

TEACHING ENGLISH IN ELEMENTARY SCHOOL THROUGH ICT AS A
PEDAGOGICAL STRATEGY

Monograph

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by

EDNNA ZULIMA ACEVEDO ALZATE

DIANA LORENA QUINTERO GORDILLO

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DEDICATION

Zulima Acevedo: This Monograph is dedicated to my husband Manuel and my daughter Isabella, the main support in this path that we started a few months ago. To my parents Martha and Iván that always gave me a word of hope when I wanted to give up.

Diana Lorena Quintero Gordillo: This monograph is dedicated to my family who gave me courage to not surrender in any project. Additionally, this research is dedicated to all the people who during this formation oriented me to keep improving and become a better teacher, woman and human being. Finally, I dedicate this work to all the teachers who need an orientation concerning education, language instruction and ICT's use.

SPECIALIZED ANALYTICAL SUMMARY

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| Contents | Esta monografía, contiene la recopilación bibliográfica, de varios autores e investigaciones desarrolladas a partir de la eficacia del uso de las Tecnologías de la información y la comunicación TICS enfocadas en los múltiples beneficios para la enseñanza del inglés como lengua extranjera. |
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| <p>Conclusions</p> | <ul style="list-style-type: none"> - The use of ICTs increases teacher-student, student-computer and student-knowledge interaction (Coleman, 1996). - With the ICTS, the autonomy of students in the process of learning construction is promoted by encouraging an active role for them (Alick, 1999). - The degree of motivation of students is increased by using ICTS (Warschauer, 1996). - The use of different teaching styles and strategies mediated by the ICTS allows an easier learning of a second language according to the studies analyzed. - ICTs allow students to be aware of their mistakes in order to make immediate corrections, self-evaluation and feedback on their performance, as evidenced by games and platforms used worldwide for learning a second language, such as online grammar checkers and portable language applications. - The students' perspective is essential to the success of the communication environment. (Miyao, 1996, cited in Iwasaki, I, n.d.). |
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| <p>Advisor</p> | <p>Juana Valentina Rozo Suárez</p> |
|----------------|------------------------------------|

ABSTRACT

The main purpose of this monograph is to analyze the main benefits of the use of ICT for the teaching of English as a foreign language in primary schools and different levels of education in Colombia, from the search of bibliography of articles and studies that support its effectiveness in the teaching of a second language, additionally to address current issues presented by Colombia in terms of the process of teaching and learning English as a foreign language, and how it proposes the use of Information and Communication Technologies (ICT) as a possible educational strategy to achieve a significant improvement in this process.

KEY WORDS: *Learning, Strategy, Language, ICT, Teaching.*

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CHAPTER I

Introduction

English is one of the most important languages around the world because it is used by millions of people, not only for business but also for cultural and social experiences. According to (Gordin, M, 2019) a historian from Princeton University in the United States, who explained to the BBC that English has become a universal language, all guilds use it to communicate in a simple way. English is spoken in around 101 countries and it has acquired the *lingua franca* status (a language use for common understanding for people who does not have the same mother language) in international business, science, and worldwide diplomacy.

According to some data provided by the historian (Gordin, M, 2019), between 2005 and 2010 there were more than seven million scientific articles published and 97% of them were written in English, followed by German with a percentage of just under 1%, while Spanish was the fifth language used with only a 0.24% of documents written using scientific language in Spanish. This data denotes that English is the most spoken language worldwide and with greater boom at the scientific level, so it is one of the main reasons to learn and master it. Only in 2019 there was a total of one thousand 500 million people speaking English, of which 375 million were native speakers, according to surveys conducted by different electronic media inside and outside native countries.

Learning English is a difficult process because is not is the native language in most of the countries for this reason, it is necessary to learn it from zero. Sometimes it is difficult because it is a new language and for its acquisition, it is necessary to use different strategies and tools to improve the EFL teaching process. The theories and analysis raised about the acquisition

of language, and as exposed by various authors such as Chomsky (1959) and his theory of “*language acquisition or innatism theory*”, the human being is predisposed to understand any language and adapt it as a second language from the approach, from which one of the most accurate ways to achieve this, it is the use of a practical and meaningful learning that has various strategies that bring students to the effective use of a second through the mediation of these strategies, one of the main and most effective strategies for this effect is expressed by (Chhabra, 2012 as cited in Rubio Torres, R, 2019 p. 5). The use of ICTs, such as technological systems and tools, in the teaching and learning process is known as e-learning and is one of the main strategies for teaching a second language remotely employed in the world. (Rubio Torres, R, 2019 p. 5).

A clear example is found in the learning acquired in times of pandemic where undoubtedly the learning not only of languages, but also of various areas of study has been facilitated by remote learning mediated by technological means, thus making them a functional means when undertaking the process of teaching and learning. One of the attempts to improve the learning of EFL strategies that emerged in Colombia, was strategy or alliance between the Communication and ICT Ministry and other external entities for this purpose as indicated below:

“In 2013, the Colombian Ministry of ICT established an alliance with the British Council, massifying the computers in more than 5.000 schools to support the appropriated teaching of English language through these kinds of tools. One of the main goals is materialize the initiatives that strength bilingualism and the technological inclusion for Colombia's official education sector”.

By one hand, this alliance, as evidenced from diverse governmental entities, affirms that the ICT's is recognized as an effective pedagogic mediator to learn a foreign language in this

case English. By the other hand, the ICTs as a pedagogical tool in learning-teaching English has diverse advantages like those described next which demonstrate that there are many benefits of using ICTs in teaching and learning, according to Mullamaa, K. (2010) believed that:

“The web-based solutions also offer good possibilities for carrying out eye-to-eye lessons in the computer classroom. The ICT solutions can be used as a support for different classroom activities, e.g. the group-work and pair-work assignments in class, but also for follow-up independent work on classroom activities for students with a different learning style, or as preparatory work. (p.41)”.

In times of pandemic the ICTs have demonstrated their effectiveness in the pedagogic mediation of the learning-teaching process. It is affirmed by different leaders' world-wide such as Schleider, A (2020) who affirms basically that ICTs have enabled new ways to execute the activities of the companies, and many of the productive activities have been able to continue their development through the online interaction. Education, commerce, and culture are some of the sectors that have managed to transfer the experience of their users to online tools providing adequate environments for interaction between people, thus giving a perspective that the ICT's are an excellent mediator in learning with multiple tools and alternatives for interaction that promote meaningful learning in real time.

Without a doubt, another educational population that has benefited from the implementation of the ICTs as a pedagogical mediator is the population with learning disabilities. According to the discussion paper, Curriculum, Assessment and ICT in the Irish context (2004), the NCCA

identified a set of guiding principles for teaching and learning with ICT in populations with learning disabilities, described below.

ICT is most effective with students when it supports active participation in learning

ICTs promote independence and communication, since for some students, technology may be the only method they have to communicate with the world around them.

- ICT provides a multisensory approach to teaching essential skills and concepts in a variety of contexts and settings.

- ICT reinforces the concept of "cause and effect" and the concepts of pre-reading and pre-numbering. - ICT can be used to introduce and reinforce simple concepts, such as matching and classification, as well as basic reading, writing, and computational skills.

- ICTs facilitate the development of motor skills, eye tracking, and hand-eye coordination.

- ICT facilitates communication situations and language development.

- ICTs facilitate social interaction and give students the opportunity to experience turn-taking and cooperation.

Significance of the Study

This monograph aims teachers to illustrate how teachers can improve their practice in English teaching with the support of ICT. It also looks to demonstrate and evidence the need for more up dated research on the field of Education relation with ICT and how it could possibly be validated through action research.

Effective learning of a second language is a challenge for every actor in all the educational communities, especially for teachers, who must find ways to attract the attention and

pleasure of learning EFL, taking into account the diversity of children and the different contexts in which they learn and are taught. Additionally, it is essential today for any activity, whether a job or a trip to another foreign city, it is almost mandatory to speak minimum a second language. Therefore, in this monograph tries to show the advantages of the implementation of ICT in the learning-teaching a foreign language, and also to analyze different educational resources for the management and the learning with the use of technology, that already have been used and validated through different investigations. Thus, to contribute to the improvement of the learning and teaching process in the elementary schools in Colombia. ICT, as it could be a powerful tool to ensure that primary students reach an optimal communicative level of English, since it allows a variety of activities, many of them focused on the interests of students that teachers can use in their work to enable effective learning, in addition to motivate students in real time in a classroom or in other circumstances such as the current pandemic to bring them closer to knowledge remotely through this useful and effective tool in the learning process as ICT.

Statement of the Problem

In the globalization context, English has become a lingua franca that is a language adopted tacitly for a common understanding between people who do not have the same mother tongue from business or relationships, to knowledge and cultural exchange, research, among others. In addition, it offers better job opportunities in a world that demands the mastery of one or more foreign languages according to the Colombian National Ministry of Education (MEN, 2006, p.9). In agreement, the General Education Act of 1994 established that it is mandatory to teach foreign languages from early school age to incentivize the bilingualism. However, achieving a communicational language level remains a challenge in the educational institutions of the

country.

The efforts and interests of the Colombian government to improve the teaching and learning processes have been evidenced since the National Plan of Bilingualism, which was created in 2004, with the purpose of focusing efforts on three lines of work, according to Cardenas & Miranda, 2014 as cited by Gomez Sará, M, 2017:

1. ethno-education, to provide education in indigenous communities, where the mother tongue is the aboriginal language, and the second language is Spanish. 2. Flexible education models, to regulate the teaching of foreign languages in educational institutions for work and human development; and 3. English is taught in schools, bilingual schools, and monolingual to improve current levels of communicative competence (p. 142).

The goal of the National Plan of Bilingualism, in this last line of action, -in which this study is focused-, is that "each citizen can communicate in English, so that they can insert to the country in the universal communication process, in the global economy and in the opening cultural, with internationally comparable standards" (MEN, 2006, p. 6). Being these measured by the Common European Framework of References for Languages (CEFR), is an international standard that defines linguistic, communicative, and socio-communicative competence throughout on a scale from A1 to C2.

Despite the country policies in terms of language have been incorporating intensive strategies to become a bilingual country, the level of English, mainly in public institutions, continues to be low according to international standards such as the CEFR and the Basic Standards of Language Proficiency. Therefore, it is necessary to create strategies to improve the low level, unlike others, Latin American countries such as Argentina, where students can reach an intermediate level of English; Colombian students were mostly classified as basic A2 level

since they have difficulties answering to basic information about themselves using the grammar and elementary vocabulary required for this level or they were able to listen and read basic texts and discussions, also they had difficulties in communicate orally and in writing, as confirmed studies by the bilingual educational firm regarding the level of foreign languages in Latin America. (Cronquist, K & Fiszbein, A, 2017, p. 3).

From other perspective aimed at strengthening learning and teaching mediated by ICTs, according to the study on the learning process and the development of ICTs carried out by McDougald (2009 p. 17) affirms that the use of (ICTs) is becoming a common practice in Colombian educational institutions as a way to improve the process of teaching and learning English, while promoting the autonomy of students. Since according to the author's statements in his study, ICTs strengthen understanding processes and they approach a second language from the intervention, generating in the students a significant improvement in the enjoyment for a second language, from the remote interaction with various educational applications that enhance the development of their communication skills without the need to be in permanent contact with the teacher and classmates.

However, Mc Dougald (2013 p. 18) in another study affirms that there is a need to prepare teachers to use properly ICTs in their classroom, mainly when adapting activities to provide different learning opportunities taking into account learning styles and individual needs. In this perspective, there is an evident necessity to understand the role of ICT in EFL education, the reasons why many teachers use or avoid it in the classroom and the current reasons behind the low level of English, even when these are used. ICTs for the process of learning and teaching English as a second language using different strategies offered by the ICTs as a learning mediator in the teaching of a second language, which increases its advantages if the teacher

knows this mediator and uses it in their design and curricular application in foreign languages.

On the other hand, Cronquist, K & Fiszbein, A. (2017) point out that:

There are three possible causes of difficulties in Colombian language learning programs. First, the lack of permanence; since some students quickly abandon the learning of a foreign language due to lack of interest, second, the lack of adequate evaluation practices and, finally, the insufficient training and number of teachers of this subject who are highly prepared to guide it. (p. 6).

Also, according to the study on learning English in different contexts and using different strategies for this idea, developed by (Cortina-Pérez and Solano-Tenorio, 2013 p. 169), they point out that the lack of opportunities to practice English outside the classroom causes low levels of bilingualism in the country in addition to making students lose interest in learning a second language. That is why an ideal tool to improve these deficiencies would be the use of the ICTS as a pedagogical mediator in the process of teaching and learning foreign languages, especially ensuring academic continuity and interest in learning remotely through various practical applications that can be functional in various technological devices available to all populations of the country. In this way, making language learning an easy alternative to distance learning and self-learning.

Objectives

General Objective

To determine the advantages of the implementation of ICTs in learning English in elementary education in Colombia.

Specific Objectives

To analyze the main benefits of the use of ICT for the teaching of English as a foreign language in elementary schools, and different level of education in Colombia, from the search of bibliography of articles and studies that support its effectiveness in the teaching of a second language.

To identify functional pedagogical and didactic strategies in the learning of languages through ICT for the teaching of EFL in elementary school, through the search of previous studies, analysis and valid theoretical references that demonstrate its effectiveness as a pedagogical mediator of the learning of a foreign language.

To identify different strategies to learn-teach English through basic elementary ICT to children in primary and secondary school, through the search and theoretical validation of these resources, in previous studies in Colombia and worldwide, that allow us to argue and support its validation as an effective strategy in the process of learning a second language

To define which teaching methodologies and strategies are useful for elementary English teachers through the use of ICTs, with the validation of previous studies on the effectiveness of the subject.

CHAPTER II

Literature Review

This chapter will expose from different perspectives what is ICT, some pedagogical strategies, methodologies, and the current policies in Colombia that could support the use of ICT for the process of teaching-learning EFL. Throughout this chapter it will be exposed the relevance and connection of ICT with the process of Teaching-Learning especially in elementary and high school.

ICT AND LEARNING

Learning, according to various theorists and pedagogues such as Piaget, is defined as the process of interaction and discovery of the world, which is done through manipulation and contact with the environment in another way. The term "ICT" is defined as "the forms of technology used to create, display, store, manipulate and exchange information" (Hoang & Thi Nguyen, 2014, p.3). This definition appears to be general; thus, within the scope of this study,

ICTs refer specifically to computer-based technologies such as desktops, laptops, tablets, smart phones, and software- and Internet-based technologies, including e-mail, websites, and social networking sites for the purpose of teaching and learning English (Davies & Hewer, 2009, cited by Hoang & Thi Nguyen, 2014, p. 34).

From these perspectives, learning is highly linked to the appropriation and application of those of the ICTs since they are a means by which the student can interact, discover, manipulate, and access diverse types of information, for that reason their importance and functionality when teaching and learning as it has been evidenced in diverse parts of the planet due to the Covid-19 pandemic, which has forced entire nations to go into confinement, and in turn continue with their

daily tasks from home office or home school, demonstrating various advantages when adding them as a digital pedagogical mediator in learning in all fields of study.

Benefits of ICT Application in English Language Learning

In the times in which we live, technology is influencing the lives of all human beings and are involved in all fields of knowledge, without being the exception education, so it is necessary to know their advantages in the process of teaching and learning, specifically in the area of English.

The ICTS, offer some really useful elements, which allow a significant interaction between the teacher and the student, as long as they are used in an adequate way, because it is necessary to remember that they do not work by themselves, but it is the human beings who give the significant use and application to these, so that they can be exploited in the best way. Furthermore, it is important to emphasize that foreign language teachers should strive to form beings who not only understand and interpret the purposes of the speakers and users of the language in pragmatic and semantic terms, but who are reflective, critical, autonomous and managers of change in the community that they work with, through the incorporation of ICT as an enriching tool in the pedagogical task.

ICTs offer a multitude of possibilities to help improve the effectiveness of students' learning of foreign languages in the classroom. For example, the acquisition of vocabulary, grammatical structures and information that can be reinforced and improved due to interactive exercises, online test, sentence ordering exercises, dictations and/or videos. In addition, the practice of all these types of activities has the advantage that students can practice from their own homes the contents studied during the sessions.

It also helps to bring the students closer to the cultures of the countries where the language is spoken. An effective educational strategy for this approach is the webquest, in which the teacher provides students with a list of previously selected websites in order to find information on a particular topic, which focuses on the English language and culture of English-speaking countries.

In addition to the webquests, correspondence can be carried out via e-mail or chat between students from the same country and different countries. This allows them to become familiar with certain socio-cultural aspects of the new country. Rodriguez in his work highlights the advantages of using chats: Chats bring the youngest and most vivid language that brings new positive elements, and motivators that, at high levels, we can use as a pretext for the sharing and discussion of current and cultural issues. In addition, they help to focus the issues we want, as teachers, explode in the classroom. (Rodriguez, 2004: 6)

All this leads to an increase in production possibilities to real time, acquiring communication skills applied to everyday contexts and situations. As consequence, there is a greater stimulation of the language and oral comprehension, in more occasions than with the traditional methods, presenting themselves in a more playful and attractive way.

In addition, ICTs are very helpful because they provide great opportunities for the development and enhancement of listening, writing, reading, and speaking skills in the English language, since the teacher can seek and design activities focused on each of the communicational skills of a foreign language with the use of ICTs making them a functional tool in the process of teaching - learning a second language.

In addition the “ICT has reached into every aspect of life. Thus, to make individuals technology literate, ICT education should start from primary school” (Kawade, D. R. & Kulkarni, S. N., 2012, p. 1). According to Kawade, D.R. & Kulkarni, S.N. (2015): Technology comes in a range of forms in Primary Schools. It is used in education to improve or enhance the quality of a student’s education and improved academic opportunity and success. Included in this range the tools which are used by the teachers to deliver courses, develop course materials and manage classroom administration. (p. 02).

That means, that the Internet connection allows learners to gain access to a huge number of authentic materials to make English learning more enjoyable. The application of the online resources available inside and outside the classroom activities can result in the enhancement of the students’ competences in listening, speaking, reading, and writing.

For example, according to a study on the use of technology in the development of learning carried out by Kelsen (2009) which revealed that students had perceptions that YouTube motivated them to learn listening. Besides, they think listening by using YouTube made the learning interesting, and also the videos are a motivating resource that help students develop their language skills, due to the fact that they seek to deepen their vocabulary knowledge willingly. Despite the fact that the majority of students are in favor of watching EFL YouTube videos. An online language support system helps to promote learner’s autonomy. Another contributing factor of ICTs is motivation. The blossoming of multimedia technology including visual aids, sounds, video clips, animations, and so on motivates learners, “attracts their attention and elevates their interest in learning”. (Kuo, 2009 as cited by Hoang Tri, D & Thi Nguyen, N 2014 p. 35). Another example is YouTube; YouTube has the potential to connect students to the authentic contribution of English through what is possibly already part of their life experience

and provides a context through which they can interact, exchange ideas, share feelings and participate in an environment (p. 27).

According to Vega Beatriz 2017, currently, for the human being it is easier to learn a second language thanks to the different and multiple tools offered by technology, already mentioned like YouTube, there is also a number of social networks and interaction with which you can learn without even leaving home. This is how the ICTs are functionally effective at the time of applying them from an educational scope, in fact, in Colombia due to the quarantine that people were facing due the pandemic caused by the COVID-19; it is common and very useful to use them for learning not only the English language but also, all the basic areas of study; in this way, Colombia and the rest of the world will need and use effective tools for the transmission of knowledge virtually.

Nowadays, the learning of a second or foreign language is not only done in the classroom, but it is open to the ICTs. In this case, ICTs become in one of the most far-reaching tools to ensure that primary school students achieve a communicational level of English, since these allow a variety of activities, many of them focused on the students' interests that the teachers may use in their labor to enable effective learning, motivation and real life skills development.

The process of learning a foreign language is an active and interactive process in general, ICT and multimedia have been used in education for more than 25 years (Rodriguez, Nussbaum, López & Sepúlveda, 2010 as cited by De Sousa, L; Ritcher, B & Nel, C, 2017, p. 5). In teacher-driven education, multimedia lessons were found to be effective in teaching road signs and speed limits and produced higher levels of performance than non-multimedia instruction. This

highlights that the unique characteristics of a subject influence the success of learning via picture or audio presentations (Nugent, 1982 as cited by De Sousa, L; Ritcher, B & Nel, C, 2017, p. 5).

“The primary school curriculum stresses vital role of language in children’s development and incorporate the use of talk and discussion as a central learning strategy in every curriculum area”. (NCCA, n.d. p. 06).

According NCCA (n.d.) ICT offers the child a motivational context for his or her engagement with content, and thus serves as a powerful stimulus for the child’s talk about his or her learning experiences. When the child is given regular opportunities to discuss with peers and teachers what he or she knows and can do when using ICT, technology enhanced classrooms can provide a powerful catalyst for a child’s learning in the primary school. (p. 06). Additional uses of ICT to support this principle of learning include: multimedia tools and software may also provide opportunities for children to document, through audio or video or both, the interaction between language and experience, by recording their learning for later reflection and discussion. (NCCA, n.d. p. 07).

On the other hand, currently, different experiences developed in countries such as Israel, Japan, United States and Canada among others about the mediation of the ICTs in the learning of EFL remark:

- The use of the ICTs increases the interaction teacher-student, student-computer, and student-knowledge (Colemman, 1996).
- The focus of learning is the student not the teacher.
- The autonomy of the students in the process of learning construction is encouraged promoting an active role of them (Alick, 1999).
- The degree of motivation in students is increased using ICTs (Warschauer, 1996).

- The use of different styles and strategies enables an easier learning.
- The ICTs allow students to be aware of their mistakes to make immediate corrections, self-evaluation, and feedback of their performance.
- The perspective of the students is essential for the success of the communication environment (Miyao, 1996 as cited in Iwasaki, I, n.d).

From these perspectives, learning English mediated by ICTs becomes an important and essential contribution for teachers, parents and especially for students at the moment of learning and teaching regarding the benefits in terms of motivation, development of skills, learning environment, quality of input, output and interaction towards their pairs and the means of learning.

ICT's use in education and English learning and teaching

There are a variety of useful applications of ICTs for learning English and they can be classified into four groups:

1 -Learning resources, within this group are included educational software, online resources and video resources, where the student learns and practices all the communicative skills in English by mediating their learning with ICTS resources, without the need for the teacher to accompany their process.

2 -Instructional learning organization: These refer to the computer programs and technological tools for teaching in the classroom, the course management system such as Moodle, and the computer-based testing system as a functional application such as Hot Potatoes, Half-Baked Software's shareware that allows teachers to do six different types of self-assessment exercises; this program is based at the University of Victoria in Canada. These exercises can also be easily imported into an LMS such as Moodle to be used for the evaluation of learning content. Hot

Potatoes was originally intended to create language exercises, and some Hot Potatoes exercises (such as the mixed sentence) have little use otherwise. However, most exercises can be used for any topic. (Collis & Moonen, 2001 as quoted in Hoang & Thi Nguyen, 2014 p. 34).

3-From another point of view, according to the online magazine (New Medium Consortium, 2005, as cited in Hoang & Thi Nguyen, 2014 p. 34), technology areas can contribute to the field of education in the following ways:

The first area is called Extended Learning, in which traditional teaching and learning are enhanced by new communication tools or social networking sites such as Facebook, Twitter, blogs, wikis, and instant messaging. In other words, the teaching and learning process is no longer limited to the classroom environment, but is enhanced, practiced, and empowered beyond the classroom through these social networking sites where students can participate in a communication platform that "facilitates collaborative discussion, exchange of opinions, and critical thinking, as well (Cheng 2012, p. 116).

In addition the second area is called Ubiquitous Wireless, which addresses the "rapid penetration of wireless networks" by encouraging student flexibility in learning through the use of their portable or mobile devices, including laptops, tablets, smart phones, etc. Smart Search, which is the third area, allows students to search, organize, and retrieve data more effectively and enables teachers to find an organized online search system for their students to find area of study-focused learning pages previously validated by teachers and academic peers.

The third category of computer-based learning to mediate learning, is that of Educational Games, composed of games and simulations, is considered as a learning tool that has beneficial effects on motivation, communication, critical thinking, and problem-solving skills; according to an exploratory study on the use of ICTs in English learning among EFL university students

developed by (Hoang Tri, D & Thi Nguyen, N 2014 p. 34) ICTs present information in the form of multimedia or hypermedia. It includes text, image, sound, and video. This adds new value to the information for readers to make sense of it. Not all students have the same ability to find meaning in a form of information. The multimedia form of information addresses the different needs of students.

In the other perspective (the new generation) has unprecedented levels of skill in information technology. They think and use technology very differently than previous cohorts of students. (Kvavik, 2005, p. 1). From this perspective, the learning of English in the 21st century is directly related to the effective and efficient use of ICTs, which are not new to students, nor to some teachers, the importance lies in their correct use to carry out the process in an efficient manner by means of the didactic resources offered by the ICTs.

How ICT can benefit students with learning disabilities in general

ICTs are not only beneficial in learning diversity of studies, but they also become interesting and use mediators in the learning process of students with learning problems in general, as stated in Curriculum, Assessment and ICT in the Irish Context (2004), ICTs can play a role as an administrative tool, diagnostic software can help the teacher to identify the learning difficulties of students and some offer learning programs that address these difficulties. Other software can assist the teacher in developing individual education plans. How ICT can benefit students with general learning difficulties depends on the level of their disability. Here are some of the advantages:

Table 1 How ICT may benefit students with general learning disabilities

| How ICT may benefit students with general learning disabilities | |
|--|---|
| <ul style="list-style-type: none"> • ICT can provide a non-threatening environment in which the level and pace of instruction can be differentiated for individual students. • Software programs can provide exciting and stimulating repetition that is often required for students to master skills. • ICT can offer graphics, sound effects and immediate rewards to help encourage the learner. • ICT may provide the needed support to effectively accomplish tasks in a variety of contexts and settings that the student may otherwise find difficult and stressful. • ICT can provide a means for some students with general learning disabilities to accomplish tasks independently, and therefore not have to rely continually upon others. | <ul style="list-style-type: none"> • ICT promotes independence and communication, since for some students, technology may be the only method they have to communicate with the world around them. • ICT provides a multi-sensory approach to the teaching of essential skills and concepts in a variety of contexts and settings. • ICT reinforces the concept of 'cause-and-effect' and pre-reading and pre-number concepts. • ICT can be used to introduce and reinforce simple concepts, such as matching and sorting, as well as basic literacy and numeracy skills. • ICT facilitates the development of motor skills, eye tracking and hand-eye co-ordination. • ICT facilitates communicative situations and language development. • ICT facilitates social interaction and gives students an opportunity to experience turn taking and co-operative situations. • ICT provides motivating and stimulating learning experiences and gives instant feedback to students' responses. • ICT is non-judgmental and allows students to work at their own pace. |

Guidelines General Learning Disabilities / Introduction / Supporting teaching and learning through ICT tomado de

https://ncca.ie/media/2509/sen_introduction.pdf

Previous Studies on Students' ICT use and student's Attitudes

According to a study developed in China by Hoang Tri, D & Thi Nguyen, N. (2014) referring to the frequency of use of ICT. It was developed with a population of 591 Chinese university students, in order to be useful for general purposes and also to be taken as a reference in projects or studies in learning English and their perceptions of the applications of ICT in it. The findings indicated that most of the students spent three to ten hours weekly using ICTs including computers, electronic music devices, camcorders, digital cameras excluding cell phones for general activities with 95% browsing the Internet for pleasure, 93.3% downloading music and videos, 83.4% checking and composing emails, 74.8% instant messaging, and 60.1%

playing computer games whereas nearly 40% of them spent below one hour per week on ICTs to learn English.

Also in China, it was developed a study that investigated Chinese non-English major students' attitudes towards ICTs as a mean for learning English and factors that gave rise to such attitudes consisting of the affective, cognitive and behavioral components showed that the participants recognized the advantages of ICT to learning English and "perceived ICT attributes" entailing "the advantage, compatibility, simplicity, and observability", "cultural perceptions of ICTs" involving "cultural or social norms of a country to technology acceptance among its people", "computer experience" and "ICT confidence" were the factors leading to differences in their ICT attitudes. (Liu, S & Laohawiriyanon, C. 2013, p. 32).

Another research was carried out, (Kubiatko, 2010 as cited by Hoang Tri, D & Thi Nguyen, N, 2014, p. 36) it also was an investigation into ICT-related attitudes among university science education students in the Czech Republic. Unlike the aforementioned studies, however, this study assessed learner's attitudes in terms of three variables, namely gender, grade, and residence. When it came to the results, male university, second year, and town students were more positive in their attitudes towards ICT use as opposed to other groups. While in Kullberg's (2011) study on Swedish teachers' and students' perspectives of the use of ICT in the English classroom setting, the students showed a more positive attitude to ICT than the teachers, and they would like to adopt computers more in the classroom. Finally, (Fujimoto, 2012, p.165 as cited by Hoang Tri, D & Thi Nguyen, N, 2014, p. 43) analyzed Spanish EFL learners' attitudes to the use of technology after the implementation of an experimental project of ICT in the classroom setting. The findings indicated that the students were fully aware of the usefulness of ICT to their

English language learning, but they also said that they had little exposure to new technologies for the learning process.

ICT studies and effectiveness in learning

The Organization for Economic Cooperation and Development (OECD) 2019 stated that an in-depth analysis that the most innovative environments use new technologies to support their methodology favoring the integration of the child to the real world today. The effectiveness in the learning process is higher when new technologies are integrated. From these perspectives, the Ministry of Information and Communication Technologies in Colombia ensures and proposes the following advantages of using ICTs in study-based learning of the Organization for Economic Cooperation and Development (OECD, 2019) which demonstrate that the most innovative educational environments with the best learning outcomes are those that in addition to an innovative pedagogical system, integrate new technologies in their daily development.

The need to use new technologies to raise the quality and efficiency of education cannot be over emphasized. It is imperative that we expose our children, parents, and teachers to ICT to improve the quality of education and technical proficiency of our human resources, thus leading to increased productivity and accelerated development. (The Namibia Government, 2004 as cited on UNESCO, 2012, p. 76).

The benefits of using new technologies in schools are many, to name the most important:

- Democratization of culture: Through new technologies, regardless of the student's social class or economic level, it is possible to access large amounts of information.
- Opening new teaching opportunities for teachers: Access to more information and new tools gives teachers new ways to offer different kind of knowledge to students, to communicate, monitor and analyze the results of their classes. Additionally, it offers

- them new methodologies to implement and improve the results of their students and, at the same time, it facilitates their own work in terms of big banks of media resources such as British Council, BBC Learning, Cambridge, Teach This, ESL-Lab or apps as Duolinguo, Kahoot, Quizzlet, Tandem.
- Personalization of teaching adapting the learning to the needs of each student: Each person learns in a different way and each child needs to access information in a different way. Through ICT it is possible for students to reinforce their weakest learning areas by expanding the learning opportunities. In a class, student can work individually on grammar using online exercises, while others work in speaking through games as guess up, or others listen and read stories through Rivet.
 - Development of skills for adult life in a technologically advanced environment: Technological non-literacy could create a social, economic and employment gap in adults unable to adapt themselves to the use of the tools that surround them. The use and the mastering of ICTs since childhood brings the opportunity to understand the function of them in different situations as the social media, or to be eager to understand and use new tools as business platforms and websites.
 - Students highly educated in the information society: It is essential to educate people capable to be adaptative to a constantly changing, global society where learning to "do something" is less important than learning to learn. Learning to be updated autonomously from this perspective, ICTs becomes in a functional tool, where the student can find free courses in websites as Future learn, Creahana, Domestika, Education First in order to learn a new ability. In the case of foreign languages (Aguirre, 2018) in his research titled "ICT in the management of the teaching-

learning process in the Organizational Communication area: Bachelor of Communication Sciences” concluded that the interviewed teachers consider ICTs as a valuable tool in their works, since they allow them to simplify the programmatic contents of an educational experience as one of them affirmed “I use ICT especially as a teaching aid, using Power Point presentations, videos or movies that allow me to teach the classes in an interactive way...”

Material Design: the ICTs allow teachers to design a big variety of teaching materials, the creation of academic tutorials and the use of digital platforms and tools that have gradually been included in classroom practices.

E-Learning in Context

According to Sife, A; Lwoga, E; & Sanga, C. (2007) E-learning refers to: “The use of ICTs to enhance and support teaching and learning processes. It is the instructional content or learning experiences delivered or enabled by electronic technologies and it incorporates a wide variety of learning strategies and technologies”. E-Learning ranges from the way students use e-mail and accessing course work online while following a course on campus to programmers offered entirely online (Commission on Technology and Adult Learning, 2001; OECD 2005). It is thus an alternative solution, which enlarges accessibility to training and becomes essential to complement the traditional way of teaching (i.e. face-to-face).

In Colombia, learning English is a fundamental pillar for the MEN, who decreed in the Law 1651 of 2013: National Law of Bilingualism, which decrees among other provisions the compulsory teaching of English from preschool to higher education, developing in each of its stages the international competences in English as a foreign language from CEFR, that is the

international standard that defines linguistic, communicative and socio-communicative competence. This one is used throughout the world to define the linguistic skills of students on a scale from A1 or basic level of English, to a C2 for those who are exceptionally proficient in English. Below is the mentioned table.

Table 2 Common Reference Levels: global scale

| | | |
|------------------|----|---|
| Proficient User | C2 | Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations. |
| | C1 | Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices. |
| Independent User | B2 | Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options. |
| | B1 | Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans. |
| Basic User | A2 | Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need. |
| | A1 | Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help. |

Spezzapria, M. (2018). *CEFR: Common References Level: Global Scale*. [Table]. Retrieved from:

<https://pt.slideshare.net/Marcela2010/cefr-common-reference-levels-global-scale>

Taking into account the previous table, a comparison was made with the level of English expected by the MEN at each of the educational levels in Colombia described below:

Table 3 Standards in the Context of the National Bilingualism Program in Colombia

| Levels according to the Common European Framework | Common name of the level in Colombia | Educational level in which it is expected to develop each language level | Goals for the education sector to 2019 |
|--|---|---|---|
| A1 | Beginner | Grades 1 to 3 | Minimum level for preschool and elementary school students for 100% students |
| A2 | Basic | Grades 4 to 7 | |
| B1 | Pre-Intermediate | Grades 8 to 11 | Minimum level for 100% of high school graduates |
| B2 | Intermediate | Higher education | <ul style="list-style-type: none"> • Minimum level for English teachers. • Minimum level for professional in other careers. |
| C1 | Pre advanced | | <ul style="list-style-type: none"> • Minimum level for new graduates of bachelor's degrees in languages |
| C2 | Advanced | | |

Adapted from, Ministerio de Educación. (2006). Los Estándares en el Contexto del Programa Nacional de Bilingüismo.

Taking into account the specific purposes of learning as a second language at the international level and the purposes of strengthening and achieving a bilingual Colombia as intended by the MEN in Colombia, and taking into account the many advantages of learning and improving English mediated by ICTS in potential countries, as shown in international studies above, it is proposed that language teachers in Colombia take into account and most importantly implement the extensive benefits of ICTS for learning a second language.

Learning Styles and the process of learning a Second language

Often, in the teaching-learning process, that part of the process that has to do with teaching is hyperbolized. Teachers are concerned about what objectives to achieve, what to teach, what method or approach to use, often leaving aside the part of the process related to learning has been left in the background; how students learn, what strategies they use to achieve the objectives and develop skills, *i.e.* to achieve effective learning which undoubtedly in the learning of a second language is a fundamental pillar for achieving excellent results.

During the last century, different psychological and educational approaches aimed for a definition of learning and its implications. Within the main four approaches it is possible to find the behaviorism, the cognitivism, the Constructivism, and the Socio-constructivism. Each theory or approach defines the learning in a different manner, the first one defines it as the transmission of knowledge reinforcing behaviors, the second as the process of the information through the constitutive internal mental mechanisms of the thought and the action, the third as the constructions of pictures from the real world though active situations and, the fourth as the meaning exchange through the social relationships. In fact, the last few years the new education

tendencies have been oriented towards the last approaches, mainly in foreign language education such as communicative or actional approaches, the last one proposed in the CEFR in the first and second edition.

But it is important to realize that not all the students learn in the same way. The cognitive and learning style and strategies depends on student's personality, type of activity in which they are involved, age, etc. However, Cassidy (2004) stated that: Cognitive and learning style are not the synonyms. Cognitive Style is referred as "an individual's typical mode of problems solving, perceiving and remembering" unlike learning style that is conceived as "the ways in which individuals characteristically approach different learning tasks making use of one or different cognitive styles". In other words, depending the cognitive style of the student, the style of learning can be different form a person to the other.

Considering different authors who refer to learning styles, it is possible to mention information of some of their theories such as Visual, Auditory and Kinesthetic Learning Style (VAK), that is described below. The VAK learning was created by Richard Bandler and John Grinder 1982, using the three main sensory receptors: visual, auditory, and kinesthetic (movement) to determine the dominant learning style. VAK emphasizes that each person has a favorite receptive sense that allows them to connect previous knowledge with new and vivid experiences and memorize them more efficiently. Each sensory receptor and learning style are determined by specific aspects. Other works that have been widely used come from the contributions of (Dunn and Dunn, 1985b as cited on Gamboa, M; Briceño, J & Camacho, J. 2015 p. 514) who contributed to emphasize three classifications, which they called perception channels: visual, auditory, and kinesthetic (VAK) defined in the following table.

Table 4 Characteristics of the perception channels by (Escobar, 2010, p. 5)

| Channels of perception | Characteristics |
|---------------------------------------|--|
| Visual | <p>Students with a high Visual perception present these characteristics:</p> <p>They present difficulties when explanations are verbal.</p> <p>Are very observant.</p> <p>Learn best when the material is represented visually.</p> <p>Are able to memorize using patterns, images, and colors.</p> <p>Have greater facility to remember images and videos.</p> <p>Have difficulty explaining verbally or remembering verbal information.</p> <p>They think and store information using pictures.</p> <p>Have a penchant for the arts.</p> <p>Have great imagination and strong color sense.</p> |
| Auditory | <p>Learners with Auditory perception have some of the following characteristics:</p> <p>Learn easily by paying attention to what the teacher says or narrates.</p> <p>Are able to remember audible signs with changes in tone of voice, intonation and accents.</p> <p>Can skillfully repeat and remember what someone else says in a lecture or class.</p> <p>Are good at oral exams and presentations.</p> <p>Have good skills for telling stories, narratives, histories, and tales.</p> |

| | |
|-------------|---|
| | Like to study with music and can remember facts and people with it. |
| Kinesthetic | <p>Likes to learn through experiences, such as lab practices, games, models, even tangent representations of what he studies.</p> <p>He is a restless person, who moves constantly when doing homework or concentrating on an activity.</p> <p>He needs to be involved in what he is learning otherwise he finds it very difficult and becomes tired.</p> <p>Their movements are an extension of his creative thoughts.</p> <p>He has the need to express himself in a bodily way like dancing and singing.</p> |

Adapted from: Gamboa Mora, M.C; Briceño Martínez, J.J; Camacho Gonzales, J. P. (2015). Características de los canales de percepción. [Table]. Retrieved from: <https://www.redalyc.org/pdf/310/31045567026.pdf>.

Learning styles and ICTs

According to national council for curriculum and assessment (NCCA)(n.d. p. 78) the effective use of multimedia authoring and presentation software in teaching and learning helps children to develop a range of skills and widens their knowledge and understanding of ICT. Multimedia presentation software supports a range of learning styles, and motivates the visual, auditory and active learner.

Using multimedia authoring and presentation software, children can

- Plan, develop, refine and produce classroom projects
- Improve their writing skills as they practice using the editing tools that make drafting and re-drafting easier
- Learn to present project work in an interesting and stimulating way
- Investigate the familiar world from new perspectives

- Look closely at common objects using close-up photos from a digital camera, and thus engage their curiosity
- Create and maintain records of significant events in the classroom or school year using the digital camera
- Collect images, sounds and materials for classroom projects when they are exploring in the environment or during a field trip
- Develop and refine scripting and storyboarding skills, as they organize their thoughts and ideas to create a multimedia presentation
- Be motivated to produce accurate text and refine their presentations for a specific audience, for example, parents
- Explore a range of tasks engaging all of the senses, visual, auditory, kinesthetic, thus catering to their individual learning style
- Engage their auditory senses and discrimination by adding sound and comments to multimedia presentations
- Use technology to control, manipulate or communicate musical information, creating sounds and sequences of sounds
- Enjoy recording their own voice or the sounds from their environment using a microphone and tape recorder
- Clarify their thinking as they work through the steps in putting together a multimedia presentation
- Learn to work in teams and collaboratively, with each group offering a valuable contribution to the overall finished product
- Develop habits of responsibility, through the handling and care of digital equipment

- Develop critical analysis skills, for example, using the digital video to record practices for a drama session, and playing them back to analyze it.

Additional uses of ICT to support this principle of learning include:

- Content-rich software typically represents information through more than one format (text, audio, image, etc.), and provides options for the pacing and sequencing of information, so that instruction can be tailored to each child's individual learning needs and learning style.
- The range of content-free software available including writing, multimedia and concept mapping software, also supports children's different learning styles.
- The possibilities for the teacher to support the differentiation for the specific learning needs of individual children can be aided through the creation of worksheet templates, and reinforcement software for those children who require additional time practicing a skill or concept.
- ICT assessment tools such as electronic portfolios may also engage the child's interest in his or her learning by increasing the transparency of progress records. (NCCA, n.d. p. 11).

Kolb classification of learning styles

David Kolb, an educational theorist from the United States, believed that learning was “the process whereby knowledge is created through the transformation of experience” (1984, p. 38). At the same time it involved the acquisition of abstract concepts that could be applied flexibly in a range of situation. Was developed from three causal factors which he grouped

together: genetics, life experiences, and experiences from the environment. In this way, he defined types of learning:

1. Convergent or active (watching and thinking)

People with this learning style have dominant abilities in Abstract Conceptualization and Active Experimentation. They are recognized for being highly skilled in the practical application of ideas. Students with these characteristics are recognized as practical and seek solutions to problems, interested in technology, prefer technical task. Some instruments that can be used in children with this type of learning are manuals, graphics and maps, orientation, experiments, practical demonstrations. Kolb, A. Y., & Kolb, D. A. (2005).

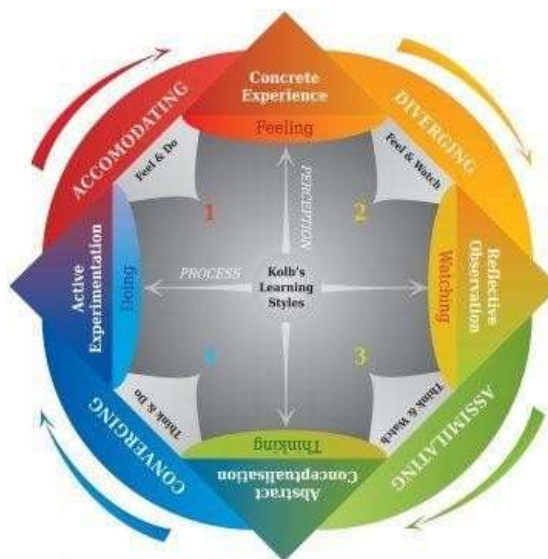
2. Divergent or reflective (feeling and watching)

Divergent abilities are more effective in Concrete Experience and Reflective Observation. They are recognized for looking at things from different perspectives and being sensitive. These students are recognized for:

- They want to know and weigh different points of view; they have an open mind and they reflect before making decisions.
- They are always willing to receive feedback; they like to listen.
- They are emotional and creative showing interest in the arts.
- They have broad cultural interest and like to gather information.
- They prefer to work in groups and listen with an open mind.

Examples of related activities and resources: Brainstorming, crossword puzzles, predicting results, carrying out experiments, riddles, or puzzles.

Figure 1. Kolb's Learning Styles



Gomera, J. (2020). Kolb's Learning Styles. [Figure]. Retrieved from: <https://catalogo-decursos.com/habitosytecnicas/estilos-de-aprendizaje/>

1. Assimilator or theoretical (watching and thinking)

Assimilators are well known for Abstract Conceptualization and Reflective Observation. They have a great understanding and ability for creating theoretical models. They tend to be more interested in abstract ideas than social interaction. Students can be recognized for:

- They prefer to read, study and work individually, they are not especially sociable.
- They are more interested in abstract ideas than in people and feelings.
- They do not worry about the practical application of the theory and they require clear theoretical explanations.
- Some activities and resources for them are reading texts, written reports, dictations, dictionaries, notes or conferences.

4. Accommodating or Pragmatic

Accommodators are recognized for their Concrete Experience and Active Experimentation. They rely on intuition rather than logic. They enjoy performing experiments, have challenges and carrying out plans. The students with this style are recognized for:

- They trust their intuition, acting and deciding without too much prior reflection.
- They are active and impatient, often using the trial-error approach.
- Show interest in team work.

Examples of activities and related resources: group work, illustrative graphics, artistic expression, field studies or scientific experiments. At the same time, Kolb (1984) developed the Experiential Learning Cycle base of his learning styles. This cycle is represented by four stages in which the learner can learn something in an effective way.

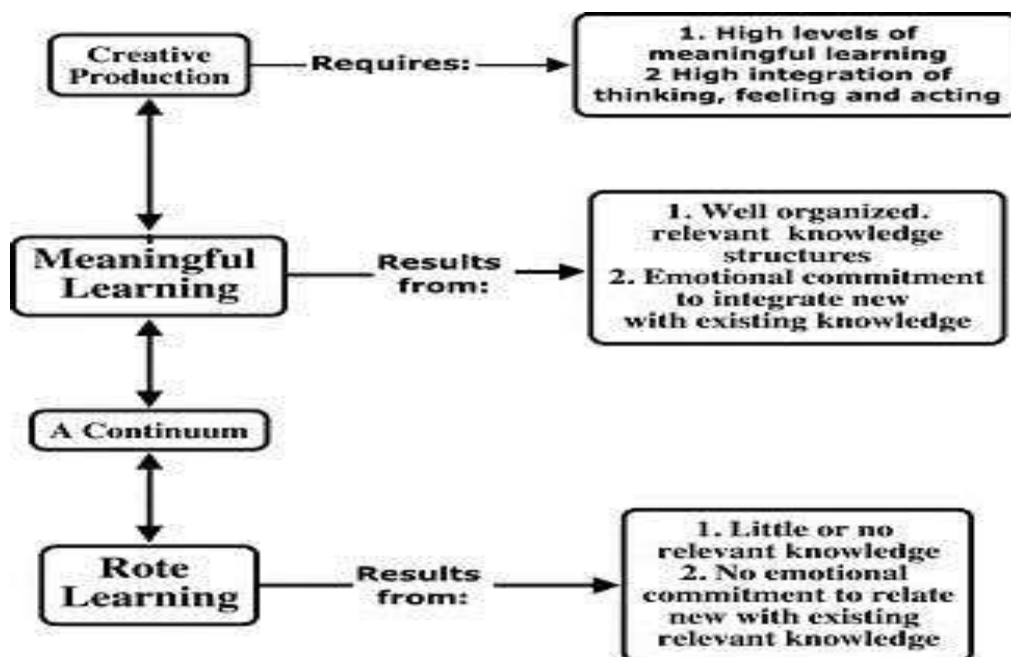
- 1. Observation** of immediate and concrete experiences.
- 2. Reflection** to start building a general theory of what you have observed.
- 3. Training** of abstract and generalized concepts, based on hypotheses.
- 4. Test** of the implications of their concepts in new situations.

Kolb's learning styles are useful for EFL teachers because they can guide them in the designing of different activities in the classroom, material, on-line exercises searching for more appropriate learning opportunities, encouraging their motivation, and reinforcing their skills.

Ausubel's Learning Theory

According to Ivie, S.D. (1998) David Ausubel was an American Theorist who proposed the concept of meaningful learning focused on the importance of the structure and connecting new information to known where “The most important single factor influencing learning is what the learner already knows” (1968, p. 8). He remarked that the understanding concepts, principles, and ideas are achieved through deductive reasoning. In that perspective, before teaching and learning something, it is necessary to consider the students' background. For instance, the learning is given through readjusting and reconstructing both information -the previous and the new- in this process explained in the following graphic:

Graphic 2 Meaningful Learning



Universitas Pendidikan Indonesia. (n.d.). *Meaningful Learning*. [Map]. Retrieved from:

http://fpmipa.upi.edu/data/report_activity/9875881844.pdf

Taking into account these types of learning, it can be highlighted that one of the most optimal options for children to develop the learning of a foreign language, taking into account

what was previously described about each learning style, focus on managing the pedagogical and didactic mediation that the ICTs offers to achieve this goal since through the optimal use of them we can find and develop all these types of learning, that is how (Chang & Tung, 2007 pp. 71 – 83) suggests that through Information and Communication Technology it is possible to offer students enriching resources with digital instruction material, an attractive and friendly learning interface with images and sounds, which from the theory described above, they approach visual auditory and kinesthetic students, thus managing to cover these three important learning styles in the classroom with the use of ICTs to achieve the goal of effective English learning.

Theories of Acquisition of the Language and its Application with the ICT

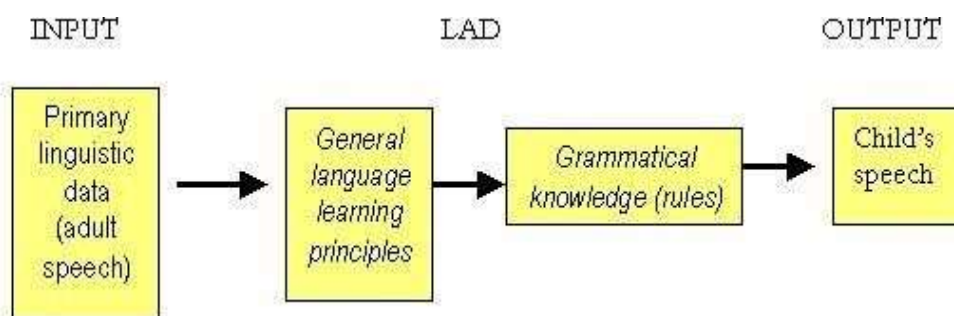
The research of the process of language teaching and learning have been developed almost at the same time with the pedagogical and psychological theories and approaches. Language is the vehicle for the communication and learning. Different authors such as Skinner and Vigotsky studied the process of acquisition of mother and foreign language, these are explained below:

1. The behavioral learning theory represented the first attempt to provide an explanation of language development in children. Skinner (1957) was the main exponent of the idea that a behavior (the language in this case) once reinforced, will continue especially after a reinforcement or reward. According to this theory, in the early stages, children would reproduce all sounds from all languages and parents selectively reinforce, through attention or approval, those that corresponded to the native language. The reinforcement can be verbal or physical. This selective reinforcement would result in the production of words. Once the child was able to speak, it could produce a complete emission of messages with full meaning. For example, if the child says bread, he may be reinforced

by receiving what he asks. Following this theory, (Ramirez and Chen, 2008, as cited by Chang, S. C. & Tung, F. C., 2008 pp. 71 – 83) mentioned that when teaching English to children, it is efficient to use, for example, flashcards, stories or dramatizations. In the case of the flashcards when teaching children, a second language, these are grouped by semantic fields allowing a wide variety of activities to be carried out with them, strengthening the processes of language acquisition of a second language.

2. The Language Acquisition Theory from Noam Chomsky (1980) considered that a child does not learn a language by exposition and imitation, but rather he learns to relate his innate knowledge of the syntactic structures of language or a Universal Grammar, with the limited set of words (also known as a lexicon) contained in his native language. In other words, the Universal Grammar Theory suggests that all the languages follow the same laws, for example the existence of subject, verb, number, adjectives, among others that exist in all the languages, even the no connected. For instance, the child is born with these laws in his mind, but the environment determines which language he will use, and the specific characteristic of it, that is explained in the next graph from eduglobster.com:

Graphic 3 *Mechanism of Innate Theory*



Lucy's Blog. (2016). Mechanism of Innate Theory. [Graph]. Retrieved from:

[https://gutyerlle.wixsite.com/lucysblog/single-post/2016/07/04/Innatism-and-the-Language-Acquisition-](https://gutyerlle.wixsite.com/lucysblog/single-post/2016/07/04/Innatism-and-the-Language-Acquisition-Device-LAD)

Device-LAD

3. In fact, the use of the Universal Grammar Theory (UG) may help educators in the design of foreign language teaching tools, courses and activities mainly in the first stages of learning where students try to understand the structure of the new language (Second L2 or Foreign FL) using the principles of its own language (L1), this process well known as interlanguage. According to White (n.d.), the interlanguage is hint of the UG where a second or Foreign language learner may arrive at the target grammar, sometimes it may be correct or not.

In that way, teachers while teaching may appreciate the use the interlanguage from their students as a way of understanding the new language structure, where they favorize the attempt of producing even when the grammar is not totally correct, with the time, the contact with input of the target language, the trial and error situations will guide the learner to acquire the specifications of the target language.

Moreover, the activities in class or using ICTs can be designed in a way where students propose the structure, later the teacher suggests the accurate for the language situation. According to Vygotsky (1934) and his language theory encompasses not only the development of the language processes related with the use of sign/symbols (internal systems of meaning that affect the behavior), but also the thought that is related with the mental processes including perceiving, processing, organizing and storing information for further use. He affirms that thinking and language are independent mental process, taking into account when the child is born, it has already an elementary thinking process that is shaped through the sociocultural situations or social systems as the language, the education, the play.

The desire of communicating makes the child use symbols to convey meaning internalizing contextual signs as the language that allows the evolution of the thought. This

process of internalization is given from the reconstruction and adaptation of the external activities and systems to our own system and sense. The complexity of the child system allows him to internalize and generalize new systems as social concepts, values or abstract thought, in that way achieving higher forms of human activity. The development of the speech evolves as the thought becomes more complex, less physical, and more abstract as the next table:

Table 4 *Vygotsky's Theories*

| Stage | Characteristics |
|---|---|
| Pre-intellectual social speech (0-3 years) | <ul style="list-style-type: none"> ➤ No thoughts constructed through the use of language ➤ Speech used for social change |
| Egocentric speech (3-7 years) | <ul style="list-style-type: none"> ➤ Language helps control child's behavior ➤ Spoken out loud (children verbalize their thoughts while playing games etc.) |
| Inner Speech (7+ years) | <ul style="list-style-type: none"> ➤ Silently used to develop inner thoughts ➤ Publicly used for communication with others |

Weebly. (n.d.). Vygotsky's Theories. [Table]. Retrieved from: <https://genderandvygotsky.weebly.com/vygotskys-theories.html>

In the case of EFL and ESL acquisition, Vygotsky argues that the process is not the same. The tools, the symbols and the systems are totally different, even when the child learn both languages at the same time, the individual system is different for each language. As a result, the child or even the adult learns a foreign language almost with the same systems that he understands abstract concepts as the scientific ones.

It “begins in the domains of conscious awareness and volition. It grows downward into the domain of the concrete, into the domain of personal experience, scientific concepts restructure and raise spontaneous concepts to a higher level, forming their zone of proximal development” by theory of learning (Vygotsky, 1987)

In this case the role of the teachers is to design syllabi and courses focused in the social interaction, using the ICTs as a mean for connecting the learner and the real context as the videos, the podcasts, the films, the e-books, at the same time, the formal instruction related to grammar and syntaxis were taught using primarily the students systems, and their previous knowledge as Chomsky indicated, connecting the structures with the its function in real life, activating not only memory process but the other functions of the thought. Additionally, when the activities consider not only the speech but the action, the students may build significant moment and meaningful learning as (Ausubel, 1968) affirmed.

It is important to remark the role of the game that becomes the most effective alternative when learning a second language and without a doubt, the ICTs offer EFL Teachers various alternatives to use it, as suggested in the concept of Pacheco (2011 p 448) regarding: ICTs, offer the opportunity to freely access all kinds of resources such as digital “Mass media”, with direct, real and authentic access in the use of a second language, thus offering the possibility of acquiring a second language by mediating it with the use of ICT. Otherwise, (Ramirez and Chen, 2008, as cited by Chang, S. C. & Tung, F. C., 2008 pp. 71 – 83) propose that “Multimedia resources in teaching English allow the integration of different didactic materials such as: sounds, texts, images, animation, and also increases the effectiveness of learning since integrating different perceptual modalities increase the student's ability to memorize and understand. " which can lead us to various advances regarding the acquisition of a second language, mediated by ICTs.

Material Design

The ICTs allow teachers to design a big variety of teaching materials, the creation of academic tutorials and the use of digital platforms and tools that have gradually been included in classroom practices. In this sense, ICT allows teachers to design a wide variety of teaching materials, the creation of academic tutorials and the use of digital platforms and tools that have been gradually included in classroom practices. Virtual teaching materials are the carriers of digital content, which should enable learning and become in turn transmitters of knowledge. Didactic materials are those that gather means and resources that facilitate teaching and learning. They are usually used within the educational environment to facilitate the acquisition of concepts, skills, attitudes, and abilities.

According to Schwartzman (2013), teaching materials are those with which the student interacts directly as part of its process of building knowledge and are designed, from the same design process, to support and guide learning processes. For Del Prado and Doria (2015), in the virtual learning environments the didactic materials play an important role, since the design of these generates the attraction or not on the part of the students. These materials are usually of the multimedia type, that is to say, they combine different technologies such as texts, images and/or videos, from a perspective of maximum pedagogical benefit, focused on the learning needs of the students and their context. On the other hand, Prado and Doria define them as the main guide in the elaboration of the activities of the subject: from them the activities and evaluation that the teacher will carry out are generated.

From another point of view, García Araya (2017) calls them digital teaching materials and recommends important aspects to be considered in their design, among which are:

- The focus on what, for what and how to communicate the subject to be taught, so that students achieve the goal of learning in a constructive way, focused on the pedagogical mediation of multimedia digital environments.
- The achievement of all the resources used in the didactic, graphic, and functional design of the digital material allows students to focus on the content presented, reinforce themes and complement them.
- The degree of demand in terms of usability or navigability of the material. This must be ensured by considering all the details when designing, ensuring the application of short and clear audios, fast loading of images and videos, as well as an intuitive and fluid navigation to prevent the student from losing motivation and, finally, their interest.
- The selection in each case of the appropriate technological tool and the carrying out of all the checks prior to the publication of the material to avoid possible difficulties.

The creativity to teach in an innovative and different way, given that digital materials constitute a didactic support that challenges students, awakens their curiosity and encourages them to efficiently use the information, to observe, discover, classify, hierarchize and create by themselves. In this way, the pedagogical implications and the scope when designing multimedia content and applying it in the classroom as a learning strategy mediated by ICTS, analyzing and discussing its main advantages in education.

CHAPTER III

Methodology

This research is framed in the qualitative approach, that is defined by Blasco and Perez (2007 as quoted by Taylor and Bogdan, 1987) as “the study of reality in its natural context and how it happens, interpreting phenomena according to the people involved” in this case, the study of the ICTs in the process of teaching and learning languages. In addition, (Blasco as quoted by Taylor and Bogdan, 1987) points out that this methodology is a way to face the empirical world, highlighting the production of descriptive data such as people's words, spoken or written, and observable behavior. This approach allows to ensure a narrow margin between the data and what people say and do, remaining close to the empirical world and obtaining direct knowledge from social life, not filtered by concepts, operational definitions or classification scales.

Other features of this approach are the validity of all the scenarios and people involved in a phenomenon, the flexibility in methods where the research follows the guidelines, but they may create new instruments and methods depending the study object and the context.

Within the qualitative approach the most suitable method for this research is the descriptive where Tamayo and Tamayo, M. (2004) referred the descriptive research as "to involve the description, recording, analysis and interpretation of the actual nature, and the composition or process of phenomena. The focus is on dominant conclusions or on groups of people, groups or things, conducted or functioning in the present". (p. 35). In addition, according to Sabino (1986) "Descriptive type research works on factual realities, and its fundamental characteristic is to present a correct interpretation. For descriptive research, its primary concern lies on discovering some fundamental characteristics of homogeneous sets of phenomena, using

systematic criteria to reveal their structure or behavior. In this way, it is possible to obtain the notes that characterize the reality studied". (p. 51).

Characteristics of descriptive Research

The descriptive research that this study has handled during the course of this investigation, allow to address different sources of information and data collection which were clear and accurate sources to determine this research and lets to describe the problem posed at the beginning of the investigation, this type of research has different advantages described below; some characteristics of the descriptive research are that it is restricted to factual registration and, there is no quest for an explanation why reality is showing itself this way. In principle, descriptive research is not aiming at forming hypotheses or development of theory.

Another characteristic of the descriptive research is objectivity or neutrality. Descriptive research is about describing how the reality is. In this regard, descriptive research differs from prescriptive research that is primarily concerned with the question how the reality should be. Descriptive research is making inventories; prescriptive research is normative, with descriptive research in its purest form explaining and evaluating is left to the reader or to other disciplines. However, in practice there is a gliding scale from pure description to analysis, interpretation, and evaluation. The same applies for the dimension objective - subjective. Analysis and interpretation of the data are seldom completely objective. Therefore, a biography (description of a life), or a plan documentation, is always partly, or even strongly colored by the selective perception of the author. (Lans, W & Van der Voordt, T, 2002, p. 53).

CHAPTER IV

Results and Discussion

In the course of this monograph, the main bibliographic sources that allowed to develop the question problem and the central theme of this research about how ICTs could help to strengthen the learning process of English, using the diverse strategies and resources offered in each one of them, which allowed to describe methodologically the benefits of its implementation in English classes, as well as to analyze different studies and theories about language learning through ICTs, which is an appropriate bibliographic and theoretical base for those who want to implement it in their pedagogical practice or to carry out a more detailed type of research on the subject.

Within the bibliographic sources studied, interesting contributions that help to develop this problem question about how the ICT's help the strengthening of the English, one of the most relevant are the studies developed in China, which gave the researchers an idea about the challenges and strategies of implementation of the ICTs for the learning of several languages, which up to the moment have been effective and leave great contributions proven to achieve great result. According to Tedesco, (2009) "in a world where information and knowledge are accumulated and circulate through increasingly sophisticated and powerful technological means, the role of the school must be defined by its ability to prepare for the conscious, critical, active use of the devices that accumulate information and knowledge" (p. 10).

The previous citation leads to make an analysis Bibliography of diverse sources compiled in 59 references organized as follows: 1 Web Platform Content References, 5 Magazine References, 33 Article References, 4 Primer References, 6 Website Article References, 2 Magazine Article References, 1 Academic Paper Repository Reference, 1 Author's Monograph, 1

Work – Thesis, 1 Test Reference, 5 Book References, 1 Report, 1 Guideline, 1 Conference paper. In each one of them it is explained in detail the multiple benefits of ICTs.

The use of technology in the classroom, for example helps to mediate pedagogical English, enhances multiple intelligences, promotes creativity, and fosters the development of basic English skills, since the contents of all areas specifically in English are within the reach of a click. There is no doubt of the multiple benefits, previously described and information resources found in online educational platforms, which provide teachers with support, a guide and a useful resource that facilitates their teaching practice and optimizes their work, since today in the century XXI, the English language is one of the most important languages in the world.

From other perspectives, contemporary students faced by teachers of the XXI century are characterized by being curious, informed, open-minded, critical, daring, self-managed and lovers of new technologies; Therefore, when applying traditional and routine methodologies in the learning and teaching of a second language inside and outside the classroom, the motivation levels of the students are reduced in a broad way, since they are outside the interests of the students and they end up causing poor results in learning English as a foreign language.

However, it is important to give relevance to the technological tools which are a great ally in the teaching and learning of English, but at the same time, it should not replace the teacher or their practice; they should serve as a support material for the class and as a differentiation tool to satisfy the different learning styles found in the classroom and strengthen the learning and teaching process in the area of foreign languages.

In this monograph the contributions of the following project called the ICTs as tools for teaching English according to (Jaimes & Jaimes, 2013 as cited by Lizasoain, C; Ortiz de Alzate, A & Becchi, C, 2018) were valuable. This project focused on the processes of teaching English in

the institutions of primary and on the use that ICT make in said process. The author made a deep reflection on the importance of ICT in education, the role of the teacher in this field and at the same time, expressing high concern about the lack of trained teachers, he cited the National Bilingualism Plan (2011), since it requires the professional qualification of ICT teachers and in this case focused on teaching English in primary school.

(Jaimes & Jaimes, 2013 as cited by Lizasoain, C; Ortiz de Alzate, A & Becchi, C, 2018) also invites to reflect on whether new technologies really contribute to educational processes or whether the media are useful as pedagogical tool from this emerging research concerns that the implementation of technologies in all sectors is increasingly latent. However, in schools, teachers they still lag in taking this step. Some blame this phenomenon on the lack of resources, yet it is important to remember that the legacy of former President Andrés Pastrana Arango and the Computers to Educate program, which was specifically created with the aim of bringing technology closer to the most remote areas and communities, in addition to combating the digital divide and achieving make a presence in 98% of the national territory.

In another sense, ICTs cannot be foreign to education, since they have fundamentally and irrevocably modified the way we live, sleep, dream and die, thinking about the needs of the 21st century. In the same line, other analysis like Balanskat, A; Blamire, R & Kefala, S. (2006) concluded that most of the studies examined confirm the benefits of using ICT, this analysis leads to affirm that the challenge for learning the English language it can be complicated and demotivating, since the key is to incorporate innovative resources through ICTs and currently few teachers are prepared for this.

However, the need is latent, also because in Colombia English has gone from becoming an option to a need for personal and professional development.

CHAPTER V

Conclusions and Recommendations

Teaching English has become a real challenge for teachers, especially those who work with children in school. As ICT has become an important tool to guide and help students to assimilate and learn the language in a very effective way. Cetin (n.d.) states that "Without a doubt, ICT is a valuable and innovative teaching tool that improves EFL learning, which was validated in the course of the bibliographic search and support, which led us to investigate important studies with the use of ICTS, in the learning of a second language at an international level, such as the study developed in China by Hoang Tri, D & Thi Nguyen, N. (2014) referring to the frequency of use of ICT, where it was evidenced that the ICTS are effective in the teaching-learning process of a second language, using them as pedagogical mediators. The study mentioned above undoubtedly agrees with Cetin's (n.d.) statement about the rapid growth of ICT and how they have naturally influenced all aspects of the language teaching process, allowing us to realize one of the objectives of this monograph, which focuses on validating the idea that the use of technology has positive effects on the teaching and learning of English, not only in elementary school, but at all levels of learning.

In other way, the teachers need to consider that it is very important to help students to assimilate the language learning in a dynamic way, that's why ICT has become in a crucial tool to accomplish that goal. It is necessary that teachers change some aspects of their classes 'methods and start implementing ICT in them. According to an investigation made by Tay, L; Lim, C & Ling, J, (2012) "Broadly speaking, learning from and learning with ICT could provide a very useful conceptual framework when integrating ICT into teaching and learning." (Tay, L; Lim, C & Ling Koh, J 2012, p. 741).

In addition the teachers need to take into account that ICT is not a method in teaching and learning, but it's a way of several methods, strategies and pedagogical philosophies that could be implemented in learning and its effectiveness depends on how they are applied (Garret,1991 as cited by Salehi, H & Salehi, Z, 2012, p. 215).

There are different approaches that are related with ICT, according to Roblyer and Edwards (2000) believe that:

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

During the process of development of this monograph and taking into account the information found, there are some recommendations that can be made in order to help students 'learning process in English teaching in primary school:

1. The internet connection has to be improved in all the schools not only public but also private; it means to guarantee that all the schools will provide students with a good internet connection not only for them but also to get access to different technological appliances such as tablets and computers.

2. As it is well known by people, not all the schools have access to different tools like computers, tablets, cellphones, video beams or smart TVs; that's why it is considered that is important to provide the different institutions of these appliances that students could use to improve their learning processes.

3. Integrating technologies to schools and other educational spaces has not been an easy process. It is not only to take computers and access to internet networks, but teachers must also be trained, to integrate these technologies into their work methodology in order to provide a tool that provides multiple benefits for their students.

4. Another recommendation could be to arrange different alliances between schools and different commercial sectors to donate or provide computers and tablets in good shape for being used by the students in order to improve their skills not only in language learning.

5. Continue to promote easy access to ICTs and its proper use.

6. Train not only teachers but also students in the appropriation use of ICTs as a tool to improve the learning process, mainly in primary school.

7. Seek alliances with different publishers recognized for their strong influence on methodologies and teaching materials in teaching the English language, in order to reach more remote places with material to provide teachers and students as well as receive training on its implementation in the class.

8. Motivate teachers to include ICTs in their methodologies in order to change the perspective and the learning environment in the classroom.

9. Raise the holding of educational fairs where the great potential of ICTs in education is evident, in addition to the different strategies proposed by teachers from the experiences in the classroom mainly with primary school kids.

10. Request the government to support the creation of a special fund, where not only money is raised but also support material and personnel trained in the use of ICTs and their implementation in education, especially in the teaching of foreign languages such as English.

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