

# Innovation in ELT



COLLECTION: SCIENCE, EDUCATION AND SOCIETY



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# Innovation in ELT

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## FOREWORD

Plato, one of the most outstanding Philosophers of all times, used to say that “Education is the embellishment y perfectionism of body and soul”.

When I was a child, I heard from my teachers, usually saying the following statement: “*Mente sana en cuerpo sano*” (A healthy mind in a healthy body). They were focused mainly on the integrity of his/her pupil in all his/her dimensions (Cognitive, Social, Ethical, Artistic and Spiritual dimensions). This book, *Innovations in ELT*, compiles the importance of research in different contexts and situations and shares interesting information about the Implementation of Flipped Learning, English teaching in Public Schools, Creation of APPs Towards Language Learning Enhancement, Autonomous Language learning, Contextualized Materials to Enhance Public Speaking using Flipped Learning Approach.

Educators, around the world, have worked hard for many years for an educational reform and improvement, and its results have not been satisfactory enough. For that reason, many teachers and Professors have been aware of the importance and need of looking for more effective ways to teach and to learn.

We are living in and facing a **rapidly changing world**. How are we, as teachers, preparing children, adolescents, teenagers, and youngsters for the future? Our



students are going to have to work with **knowledge that has not been given yet**, to work **on technology that has not been invented yet**, as well as to face **new ways of being taught and new ways of learning**.

How can we, as Teachers, **meet their needs, interests, expectations, and challenges of tomorrow**? We should be using science to change the odds.

We must **be changed** in order to change, we should **be motivated** to motivate, and **be convinced** to convince.

Our main **task**, as Teachers, is **to inform, to form and to transform**; to **understand others**, and to **be understood by others**.

Do we really know and **are aware** of how children, adolescents, teenagers, and youngsters learn? Do they learn in the same way and at the same time and pace?

What relationship is there between Teaching and Learning?

When do I really teach? I really teach **when I let the other learn**. Heidegger says that **“Teaching is letting Learning happen”**.

Is my **teaching level** equal to my student’s **learning level**?

### **Golden Rule in Teaching and Communication:**

**Tell me...** and I will forget.

**Show me...** and I will remember.

**Involve me...** and I will learn.

**Convince me...** and I will change, act, and create. (**Deep Learning**)

### **Some Misconceptions about Teaching:**

- There is a close relationship between Teaching and Learning.
- The Teacher is the only one who teaches, the student is the one who learns.
- Teaching depends on the Teacher in a remarkably high percentage.
- The relationship between Teaching and Learning is direct.
- He/she did not learn what I taught him/her.
- I evaluate what he really knows.

**Teaching and Learning are given by means of interactions in different ways:**

- Teacher-Student
- Student-Teacher
- Student-Student
- Student-Group
- Group-Student
- Student-Environment
- Student-Mass media
- Student-Electronic Devices (CLIL-CALL-Blended Learning-Mobile Learning-Task-based Project)
- Student-Website

The kid/adolescent/teenager or youngster really learns when he/she thinks on/reflects what he/she heard/wrote/read, reflects and deepens his/her information, as well as he/she shares it with others.

- Critical Thinking
- Deep Learning
- Debate
- Forum

An excellent Teacher, besides teaching, should be a **model of Learning, a Facilitator, a Mediator, a Coach**. In other words, the Teacher should **walk the other mile with** his/her student. They should reach the finish together.

The best Teaching takes place when you **motivate and encourage your student to teach and learn by himself/herself**. (Self-learning, self-regulation, metacognitive strategies, meaningful learning, and deep learning)

An excellent learning takes place when you help your student **think potentially and look beyond his/her fingers**. When your student's level of learning is superior to your level of teaching.

*Example:* You teach a 20% and your student learns an 80%. (Expanding the Topic)

**Autonomous Learning** only requires something that is essential and vital, **The Willing to Learn.**

**Metacognition** is defined as “**Cognition about Cognition**” or “**Knowing about Knowing**” It is also an awareness and understanding of our own thought process. (What we learn, how we learn and why we learn)

John Flavel defines Metacognition as “**Thinking about one’s own thinking**”. In other words, knowing what you know and what you do not know.

**Cognition** is a mental process involved in **gaining knowledge and comprehension.** This process includes **thinking, knowing, remembering, judging, problem-solving and evaluation.** They are higher-level functions of the brain and encompass **language, imagination, perception, and planning.**

When talking about **Metacognitive Strategies,** we refer to **Methods** used to help students understand **the way they learn.** In other words, it means processes designed for students “**To think about their thinking**” and “**To evaluate what they “know” and what they want “to know”.**”

**Learning** is the transfer of information to knowledge; and **Deep Learning** is the appropriation and **mastering in content to be applied in context.**

### ***Benefits of Autonomous Learning***

- 1) It enhances the learner’s motivation and leads to more effective learning.
- 2) It provides learners with more opportunities for English Communication in a non-native environment.
- 3) It caters to the individual needs of learners at all levels.
- 4) It has a lasting influence.
- 5) It makes the learner reflect on what he needs and take actions.
- 6) It expands the learner’s imagination and creativity.
- 7) It allows the learner to deepen his own learning and knowledge.

**Metacognition** helps us develop and promote the following **skills:**

- Critical Thinking and Problem Solving.
- Collaboration and Effective Communication.
- Creativity and Imagination.
- Citizenship.

- Digital Literacy.
- Leadership and Personal Development.
- Strong Commitment and Responsibility.
- Self-study and Research.
- Internal Motivation and Intercultural Awareness.

### ***Some Critical Thinking Strategies:***

- Comparing and explaining similarities and differences.
- Contrasting and explaining differences.
- Analyzing, when breaking ideas into parts or segments.
- Categorizing.
- Evaluating.

### ***Some Metacognitive Strategies:***

- Identifying one's own learning styles and needs.
- Setting goals.
- Planning for a task.
- Gathering and organizing materials and resources.
- Arranging a study space and schedule.
- Monitoring mistakes.
- Evaluating results.
- Adjusting, if required.
- Asking for help.
- Researching for further information.

When my student wants/is willing to learn, ***nothing and nobody can stop him; only you Master!***

When he/she wants to learn, he/she looks for the **means, ways, venue, resources, and strategies** to improve his learning level.

An excellent teacher **inspires his/her student, encourages, and challenges him/her through tasks and questions!**

A Teacher who challenges, **generates autonomy, imagination, and creativity.**  
(Karl Rogers)

How to foster **Learning-to learn?**

Do not make use of your authority to teach. Make use of your humbleness to teach and learn together. Sharing codes is essential for an effective learning and Communication.

You do not know everything, but together, we know everything. When I say together, I mean the Teacher, The Student, Society and Resources.

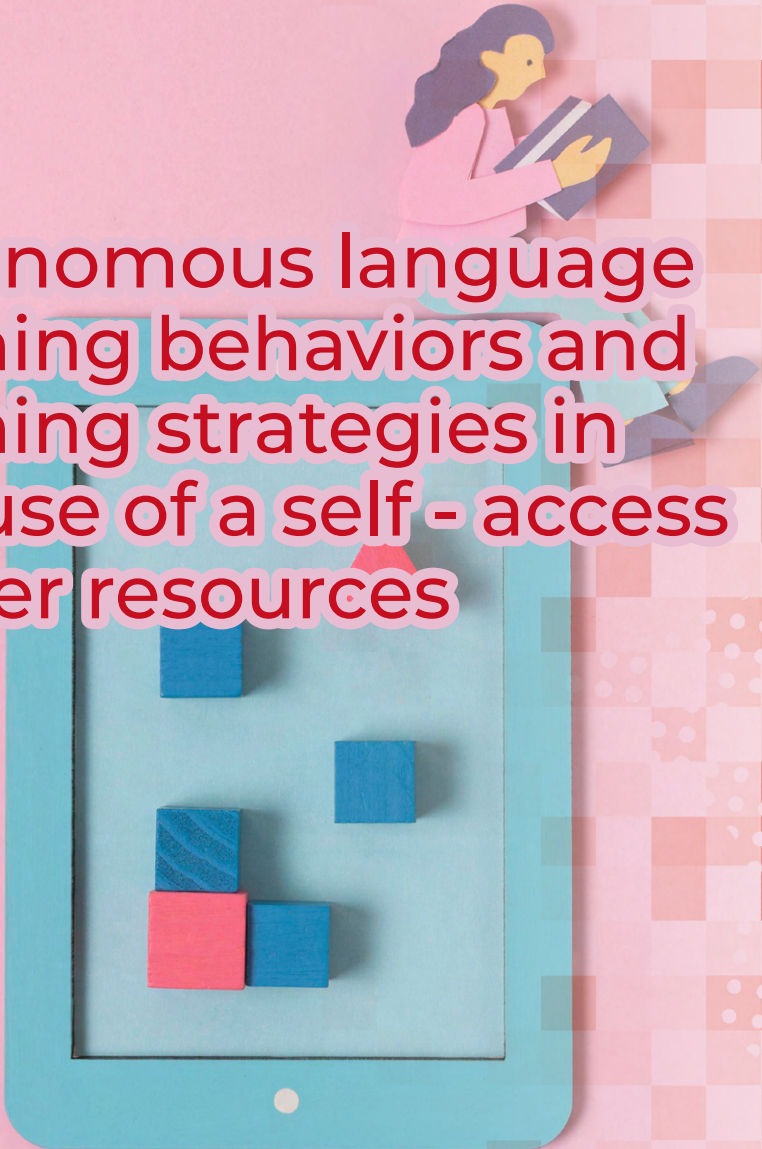
An excellent teacher **looks for, researches, experiments and sometimes makes mistakes.** Benjamin Franklin always counted with the **possibility of making mistakes!**

How much/into what extend, and how many things we have learned without having been tested?

To sum it up, in this book “Innovations in ELT” you will get answer to some of the questions asked in this section.

JOSÉ GUILLERMO RODRÍGUEZ SEGURA



The background features a light pink color with a pattern of orange and white squares on the right side. In the upper right, there is a paper-cut style illustration of a woman with dark hair, wearing a pink top, reading a blue book. Below her is a large, light blue tablet-like shape containing several colorful wooden blocks (red, blue, and pink) arranged in a pattern. The main title is written in a bold, red, sans-serif font with a white outline, centered over the tablet area.

# Autonomous language learning behaviors and learning strategies in the use of a self - access center resources

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## **INTRODUCTION**

Among the different ways of learning and teaching English as a foreign language raises an innovative and social form, Autonomous language learning. It nowadays provides new ideas, environments, and pedagogical implications that transform teachers, students, and institutions' roles in the process of learning a foreign language. Thus, the main purpose of this research is to identify in the field of autonomous language learning some behaviours revealed in the students' use of self-access centre resources through the implementation of tasks.

In the first part of this research paper, there is a rationale of the project. Second, the research questions, sub-questions, and research objectives are presented. Third, a literature review related to autonomous language learning is given. A definition, its three versions, characteristics in which autonomous language learning can be identified, and several learning strategies related to this project are shown. Fourth, the issue related to self-access centre, its requirements, typology, teacher, and students' roles to develop autonomous language learning is defined. Fifth, the research design in which participants, educational setting description, data collection instruments, and procedures is explained. Sixth, the instructional design points out the use of tasks inside the project. Seventh, the data analysis providing students samples and opinions is organised by tasks. Finally, the results and conclusions emerged from the data are explained.

## LITERATURE REVIEW

The aim of this literature review is to support our pedagogical project that is related to autonomous language learning behaviours identified in students' use of Self-Access Centre resources through the implementation of tasks. It clarifies the main constructs presented in the research questions, for instance, what autonomous language learning characteristics are, and what a self-access centre is. First, there is a definition of what autonomous language learning is, how this term has been used in education, its three main versions, some autonomous language learning characteristics, and learning strategies in autonomous language learning. Second, a definition of a self-access centre, its typology, and its requirements for the success of autonomous language learning are presented. Finally, students and teachers' roles are given in terms of self-access centre interaction for the development of autonomous language learning.

### *Autonomous language learning state of art*

In the field of language education, autonomous language learning arises from debates about the development of independent thinkers originated in the 1960's; and by 1981, Holec (1981) defined this term as "the ability to take charge of one's own learning". This definition has been taken as a starting point for many authors, such as, Dickinson (in Gardner & Miller, 1999) that accepts autonomous language learning as "a situation in which the learner is totally responsible for all the decisions concerned with his or her learning. In addition, Little, D (in Gardner & Miller, 1999) defines autonomous language learning as "a matter of the learner's psychological relation to the process and content of learning". Finally, Benson (1997) establishes autonomous language learning as "an educational practice that recognises the right of non-native speakers in relation to native speakers within the global order of English. From the definitions given by Dickinson and Little, we can appreciate that their focus is on the learner's psychological aspects and personal characteristics rather than in social aspects that are important and influence the process of language learning.

Thus, it is important to consider that autonomous language learning becomes a tool to help students in a struggle towards alternative cultural definitions of their lives. In this view, language is not taken as a given code (structures, grammar, or vocabulary) that students need to learn; "but rather as a major aspect of the cultural domain in which life can be constructed and reconstructed" (Pennycook, In Benson, 1997). It also opens cultural alternatives that allow students to become authors of at least part of their worlds. In this way, students are participants in the transformation of their attitudes and social- educational context.

### ***Educational uses of autonomous language learning and versions***

As well, the term autonomous language learning has been used in at least five ways (Benson & Voller, 1997): first, for situations in which learners study entirely on their own. Second, a set of skills that can be learned and applied in self-directed learning. Third, an inborn capacity that is suppressed by institutional education. Fourth, the exercise of learners' responsibility on their own learning. Fifth, for the right of learners to determine the direction of their own learning.

From these definitions and uses, Benson (1997) proposes three versions of autonomous language learning (technical, psychological, and political) that are strongly related to three approaches of knowledge, learning, and language (positivism, constructivism, and critical theory). Thus, the concept of autonomous language learning is clarified for better understanding.

Concerning to the technical version, it is related to learner strategies and learner training. It works with positivistic approach where knowledge is seen as a reflection of objective reality. Processes of learning are characterised by the transmission of knowledge from teacher to student. Furthermore, language is perceived as a code where communication occurs by the mastery of linguistic structures. Moreover, autonomous learning is defined as the act of learning a language without teacher intervention and outside the classroom providing students language learner strategies to manage their own learning process.

In relation to the psychological version, it is concerned with the capacity of taking responsibility through construction of abilities and attitudes. It is linked to constructivism where knowledge is defined as a construction of meaning and restructuring of experience. Language is seen as the negotiation of meaning conveyed in specific situations or contexts. Furthermore, this version determines autonomous language learning as a group of attitudes and abilities from the learner that are suppressed by the institutional education and learner has the responsibility of what and how interacts with the target language.

The last version of autonomous learning is the political one. It is the control over the processes of learning considering the capacity to choose what to learn. It is combined with the critical theory that defines knowledge as a construction inside a social context opening criticism in a particular, cultural, and historical product. Learning is a process of engagement with social context, which involves the possibility of political action and social change. Language is related to the term ideology that expresses social interests and meanings. Furthermore, autonomous learning is seen as a way of enabling students to manage their individual learning through interaction with other individuals, and the institutional context in which it takes place.

From these three versions of autonomous language learning proposed by Benson (1997), we consider that the political version of autonomy is the closer to one we adopted for our research project. First, it promotes the language learning as a process of interaction among learner, teacher, and social context, where they are sharing knowledge, needs, personal goals, and motivation, being aware of their social and cultural environment. Second, this version sees student as an active participant who analyses, reflects, and proposes changes with responsibility towards his own process of learning. Third, the political version of autonomous language learning gives learners the opportunity to learn inside and outside the classroom changing their roles, developing skills, and abilities through their personal experiences.

### ***Characteristics of autonomous language learning***

Besides to these three main versions, Benson, P (1997) provides some characteristics where autonomous language learning can be identified through the political version. The most related to our project are:

- ***Collaborative group work and collective decision-making***: we deem that it promotes autonomous learning not as isolation, but rather, as a collective way in which students interact and interchange experiences in the learning process. In this way, learners can implement and appreciate different learning strategies according to their interests and needs.
- ***Learning about the target language and its social context of use***: At this point, we think that the combination between rules of the language and their use in meaningful situations for students encourage learners to interact with their peers and the surrounding environment. Exploration of societal and personal learning goals: As students interact and share experiences with their environment, they become aware about their relevant goals in which they should focus on, in order to gain more confidence in the use of the target language.
- ***Self-production of task and materials***: as Littlewood (in Benson, 1997) stated, "Motivation is one element in the success of autonomous learning." The production of materials, such as, the creation of a self-access centre (English Centre), flash cards, posters, puppets, and a puppet theatre by students is a way of sensitising and motivating learners towards autonomous language learning, so that, their participation generates compromise and responsibility.
- ***Control over resources***: through this area, students can select what and how to learn by selecting materials they consider relevant according to their learning goals.
- ***Discussion and criticism of the target language norms***: as students are immersed in the target language, the discussion of the L2 norms becomes important so that it enhances students' proficiency in the four skills and promotes learners' self-confidence.

## ***Language learning strategies in autonomous language learning***

In addition to these characteristics, Nunan, D (in Benson, 1997) proposes that at initial stages of implementing autonomous language learning teacher's goal is focused on encouraging learners in identifying several learning strategies that work best for them. According to Oxford, R (1990), learning strategies are those steps taken by students to enhance their own learning"; in addition, they are broken up into two classes. On the one hand, direct strategies are related to the management of the language itself inside a specific task. On the other hand, indirect strategies are concerned with the management and planning of the learning process considering affective and social aspects.

In terms of direct strategies, we consider that the most related to our project are:

- ***Translating***: This cognitive strategy allows learners to use their own language as the bases for understanding what they hear or read in the target language.
- ***Creation of mental linkages***: In this memory strategy students associate new language information with familiar concepts already in memory overcoming limitations in speaking and writing: This compensation strategy contributes to learning so that it allows learners to keep writing not matter the difficulties they might have.
- ***Guessing intelligently***: compensation strategy where students are not afraid of understanding every single word in the listening or reading task, instead, students can use some clues such as titles, topics, authors, and text structure in order to facilitate comprehension.
- ***Approximating the message***: It is a compensation strategy where students while speaking or writing can avoid some information or say something different that has similar meaning.
- ***Coinage***: In this compensation strategy, learners make up new words to communicate an idea in which the learner does not have the correct vocabulary.
- ***Switch to the mother tongue***: learners use this compensation strategy when they do not know a word in the target language and do not use translation to this expression.

Concerning to indirect strategies, the following are closer to this project:

- ***Asking for clarification***: in this social strategy, learners usually ask a proficient person in the target language to clarify or verify the meaning of some words although learners at the same proficiency level can often provide clarifying or verifying information.
- ***Seeking practices opportunities***: This metacognitive strategy aims at helping learners in searching additional chances to practice the language and make learners aware of the fact that it is up to them to search for these occasions.

- **Self-monitoring:** it is a metacognitive strategy where learners monitor themselves by noticing and correcting mistakes in any of the language skills. In terms of speaking learners should not become obsessed with correcting every speech mistake. They should focus on those mistakes that cause confusion.
- **Discussion and criticisms of the target language norms:** As learners get immersed in the target language, the discussion of the L2 norms becomes important so that it enhances students' proficiency in the four skills, in addition it promotes learners' self-confidence.
- **Asking for correction:** this social strategy is mostly used by students in writing and speaking when they notice and correct their own difficulties.

### **What a self-access centre is?**

In this section, we talk about what self-access is. According to Gardner and Miller (1.999) self-access is the most relevant approach to encourage students to move from teacher-directed education towards autonomous language learning.

Self-access combines an integration of elements that provide a learning environment. Examples of these are resources that offer activities, technology, and access to other language learners. People, such as, teachers who perform their roles as counsellors, and learners who perform their roles of partners and peer assessors. Management provides organisation, co-ordination, and decision making. System organises self-access learning facilities in a way that best support the needs of learners. Finally, counselling gives advice of language ability and negotiation of study plans.

### **Self-access environments and learner support structure**

There are two types of self-access environments, uncontrolled and controlled. The former are environments that go beyond the control of teachers or counsellors, such as, World Wide Web, airport, and learner's home. The latter are places in which self-access materials and activities are available in an organised way. (Gardner and Miller 1.999) From this organisation, we consider that our project takes place in a control environment, so that materials are organised and available to students.

Besides to these environments, the learner support structure, that is the level of guidance provided to learners, is a structured system of self-access where learners receive a complete guidance on how to enter the system and how to move through it.

### **Teachers' and student's role in a self-access centre**

Lastly, we define teacher and student's role inside the self-access centre in order to promote autonomous language learning. Voller, P (in Benson 1.997) proposes

three stages. Those are teacher as facilitator, teacher as counsellor, and teacher as resource in which the main characteristic is to be a negotiator. In the role of teacher as facilitator, he/she has two complementary roles (Holec, H cited in Voller, P 1997): On one hand, teacher should provide psychosocial support by promoting motivation and encourage students constantly; on the other hand, teacher should provide technical support by guiding students in the use of different resources. In the role of teacher as counsellor, Littlewood, W (In Benson, 1997) gives the same characteristics of a facilitator; nevertheless, the difference is that this type of teacher differs in the nature of the interaction that is one to one using the target language with students. In the last role, teacher as resource depends on the context wherein language learning takes place and in the view that teachers have of themselves as passive providers or disseminate the information.

Likewise, Sturtridge, G (in Benson 1.997) presents three characteristics of the learner's role, which are:

- Awareness of authentic material, such as, magazines, newspapers, and tales, and designed material (textbooks, cassettes, or videos)
- Learners need to have the ability to evaluate if the activity he/she has developed really helped him/her in the process of learning the target language.
- The use of peers as resources, gives learners the opportunity to be aware that group work maximises the benefit obtained from a task.

As a manner of conclusion, the development of autonomous language learning has several implications in the traditional way of teaching English as a second language due to the fact there is a change in the relationships of power that have been used in educational settings. In addition, it provides different spaces for teaching (self-access centre), and gives a new vision of the learners' role that allow them to be aware of their learning process and the social context in which they are.

As a final point, in our experience as teachers we realised that our role goes beyond of instructors and become in a guide who helps students in the process of autonomous language learning through the implementation of a self-access centre. In this way, we assist them to become aware of and identify their learning goals, learning strategies, interests, needs, and motivation. Therefore, students evidence autonomous language learning throughout their lives being recognised as proactive individuals and participants in the language learning process.



## **METHODOLOGY**

### ***Research design***

This research was framed by using case study methodology as it is focused on a bounded system (19 students) and it attempted to describe an occurring phenomenon inside a context. All the data collected was analysed considering the framework provided by the literature review using a method of content analysis in order to categorise both verbal and behavioural data for the purpose of classification and tabulation.

According to Noonan, D (2008) a case a study in education is the school investigation developed by teacher-researchers that use their participant roles “as a basis on which to build skills of observation and analysis”. In a more detailed definition, Noonan defines a case study as the study of an instance inside its own context or setting selected from a bounded system that could be an individual learner, a classroom, or a whole institution. The scope of this type of research is limited and can use both qualitative and quantitative methods to collect and analyse data. Some of the advantages in implementing a descriptive case study are, on the one hand, the strong relation with reality, so that researchers are concerned to real phenomena of educational settings. On the other hand, it helps teacher-researchers to enhance their understanding of the specific phenomena and it solves problems related to researchers’ own professional workplace.

### ***Context and participants***

The participants in this project were 19 fourth-grade students at a public school between eight and ten years old whose previous English language experiences were almost null since there were no English teachers at their school. Following the results from the learner profile. It was found that their reasons for learning English were mainly related to personal issues such as travelling or further education. In addition, in terms of the resources they had available for learning English, we discovered that those resources were restricted to the ones found at their homes; for example, English-Spanish dictionaries and some “informal English textbooks”.

### ***Data collection instruments***

Different data collection techniques were implemented in order to answer the research question about what behaviours related to autonomous language learning are identified in students’ use of self-access resources through the implementation of tasks.

- **Questionnaires:** these instruments were designed as students' self-reflections where the main purpose was to obtain information from open questions. Participants reflected upon their performances in different tasks, specifically the first and last tasks providing relevant information about their objectives, sharing experiences, main difficulties, strengths, and overall performance.
- **Observations logs:** an observation format was implemented in order to allow the teacher-researchers to describe behaviours related to autonomous language learning in the interaction among them and several self-access resources.
- **Documentary:** in each of the five implemented tasks, different samples of students' documentary were gathered from students' productions in a naturalistic way while these were interacting in the target language.
- **Data analysis and interpretation.**

This research was framed by the case study methodology as it focused on a bounded system (19 students) and attempted to describe an occurring phenomena inside a context. All the data collected was analysed taking into account the framework provided by the literature review using a method of content analysis in order to categorise both verbal and behavioural data for the purpose of classification and tabulation.

Thus, several autonomous language-learning behaviours (ALLB) were identified in every implemented task. Related to the Reading ability, it could be seen that students revealed the following characteristics: group work and group decision making, control over resources and learning about the target language and its social context of use. In terms of the writing skill, students shown some other ALLB, such as, self-production of materials and exploration of societal and personal learning goals. As for the speaking skill, students were engaged in two characteristics called criticism of the language task and materials and control over the management of learning.

## RESULTS

As far as this research shows several results emerged along this process. The first result is concerned to the creation and provision of a self-access centre to students and institutions. Inside this new and innovative space, they found interesting and available resources for the process of learning English.

A second result is related to the identification of some autonomous language learning characteristics. Through the interaction between students and self-access resources, such as, dictionaries, teacher counselling, or peer counselling, we identified several autonomous characteristics where the most recurrent was "learning about the target language and its social context of use" in order to contextualize the activities and background knowledge into real and meaningful situations. In addition to this feature,

students used other characteristics such as “control over resources”, where students by their own were mainly concerned with the use of different self-access resources to make clear and more comprehensible the target language; and “collaborative group work and collaborative decision making” where learners cooperated and organized activities with their peers.

The third result is concerned to the students’ use of some learning strategies. Throughout the implementation of tasks focused on specific skills, students began to prepare in order to work in a self-access centre and develop autonomous language learning characteristics; so that the use of task brings them opportunities to focus not only on language, but on the learning process itself. Thus, students handled several learning strategies that are divided into direct and indirect strategies. In terms of direct strategies, the most used were “switch to the mother tongue, creation of mental linkage and coinage” where students made ‘A up words and used their L1 to overcome limitations in the target language. While in indirect strategies students held the following “asking for clarification” and..... “seeking practice opportunities”.

## **CONCLUSIONS**

Insofar as this research illustrates in the early stages of autonomous language learning in children two main behaviours are presented. The first one is the presence of autonomous language learning characteristics such as control over resources, collaborative group work and decision-making, and creation of self-access materials that help learners to become aware of its social context of learning. Furthermore, students through implementation of these characteristics can apply their knowledge in L2 to meaningful and contextualized situations that they lived every day. Moreover, students with the use of these characteristics turn into active and responsible participators of their own process of learning.

The second behaviour is the implementation by students of some language-learning strategies that facilitate the understanding of the target language in an enjoyable and easier way. In addition, it provides students the opportunity to be aware of their personal goals, needs, and interests related to their learning process. In this way, when students use learning strategies, being aware of the importance of these, they are becoming autonomous language learners.

To conclude, it is worth of attention that the creation and implementation of a self-access centre does not correspond mainly to economic issues. Rather it is the motivation, interest, and compromise from institutions, teachers and students that grow to be real this type of spaces for learning a second language considering the social context and learning process students have.

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# Breaking ground in a teacher education program through the implementation of flipped learning

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## **ABSTRACT**

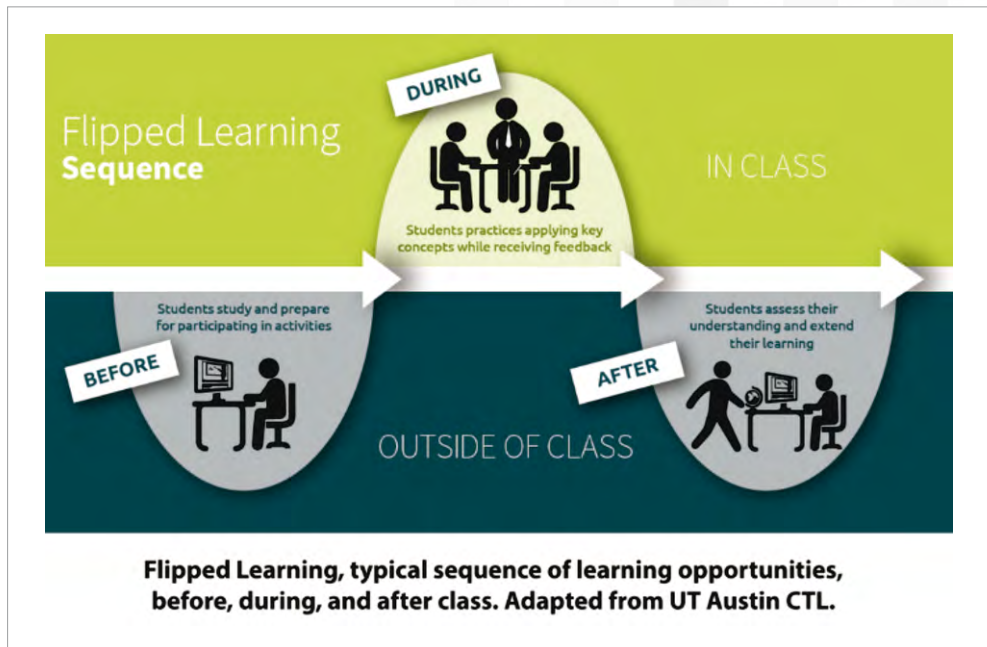
This paper describes an ongoing study performed within a teacher education program. This study explores student teachers' perceptions in relation to self-regulated learning with the purpose of laying the foundations for the implementation of the Flipped Learning approach. Participants are prospective language teachers enrolled in an English Didactics class. The information was collected by means of students and professors' surveys, a focus group, prospective teachers' reflections, and researchers' field notes. Data was analyzed using the principles of thematic analysis. The first phase of this research illustrated student teachers' views concerning self-regulated learning and the role their professors play in their training and their future performance as teachers. Initial findings revealed that it is necessary to train learners on self-regulatory behaviours and transform professors' roles into facilitators as a necessary condition for Flipped Learning to take place.

**Keywords:** Flipped Learning, Self-Regulated Learning, Teacher Education, Prospective Language Teachers

## **INTRODUCTION**

Flipped Learning (FL from now on) is a powerful movement which has evolved rapidly and is moving ahead in 21st century education. The Flipped Learning Network describes it as a pedagogical approach that allows effective teaching

and interactions among teachers and learners in class by switching the idea of classroom-based learning. Therefore, out-of-class time is used to introduce students to content before class whereas in-class time is then used to strengthen understanding through discussions and problem-solving activities in which teachers act as facilitators (see Fig. 1).



**Figure 1** *Flipped Learning Sequence.*

Source : <https://images.app.goo.gl/EU3rPMTUu3bgFJKc9>

However, due to their lack of autonomy learners might fail to understand the instructional materials by themselves (i.e. videos, readings, worksheets, among others.). This is precisely what teacher researchers observed in the English Didactics classes and in some of the students' reflections after they had to access content on their own. The whole study aims at fostering Autonomy through the implementation of Flipped Learning. Nevertheless, in the development of this first stage of the project, initial findings revealed that autonomy became evident in students through a series of self-regulatory behaviours and actions. That is why this preliminary study attempts to answer the research question: *What are pre-service teachers' perceptions, beliefs, and behaviours towards Self-Regulated learning in a teacher education program in Bogotá, Colombia?* Zimmerman defines self-regulated learning (SRL for short) as a cyclical process in which learners plan a task, monitor their performance, and reflect on the outcome. The cycle then starts again, so reflection is used for learners to adjust plus prepare for the next task (see Fig. 2). The process should be tailored for

individual learners as well as for specific learning tasks. In this paper, SRL is proposed to prepare students for the implementation of FL.



**Figure 2** *Self-Regulated Learning Cycle.*

Source: Image by Kristin O'Connell. Retrieved from <https://images.app.goo.gl/UiT9oCEcG7crdigE7>

The main objective of this study is to determine pre-service teachers' perceptions, beliefs and behaviors towards self-regulated learning in a teacher education program in Bogotá. Consequently, a second key objective is to determine the changes needed in the English Didactics classes for the successful implementation of FL.

## **METHODOLOGY**

### ***Type of study***

The study was carried out under the framework of qualitative research, which according to Johnson has become relevant in social sciences because this field considers reality as pluralist. In other words, for qualitative research, it is not possible to generate 'universal answers' for one issue, the latter is because ways of living, subcultures and behaviours vary. For that reason, researchers must be prepared to face new contexts and social perspectives in their background targets. Regarding Johnson: "Qualitative researchers view human behaviour as dynamic and changing, and they advocate studying phenomena in depth and over an extended period time" (p. 418). In addition, Johnson determines four main reasons for qualitative research: 1) Convenience of methods and theories. 2) Diversity and participants' viewpoints should be taken into account since subjectivity of the target population is considered



to be true and valid. 3) The researcher's reflection upon the studied phenomenon. 4) The diversity in approaches and methods of research.

Within the framework of the qualitative research, we can find 'action research', which in education becomes then an interesting option for teacher researchers in a teaching and learning environment. For that reason, it was the type of study implemented. Regarding this concept, Ferrance affirms that "action research is a collaborative activity among colleagues searching for solutions to everyday, real problems experienced in schools, or looking for ways to improve instruction and increase student achievement" (p. 1). The main objective in action research is to promote positive changes in educational contexts; in teachers, to improve their teaching practice and in learners, to foster better learning outcomes. Action research involves the cycle presented in Figure 3.



**Figure 3** *The Action Research Cycle.*

Source: <https://images.app.goo.gl/3uJ81a9BzEgP69fT8>

## Context

This study is taking place in a private university located in Bogotá, Colombia. The university offers programs in different areas and the School of Education offers three majors: Physical Education, Children's Pedagogy, and Spanish & Foreign Languages. Participants in this study belong to the latter program. Data were collected in an English Didactics class, which aims at giving prospective teachers the conceptual grounds for English Language Teaching. Topics involve First and

Second language Acquisition Awareness, Language Teaching Methods, Teaching the Language Skills, Using Technology in the English as a foreign language (EFL) class, Lesson Planning, and Materials Design.

### ***Participants***

The first stage of this project involved eight student teachers, two men and six women, whose ages ranged from 19 to 28 years. English Didactics is a subject offered in the seventh semester of the program and the class is taught in English once a week for three hours. This class does not have any course prerequisites. Consequently, students sometimes do not have the proficiency level required to be able to take this subject. Although the institution is private, most of the students belong to low socio-economic strata. Their personalities, learning preferences, attitudes, and motivation towards learning the language were very diverse. Even though this was a small group, it was heterogeneous. A key element that could make a difference in this population was the fact that most of them had part-time jobs and were parents at the time they were taking the subject. As a result, they devoted less time to studying compared to students whose parents supported them economically and who did not have any other responsibilities at home.

### ***Data analysis***

Data analysis has been done under the principles of thematic analysis proposed by Braun and Clarke. According to these authors, thematic analysis refers to the process of recognizing themes within qualitative data. In other words, it identifies patterns in the data that are relevant or interesting and uses them to tackle the study. A proper thematic analysis goes beyond identification –it interprets and makes sense of the data–.

Braun and Clarke differentiate two levels of themes: semantic and latent. In the former:

“... the themes are identified within the explicit or surface meanings of the data and the analyst is not looking for anything beyond what a participant has said or what has been written.” (p.84).

In contrast, the latter:

“... goes beyond the semantic content of the data, and starts to identify or examine the underlying ideas, assumptions, and conceptualizations – and ideologies - that are theorized as shaping or informing the semantic content of the data”. (p.84)

In this study, researchers attempted to do both: identifying themes at the semantic level and trying to move beyond describing what is said to focus on analysing and explaining it.

## RESULTS

In an attempt to answer the research inquiry conducting this study: *What are pre-service teachers' perceptions, beliefs, and behaviours towards Self-Regulated learning in a teacher education program in Bogotá, Colombia?*, two main themes were apparent from the data analysis: self-regulatory behaviors and teacher educators' roles. The initial analysis demonstrated that the former theme was evident for participants as crucial for their academic success. As a result, although the latter theme was not included in the research question, the teacher's role is evolving from transmission of knowledge to assisting and guiding self-regulated student learning. That is why it proved to be decisive in the development of self-regulation for learners.

### ***Self-Regulatory behaviors***

Following Zimmerman,

“Self-regulation is not a mental ability or an academic performance skill; rather it is the self-directive process by which learners transform their mental abilities into academic skills” (p. 65).

In this study, the results showed that participants may be considered what Zimmerman calls *novice self-regulators*, due to the fact that they are constantly looking for teacher's validation of their work and the learning strategies they use. In other words, they are teacher dependent. In the focus group interview, students stated that they associate this teacher-dependency, as Cuesta, Anderson, and McDougald name it, with adverse habits acquired at school and preserved in higher education, as demonstrated in the following extract:

*“Well, I think I am sometimes like a child. I do things if I am really interested in them. If not, I will not do them. But I think it also depends on the teacher. If s/he cares, I will care. If s/he does not, I lose my motivation to learn”* (Student 3. Focus Group Interview. November 21st, 2017).

The self-regulatory behaviors observed in participants of this study were very different and diverse. Some of them concern actions related to time management and organization; others are related to planning and practicing; and others still involve setting learning goals and creating action plans (see Fig. 4).



**Figure 4** *Self-Regulatory Behaviors.*

Source: image by Wendy Rey Cárdenas.

### ***Time management and organization***

This sub-theme refers to how students distribute and plan their time to carry out their academic and non-academic activities. Participants in this study seem to be aware of the importance of organizing their time effectively to have academic success, as expressed in the following excerpt:

*“I’m very organized. I think I´m totally organized with the time. I organize it weekly because I have hundreds of things to do during the week because I work in different places. I don’t know if that’s a mistake, but I don’t waste time in the university. So, for example, when I finish my classes, I go home because I don’t stay here talking or chatting or playing something. And if I have gaps in my schedule, I try to take advantage of that time (Student 3. Focus Group Interview” (November 21st, 2017).*

Students understand that distributing their time properly and having good study habits are essential to being successful learners. However, the following extract shows that this aspect varies depending on their personal situations:

*“Teacher, I try to organize my time because you know I have a daughter. So, I try to say this day I will do this homework and that day I will do the other. I try to do most of my homework on weekends, as much as possible on the weekends and the others during the week” (Student 8. Focus Group Interview. November 21st, 2017).*

Students also mentioned the importance of using different strategies such as calendars and reminders to keep track of the activities they have to do during the week:

*"I think I'm also pretty organized with my time, but it's different because I don't have like a specific schedule or something like that. In fact, I have lots of reminders on my cell phone. That's also like a useful thing for me. If a teacher gives me a task today for the next week, I put a reminder today in order to do that today. So, next week I'm going to be free. It's like a different perception of organization because I try to go in advance almost all the time"* (Student 4. Focus Group Interview. November 21st, 2017).

No matter how students organize and manage their time, participants of this study seem to be aware of its importance and value to streamline their learning and academic results.

### ***Planning and practicing***

This theme has to do with how students plan and perform precise actions to enhance their learning process. In this particular case, planning is associated with study routines and timetables. Thus, students organizing their activities implies being able to cope with their assignments. However, they expressed that they do it to comply with their duties to their teacher and not for the sake of their learning process. In other words, students lack agency in their learning process. As stated by Lindgren and McDaniel, agency takes place when the learners themselves direct learning experiences. Put differently, it must involve learners' activity and initiative.

In relation to practice, participants of this study see it as absolutely necessary, given that their opportunities to practice are limited to class time as evidenced in the excerpt below:

*"I think that at the university we don't have the enough time to cover all the topics so we have a lot of things to study, so we have to go deeper by our own because I think it is hard to go deeper in a topic just in two hours, nor in four hours"* (Student 3. Focus Group Interview" (November 21st, 2017).

All things considered, practice is pivotal for significant improvement and it should not be forced by the teacher. When students determine what they require practice and do it consciously, their results are positive and successful. However, as Van Lier suggests, the decision to practice a skill must come from the learner.

### ***Setting of learning goals and the creation of action plans***

From a social cognitive perspective, Bandura and Chunk claim that self-regulated learners direct their learning process by setting challenging goals for themselves.

The process of setting goals permits students to decide on what they want to achieve. With that understanding, they become aware of what they must focus on and improve. Goal setting allows students to enhance their academic performance, increase their motivation, and improve their self-confidence. Likewise, goal setting implies the creation of action plans, which include the steps to follow in order to accomplish their goals.

Participants in this study do not consider an action plan is necessary to overcome their weaknesses as expressed in the following comment:

*“Maybe, not exactly an action plan, but for example if I know that I have a specific difficulty in something, I try to look for information about that in order to cover what I didn’t understand or what I need to reinforce, but not exactly an action plan or something like that”* (Student 4. Focus Group Interview. November 21st, 2017).

Researchers observed that students ignore the importance of a formal action plan because they do not know how to do it and have not been taught. Participants need to learn what relevant action plans are and how to create them. Consequently, students do not plan formally; instead, they make decisions about their learning based on their immediate needs. That is why they spend more time trying to assimilate concepts, do not see significant progress in achieving their goals and, as a consequence, feel disappointed with their learning process.

Professors also ponder over goal setting and action plan creation. One of the professors stated that being autonomous *“means to be aware of the use of learning strategies, the establishment of goals, use of learning pathways”* (Professor 1, Survey, Question 1). In the same vein, another professor claimed: *“[being autonomous] allows students to set some objectives regarding their learning and take charge of their learning”* (Professor 5, Survey, Question 1).

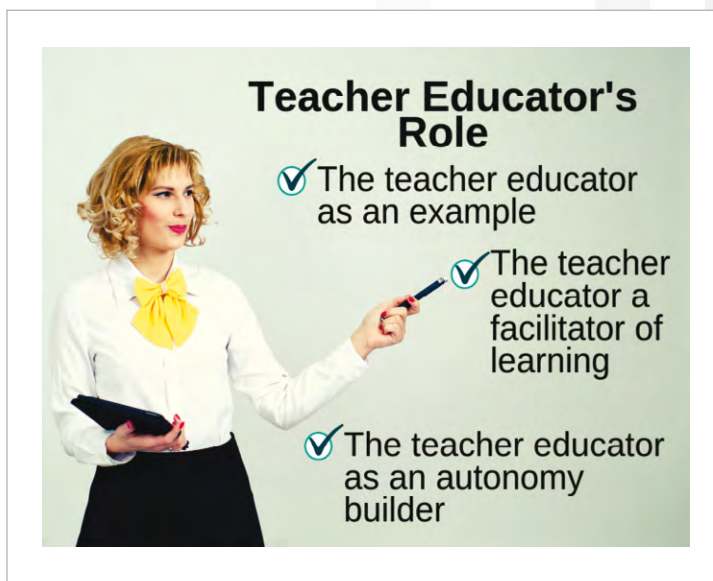
All in all, participants’ perceptions, beliefs, and behaviors towards self-regulation were revealed and researchers observed the importance of scheduling, planning, and organizing in the creation of student teachers’ learning route. The following section describes the second theme emerging from the data: the teacher educators’ role.

### **Teacher Educators’ roles**

In the development of this study, it was clear that in order to improve teacher education programs and their potential to develop innovative alternatives for learning, a key aspect to be considered is the role of the teacher educator. In this sense, Korthagen, Loughran, and Lunenberg assert:

“Teacher educators not only have the role of supporting student teachers’ learning about teaching, but in so doing, through their own teaching, model the role of the teacher. In this respect, the teacher education profession is unique, differing from, say, doctors who teach medicine. During their teaching, doctors do not serve as role models for the actual practice of the profession i.e., they do not treat their students. Teacher educators, conversely, whether intentionally or not, teach their students as well as teach about teaching”.

Regarding the same theme, it is certain that prospective teachers perceive their professors as role models and professors help learners build their identities as teachers and determine the methods, they will use in their teaching practice. The information collected in this project allowed the identification of three main roles educators play in the development of self-regulated learning: the teacher educator as an example, the teacher educator as a facilitator, and the teacher educator as an autonomy builder (see Fig.5).



**Figure 5** *Self-Regulatory Behaviors.*

Source: image by Wendy Rey Cárdenas.

### ***Teacher educator as an example***

In teacher education, as well as in any other level of education, the role of professors is crucial since they can be good or bad models of teaching practices. In the development of this study, students differentiated both types of role models. Students considered some professors as role models who supported their professional

development since they were suitable examples of attitudes and behaviors. For students, having professors who strive for knowledge is motivating because they challenge themselves and their students to go beyond subject contents as seen in the student's comment below:

*"Sometimes I read books and I know that if I go to professor 'X' or 'Y' and I start talking with them, even if it's not a university task, I will have like that exchange of knowledge because they really care about their knowledge. You can see that they enjoy what they're doing and that's important"* (Student 3. Focus Group Interview. November 21st, 2017).

In this respect, authors such as Wideen, Mayer-Smith, and Moon support the latter idea stating that the processes in teacher education may be more important than the content provided to student teachers. Russell backs this idea when he reflected on the way he teaches teachers: "How I teach IS the message".

Along the same lines, some professors also emphasized the importance of fostering autonomous learning as a requirement for successful learning, *"I've tried to promote autonomous learning among my students and I have used myself as an example, and I've told my students that it has helped me become a successful learner"* (Professor 5. Survey).

On the other hand, Professors can also set a wrong example with their actions. The excerpt below exemplifies a student's annoyance and disappointment when professors assign superficial tasks, do not plan or do not provide feedback.

*"The teacher sometimes gives tasks just for covering time! For example, we have to read something and when we arrive, we never talk about what we read so it's stupid to spend time doing something that we supposedly are going to discuss in class when the teacher didn't even read and is not going to be able to give us some feedback"* (Student 3. Focus Group Interview. November 21st, 2017).

### **Teacher educator as a facilitator**

The data collected also observed that one of the roles teacher educators should play when guiding their students is that of a facilitator of learning. In other words, educators are in charge of facilitating the acquisition of knowledge and competences. Moreover, teachers as facilitators need to build a positive learning environment in which they direct the learning process by providing feedback and advice. One of the professors stated: *"[in an autonomous learning environment] the teacher is only a facilitator, helper and a guide"* (Professor 4. Survey, Question 3) as claimed in the Flipped Learning Network transforming teachers into 'guides on the side' instead of 'sages on the stage'.



## **Teacher educator as an autonomy builder**

According to La Ganza, it is undeniable that there is a direct relationship between professors' autonomy and learners' autonomy. Professors' beliefs and practices on autonomy mold its development in learners. That is why professors must be autonomous themselves to teach student teachers to be autonomous as well and consequently student teachers will be able to foster autonomy in their future learners.

Both students and professors who participated in this study recognize the importance of autonomy building and the low levels of control over learning that students have when they are going start their higher education. Thereby, autonomy cannot be considered natural to students. They needed to be taught by their professors, which is supported by some of the information collected. As an example, one of the professors states:

*"I think autonomy is not something spontaneous and, in our context, it is a painstaking process that needs a guide from the very beginning, that is to say in elementary or high school"* (Professor 2. Survey).

Moreover, another professor supports the former idea by emphasizing the need for training on how to become more autonomous learners:

*"I apply strategies to promote autonomous learning in my classes. Those (students and teachers) who apply this type of learning require training to be counselors, to be creators of cognitive and metacognitive work-guides which will be very helpful depending on the students' needs and interests"* (Professor 1. Survey).

Researchers of this project, as professors in a teacher education program, understanding the relevance of autonomy, decided to include training on autonomous learning in the curriculum. For instance, some formats are used to help students visualize their thinking regarding self-regulatory behaviors (i.e. learning contracts, action plans, goal setting, etc.). There is explicit instruction on how to fill them out and track their progress throughout the semester. This way, students' ability to self-regulate is enhanced.

## **CONCLUSIONS**

Taking into account the research inquiry leading this study *What are pre-service teachers' perceptions, beliefs, and behaviours towards Self-Regulated learning in a teacher education program in Bogotá, Colombia?*, students' understanding, assumptions and responses regarding self-regulation were revealed. Unexpectedly,

the roles teacher educators played in building and strengthening students' abilities to become autonomous learners were also unveiled.

The analysis of the data collected by different instruments displayed two major themes: *Self-Regulatory Behaviors* and *the Teacher Educator's role*. Regarding the former, prior to starting an implementation of FL, we conclude it is necessary to train students on SRL for FL to work successfully in the context under study. In relation to the latter, teacher educators, as role models, should set an excellent example for their students.

Explicit training on self-regulatory behaviors such as time management, organization, planning, practicing, setting learning goals and the creation of action plans, is necessary since they constitute essential tools for learning and achieving academic success.

In relation to the role played by teacher educators, as role models they should enlighten and encourage students in their search for success. Thus, teacher educators need to be an example of life and professional growth for their students so that they support their students' identity as future language teachers. This study shed light to four different roles: teacher educator as a role model, teacher educator as a facilitator of learning, and teacher educator as an autonomy-builder. Each role proved to be relevant and supported by enough evidence from the participants in this study.

All in all, we consider the need for training learners on self-regulatory behaviors and the necessary transformation of the teacher educator's role into professional educators to be a must for FL to be implemented successfully in a teacher education program such as the one under study.

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# Contextualized Materials to Enhance Public Speaking Using Flipped Learning Approach

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## **ABSTRACT**

The purpose of this study is to design contextualized materials for flipped classroom to develop public speaking skills among first semester students at ECCI University. In view of that, contextualized materials are those designed taking into account students' needs and specific real context learning needs and objectives (Núñez, et al., 2013). On the other hand, flipped learning is a pedagogical approach where students are active actors in their learning process and their group work become a dynamic setting for collaborative work. This transformation also includes the role of the teacher who grows into a guide and facilitator of students' knowledge application (FLN, 2014). Consequently, designing contextualized materials and including flipped learning in the classroom facilitate the development of students' public speaking skills.

Under such circumstances, qualitative research is the methodology proposed for the present study, since the data is a product of the daily interactive teaching-learning practices in the classroom (De Gialdino, 2009). Based on that, action research is the approach followed, considering that through teaching practices, a new pedagogical implementation requires observation and evaluation to guide the research process (Bernal, 2010). In terms of context, the participants are first semester students, the teacher as a researcher and as materials developer. Additionally, the instruments for the present study are students' artifacts, focus group, and field notes. Finally, the stages of the pedagogical intervention are topic selection, defining and designing

the materials, piloting and adjusting materials, evaluating the implementation, analyzing data and drawing conclusions from the research results.

**Keywords:** Contextualized Materials, Public Speaking, Flipped Learning.

## INTRODUCTION

New learners have come to classroom with different learning needs, and then traditional teaching methods do not work either for them or the society. A new world has given new generations different technological tools which allow them to learn by themselves anything they could be interested in; this is the reason why learning a language does not require to go to a place or stay in classrooms, young people are learning languages through the Internet or video games. On the other hand, these technological advances have created new needs for the current world, which is not demanding purely knowledge; the new world requires cognitive as well as emotional intelligence.

As it was previously mentioned, the new world requirements suggest new challenges in different spheres, especially in education. Universities and schools should reflect upon their roles in the society, since they are responsible for people's professional and emotional development. Since companies are looking for professionals who can lead teams, work in a team, be empathic, manage specific knowledge and speak another language. Unfortunately, Colombian education system is teacher-centered, this fact does not develop different abilities among students such as autonomy, creativity, sense of collaboration, along with others.

Following what was said before, considering those new educational and society challenges, universities intend to change those traditional paradigms for first semester students. There is when they start developing professional skills focused on languages. In the same line of thought, it has been noticed that some students come to the university with previous knowledge of English language while others are true beginners. As a result, in our classrooms we have a mixed of language levels. On the other hand, materials were not contextualized which implies no real connection with students' contexts. Finally, teaching practices are not well developed for various reasons like big groups of students, lack of the proper technology, no frequent teaching training, among others.

Finally, one of the abilities to be developed is speaking (daily conversations and public speaking). This ability is one of the hardest because it requires different aspects that students need to control such as dealing with anxiety, nervousness, and students' own feelings towards a public. It also requires from the teacher to use different strategies to work with them and enhance not only public speaking

but also emotional intelligence. This can be even harder when students suffer from low self-esteem given that public speaking means to expose themselves with all their weaknesses in front of people who have never seen before. Based on the facts mentioned above, the research question for this study is: What can be revealed through the development and the implementation of contextualized materials based on the flipped classroom strategy to develop public speaking?

The main goal of the present research study is to analyze the impact of contextualized materials to enhance public speaking while using Flipped learning approach. The specific objectives are; (a) to assess the development of authentic materials for improving foreign language levels, (b) to promote the use of flipped learning approach during students' foreign language acquisition processes, and (c) to enhance students' autonomous learning strategies for the acquisition of a foreign language.

## **THEORETICAL FRAMEWORK**

### ***Teaching Materials development and contextualization***

One of the key factors in learning and teaching are those teaching materials we use to acquire, practice and evaluate knowledge. For this reason, these should be relevant and motivational for students to promote meaningful learning processes. Teaching materials can be any object that enables learning; they might be printable or a technological tool. In the same line of thought, materials can be instructional, experiential, or exploratory; this varies on the purpose we give them. (Tomlinson, 2013). Based on this definition, materials can be anything that allows students to instruct, experience, and explore knowledge, but in this process, it is fundamental that teachers choose, plan and evaluate students' needs.

Following the previous definition, it is pertinent to talk about the role of the teacher while choosing and implementing teaching materials. Most of the times, teachers are asked to evaluate materials according to school objectives and current world requirements. In this process, always that is possible, teachers should adapt those materials to what students need. As a result, teachers should take into account two aspects while evaluating materials; their publication, which is related to all physical aspects and the design, that is how information is given and organized (Littlejohn, 2011). It means that the teacher should evaluate how materials look, it means they have special characteristics to think about and materials organization, they should have a logical order and contemplate students learning styles and needs.

Once teaching materials are evaluated, it is worth to implement them with students to evaluate their interaction with the materials. This process helps to recognize if materials are proper for the students and if materials accomplish students' learning



styles and needs, and if they help them develop critical thinking. Here is when we start talking about contextualized materials, since we consider students' individualities, learning speed, realities, expectations, motivations, etc. (Núñez et al, 2009). By taking into account all these factors while students interact with the materials, we can notice if they are adequate for them or not.

The importance of enrolling students in the materials' evaluation process is that they support finding new ways to see teaching materials because they are the ones who work with them. Consequently, teachers can improve or contextualize them based on their students' needs. According to Núñez et al (2009) "We pilot materials when we involve the students in the process of assessing the materials and when we detect problematic areas to be improved or potentially problematic areas. A problematic area is the one that is evident and needs to be tackled with the strategies and resources necessary to do so" (p. 49). As a result, teachers involve students since the beginning in their learning process because their needs are taken into account, so they immediately feel connected with materials, and they are committed to find materials that plenty contribute to their learning process.

On the other hand, sometimes proposed materials are asked to be used but they are not contextualized or do not fulfil students' needs. As a result, teachers develop extra materials to work on students' needs; this process allows teachers to develop their own contextualized materials. This happens because most of the materials are designed to be globally used, but most of the times they present situations that learners are not close to, they do not include language variations and do not consider particular learning environments (Howard & Major, 2015). For doing so, it is worth to recognize that these materials must have some characteristics.

### ***Speaking skill***

As we know, learning a foreign language entails different skills development, one of them is speaking. Before talking about this skill, it is worth to mention that language skills are divided in receptive (reading and listening) and productive ones (writing and speaking). Consequently, speaking is one of the most important since it is how people communicate with others, but it also implies to know some language particularities; these facts make this skill more difficult for students as it requires practice and exposure to the language (Kuśnierek, 2015). Being a productive skill, speaking is one of the most difficult because it requires from students' language knowledge, exposure to the language and practice, which is the most difficult one, considering that it also demands self-awareness and emotions management.

In the same line of thought, speaking has different functions during its development, those are important during the learning process to make students talk in different

situations and with different purposes. These functions are talked as interaction; it refers to all actions related with conversations. The next function is talking as a transaction that means being focused on the message and the last one talks as a performance related with public speaking (Brown and yule in Richards, 2007). These functions are key during class planning since the teacher can assess students while designing a variety of activities developed in different situations.

### ***Flipped learning***

Teaching has different methods, methodologies, and approaches. Teachers' choice depends on factors like teaching style, students' learning styles and needs and the environment characteristics. Flipped learning is an educational approach that places students as the center of the learning process and they are responsible for it. As a result, group dynamics change inside the classroom. (Flipped Learning, 2014). In the current world, people have access to knowledge easier than before, this makes them learn in autonomous way, as a matter fact, the classroom should take this into account and give students the opportunity to explore knowledge by themselves with the correct teaching guidance this is the reason why flipped learning is useful in today educational contexts.

Once it is decided to include flipped learning in the classroom, it is relevant to foster attractive content to students, so intrinsic motivation awakens, since it enhances curiosity and they can look for information by themselves or just send it to their emails and work with it outside the classroom. Doing these activities inside the classroom turn classes into something more dynamic than just 'giving' the knowledge. For doing this, it is important to consider two factors for having a successful flipped classroom, first, to design the class environment following all the flipped classroom characteristics and take the original content out the class like readings or writing activities (Bormann, 2014). Including flipped learning is a decision that teachers make when they want to have different learning experiences, for doing this, it is worth to design a plan to use original content outside the class, that way students come to class and experience the knowledge they acquire by themselves.

One of the characteristics of flipped learning is that students can access knowledge before coming to the class, this fact enhances students' autonomy and teachers' creativity. In-class activities are the key for developing students learning processes and can change tacit knowledge, the one that is not expressed but it is accumulative into explicit knowledge which can be expressed in different ways, according to the instruction and the asked format in diverse ways of interaction. (Kim et all, 2014). In this part, class planning is a key factor to be successful in flipped learning processes, since materials for out-class work need to be carefully chosen to make students understand what is needed for the in-class activities, planning in-class

activities and materials is required to create meaningful learning spaces full of diverse ways of interaction.

## **METHODOLOGY**

### ***Type of research***

The present research study follows the tenets of participatory action research since this research intended to improve a classroom reality through changing the teaching methodology. According to Kemmis and Wilkinson (1998) “Participatory Action Research attempts to help people investigate and change their social and educational realities by changing some of the practices which constitute their lived realities” (p. 22). As it was observed, in our English language classes, materials were not contextualized and the teaching methodologies were centered on teachers; so that, it was decided to implement the present research to start changing the learning process.

While implementing participatory action research, reflection and question are key factors to have a successful process. As a result, the process of this kind of research starts by intervening a problematic situation and reflecting upon the results of the intervention. Based on that, you take new actions according to the results toward that situation; this is how it becomes a circular process. (Pain et al, 2017). Following this process was important in the sense that, in the classroom, needs are changing all the time as well as problematic situations. In addition, when different groups have the same problematic situation and the same action is taken, results could vary and there is when reflection becomes an important part of the process, because based on results, you evaluate and take new actions.

### ***Data collection instruments and procedures***

The present research started with the observation and analysis of students’ performance during previous semesters. As a result, first semester students in the year 2019 were asked to be active participants on their class development since the first day. Based on this, the first instrument used was focus group. Marczak and Sewell (n.d) stated that “A focus group could be defined as a group of interacting individuals having some common interest or characteristics, brought together by a moderator, who uses the group and its interaction as a way to gain information about a specific or focused issue” (p.2). This was one of the activities done in each term of the semester in order to monitor the class development, reflect towards the activities and actions done in class for taking the necessary corrections.

After completing the focus group, participant observations were relevant to analyse the interaction between students and the materials designed for the class. Participant

observation can be defined in different ways, but for the present study, we followed DeWalt and DeWalt definition (2002) “it is the process of enabling researchers to learn about the activities of the people under study in the natural setting through observing and participating in those activities. It provides the context for development of sampling guidelines and interview guides (DeWalt & DeWalt in Kawulich 2005). The definition goes along with the process done in class, observed students’ interactions and their interaction with the teaching materials, as well as their development, behavior and attitudes during the activities proposed for the class.

The last instrument used was students’ artefacts. For the present study, some materials were designed for enhancing speaking, these materials are artefacts to gather information about how students develop their speaking inside the class while developing flipped learning activities. Defining artefact as a physical aid that is used to draw information towards certain topic or activity, these are purposely designed and concrete evidence which can give additional information (Lankshear & Knobel, 2006). As it was mentioned before, these materials were carefully designed to develop speaking activities with first semester students, as it was a flipped-learning-based class, students experience autonomous learning since they must go and get the knowledge on the materials to develop some specific activities during class time.

After the piloting process with first semester students, it was necessary to analyze the results to evaluate materials and the learning process. It was required to get a sample of the data gathered and triangulate the information from the three instruments. After that, it was important to reduce data to categorize information, for categorizing information it was crucial to use color codes to recognize similarities and create the categories. All this process is based on Grounded theory where after collecting data, and reflection about it, it is also an important step to start categorizing information; coding is important during this process since it gives the chance to find similarities and make data reduction. (Bryman & Burgess, 1994). As a result, grounded theory was used on this study since it gives the chance to reflect upon the gathered information, reducing information based on similarities, making categories through codes and drawing findings.

### ***Participants***

Using participatory action research approach implies to implement the study with a group of people. Based on this premise, the participants for the present research study were three: students, teacher as a researcher and teacher as materials developer. Students were studying their first semester in Basic Oral Practice class of a Modern Language Program in a private university in Bogotá. Their ages ranged from 16 to 20 years old. As they will be professionals in Modern Languages, they need to develop speaking as their most important skill for their future jobs, so in

this class they must participate different activities that allows them to develop public speaking skills. On the other hand, the teacher as a researcher has the role of facilitating students the tools to work by themselves while they develop their speaking skill; he or she is also a guide of how to deal with public speaking presentations, role plays and different activities. Finally, a teacher as materials developer is relevant to create contextualized materials for flipped learning that allows students to create autonomous learning routines, those materials develop speaking skill at different levels. In addition, the role of being materials developer includes to be conscious about that decision making is key for the students' learning process, as well as designing interesting and clear materials, so that they really help students develop their speaking skills.

### ***Data collection instruments***

Qualitative research needs a set of instruments that helps gather data in order to analyse the information given by the students. For this reason, the instruments used in this study were students' artefacts, active participant observation and informal interviews.

- ***Students' artefacts.*** The interaction between students and the materials provides useful information about their learning process, since the materials are designed to improve students' speaking skills in different ways, casual interaction, role plays, presentations, etc. An artefact is that physical or virtual tool that is designed with a learning purpose and is used to gather information about students' learning process, daily lives, and autonomous work (Lankshear & Khobel, 2006). In the same line of thought, materials are in every single space inside the classroom, and can be used as a tool for collection data from students (Burns, 2010). As a result, the materials designed for Basic Oral practice were sources of information about students' learning process and progress. It is worth to mention that materials were an important part during the piloting stage to evaluate and improve them.
- ***Active participant observation.*** This kind of observation occurs when the researcher and the participants, in this case teacher-researcher establishes interpersonal relations with his students around a research problem. The participant observation has two objectives; to observe and engage activities to provide useful information (Spreadly, 1980). One of the categories is active participant observation. This observation happens when the researcher is actively engaged on the activities to observe teaching results and monitor students' results with that teaching approach (Mills, 2003). As a result, relevant information can be found during the interactions between teacher-researcher and students. In addition, designing materials for helping students, watching them using the materials and realizing how they improved their speaking skills are some of the things that can be observed with this instrument.

- **Informal interviews.** One of the principles of flipped learning is positioning students at the center of their own learning, then talking with them is one of the most important part of this study because their opinions, experiences, and their recommendations are valuable for materials design. For this reason, having some prepared questions for them while giving feedback or evaluating the class can be used as an informal interview (Pineda, 2000). Additionally, while doing these informal interviews, it is key giving students a comfortable space and confidence, so they can be honest about the information that is being asked for.
- **Instructional phases.** For the present study, some stages were implemented to have a good research process during the class. These stages are the following: 1) defining students' profile, 2) topic selection, 3) lesson development, 4) sensitizing, 5) implementation and adjustment. In this final stage, finding a framework for materials development was essential to organize the pedagogical intervention, for this reason two frameworks were chosen for this study. The first framework is the component for course development processes postulated by Graves (1996) and the process of course and materials design proposed by Núñez, Pineda, and Tellez, (2004).

Regarding the instructional phases, the first one was *defining students' profile*, it was defined by a need assessment to know students' learning styles and expectations, things that they were interested in and their learning habits. All these characteristics were confirmed through class observation to learn about their English level and attitude towards team and individual work. The next stage was *topic selection*, after the program evaluation, it was noticed that it was decontextualized, and it did not fit with the students' current needs. As a result, a new class program was tested too. In this new program topics as self-awareness, emotional intelligence, and a grammar list that included topics helping students develop their public speaking skills.

After choosing the topics and creating a new program that allows students to be in the center of their learning, *lesson development* was the next stage. Based on the need assessment, objectives, and activities that students like were included in the lesson plan; another important issue to include on the lesson plan are the objectives that the program has for them as future professionals, that is the reason why public speaking activities were incorporated. After doing the planning, *sensitizing* students about the research was the next stage. This is quite relevant for two reasons, the first one because students should know what is going on during their classes and giving them the confidence to feel that mistakes are part of the class; the second one is also let students develop critical thinking towards their learning process.

Finally, the implementation and adjustment stage after piloting the materials with one group, students' evaluation, analysing students' results and the observations

made in class. Materials were adjusted based on those results from data collection instruments. All of this thinking of students' needs. In addition, materials are seen as the most important tool of flipped learning, so this implies that explanations and instructions must be easy and clear for them to use by themselves.

## **DATA ANALYSIS**

The present study is centered on exploring the contribution on the development of contextualized materials on the development of public speaking. For that reason, different instruments were used to collect data. As a result, relevant information helped to answer the research question.

### ***Data Analysis Procedure***

The approach used for analysing data was *grounded approach*. This approach starts when you gathered data, then analyze it to allow the theory emerge from it (Cohen, Manion and Morrison, 2007). In the same line of thought, Corbin and Strauss (2015) suggested that to construct theory grounded in data “allows for identification of general concepts, the development of theoretical explanations that reach beyond the known and offers new insights into a variety of experiences and phenomena” (p. 6). Based on the previous definitions of what grounded approach is, the definition for this study is a technique for analyzing data to come up with theory while identifying concepts, finding explanations through data and bringing new perceptions from the experiences. Considering the study aim, this approach allowed to find new concepts, explanations and perceptions about how contextualized teaching materials benefit the students' public speaking development.

To do so, data organization was fundamental to come up with new theory. Once information is organized, classification is the next step, there you look for information that goes along the constructs for giving a name. A strategy to underline the most relevant information, this is strategy is *colour coding*. Using colours help identify information quickly as well as classify it (Bergaus, 2015). In this case, the information was classified under each construct and a colour was assigned to each of them, it made easier to reduce data.

Once this process was carried out, the triangulation process was done. The purpose was comparing and analysing gathered information to create categories and subcategories to have different perspectives (Flick, 2009). By means of triangulation the research takes into account different perspectives about the same topic. Once you triangulate data, you name the categories and the subcategories that come from the data.

## Results

After doing the triangulation previously explained, three categories were defined to answer the research question. These are explained in the table below.

**Table 1** *Research question and categories.*

Research Question	Categories
How does the development of contextualized materials for flipped classroom enhance students' public speaking?	Innovative materials as a tool for students
	Differences to make a community
	Empowering students, previous knowledge, and autonomous work

Source: Self elaboration.

### *Innovative materials as tool for students*

This is the first category in the present study, it emerges from the data gathering tools; it is related to the materials development construct. Based on the context where students do not have materials for the class, developing materials for this class is part of an innovation for our context. In this case, basing the class on flipped learning, a pedagogical approach where students are active actors in their learning process and their group work become a dynamic setting for collaborative work. This transformation also includes the role of the teacher who becomes a guide and facilitator for students' knowledge application (FLN, 2014), posters were designed with an attractive visual layout (Núñez, Pineda & Téllez, 2004). All of this for catching students' attention and giving them the information needed to complete a final task. It also let them remember information easier. In concordance with Tomlinson (as cited in Nuñez et al. 2009), one of the principles of materials development used for this study was "to achieve impact through novelty, variety, attractive presentation, and appealing content" (p. 43). As a result, materials were designed taking into account students' needs, knowledge required at their language level and different teaching materials inside the class.



# VERBS IN PAST

AUTHORED BY DERLY GESPEDES.

### Irregular verbs

These are the ones that totally change their based form .

**E.G.**  
 Eat - Ate  
 Feel - Felt  
 Think - Thought

### Regular verbs

These are the ones that don't change their based form, we just add -d, -ed or -ied

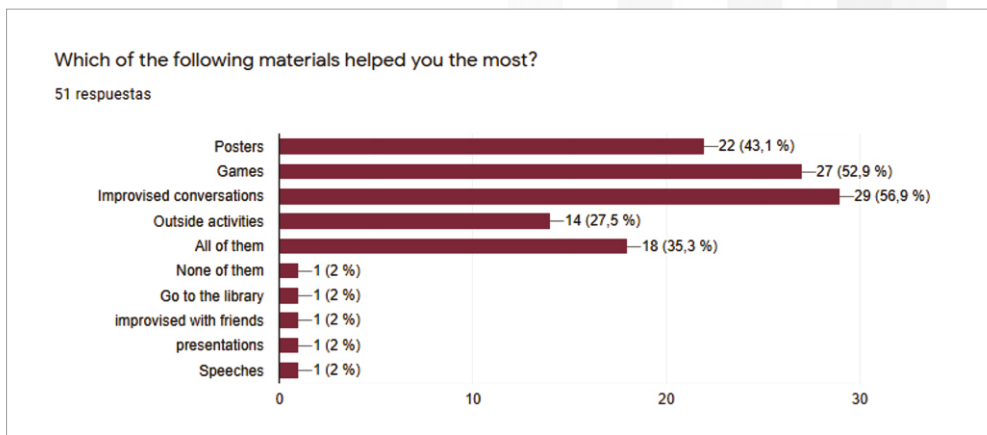
**E.G.**  
 Play - Played  
 Cry - Cried  
 Dance - Danced

### PRONUNCIATION HINT

Pronunciation of the regular verbs depends on the letter the verb is finished with.

**Figure 1** Poster simple past

Source: Self elaboration.



**Figure 2** Student's survey answers

Source: Self elaboration.

*Teacher:* [How could you describe Basic Oral Practice?].

*Student 1:* [Entertaining, dynamic, and easy to understand].

*Student 2:* [A pretty good, entertaining and dynamic class in which I learned a lot].

(Informal Interview, Student 1 & 2)

From the last two excerpts, students showed the importance of using attractive colors, font and images in posters that helped them remember the information easier when they had to present their tasks, they also felt motivated to learn since it was easier to use information by giving them interesting and attractive materials, as it is showed in their self- assessment comments. Finally, they expressed that they enjoyed the class thanks to the materials and the proposed activities that allowed them to practice and improve their speech.

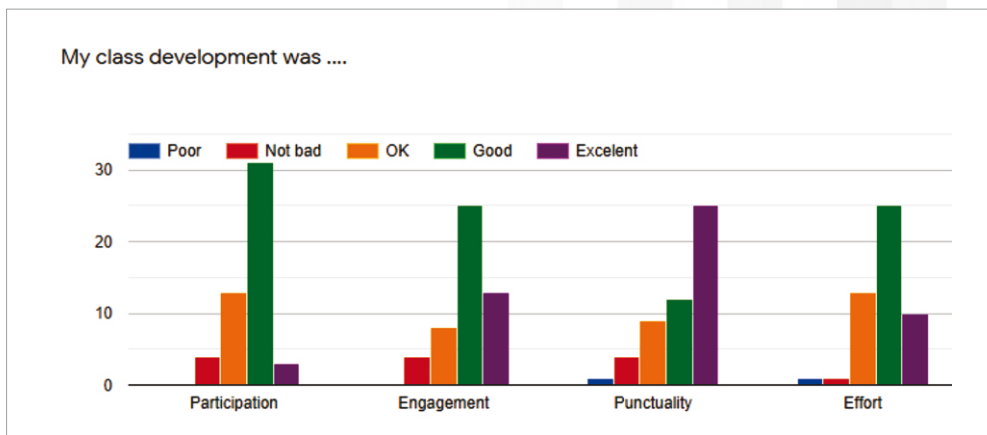
### Differences to make a community

Designing activities that catch students' attention is another goal when using contextualized teaching materials, when students are curious and motivated to do the activity, they can complete it easier than when it is imposed. It also makes them more aware about other students' differences. According to the European Centre of Modern Languages (2007): "The attitudes include curiosity and openness as well as readiness to see other cultures and the speaker's own without being judgmental" (p. 9). It means that including activities that rise students' curiosity allows them to be aware not only about differences, but also about the others' process. As a consequence, team and collaborative work start being present in class, as well as the sense of togetherness. Regarding the activities, they should have a model to follow (see Figure X), this favors students' performance and attitudes towards public speaking while having a good performance during class time.



**Figure 3** Example of contextualized teaching material

Source: Self elaboration.



**Figure 4** Results of its implementation.

Source: Self elaboration.

*Student 1:* [This class was very interesting, dynamic, I feel that improve my level in English].

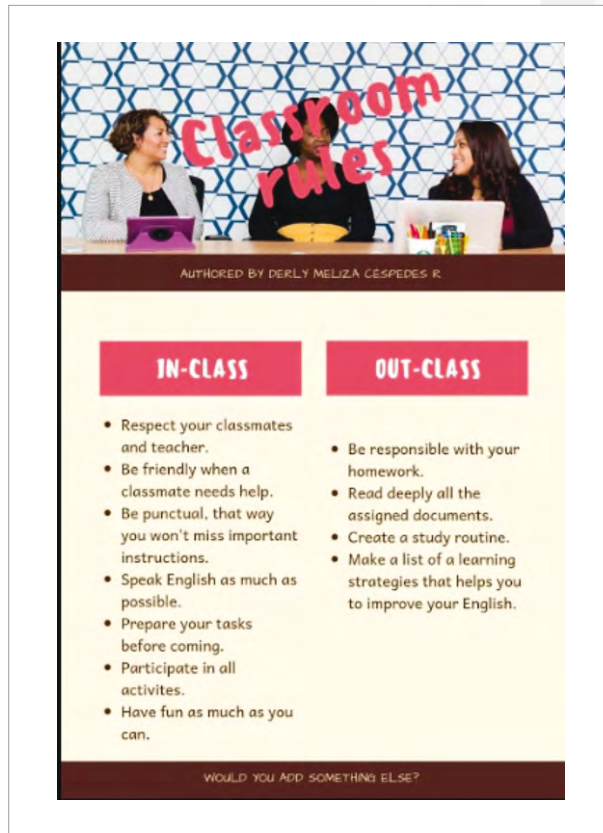
*Student 2:* [This class was and is, a great tool to perform very well in new language, and where through different activities they develop abilities speaking of the best way in that language, for example, when I will talk, sound as natural as possible, or be able to answer any question].

(Informal Interview, Student 1 &2)

As it is shown on the previous data, there was a poster modelling the activity they should do during class time, it helped them know what to say or include and how to organize the information. It is worth to mention that before delivering the activities, they had some time to prepare, in written form, what they were going to share. Also, they did another kind of activities to get the final speech, station work, where each station had an activity that helped students understand, get grammar, and practice for the final presentation. These kinds of activities became part of the routine; as a result, students had an excellent class development, as it is shown in the figure 2, where they showed that they were highly engaged, actively participated, they tended to be punctual and made a great effort during class time. Finally, during the interviews, students argued that the way the class was developed ensured their public speaking development, this thanks to the class organization and the proposed activities.

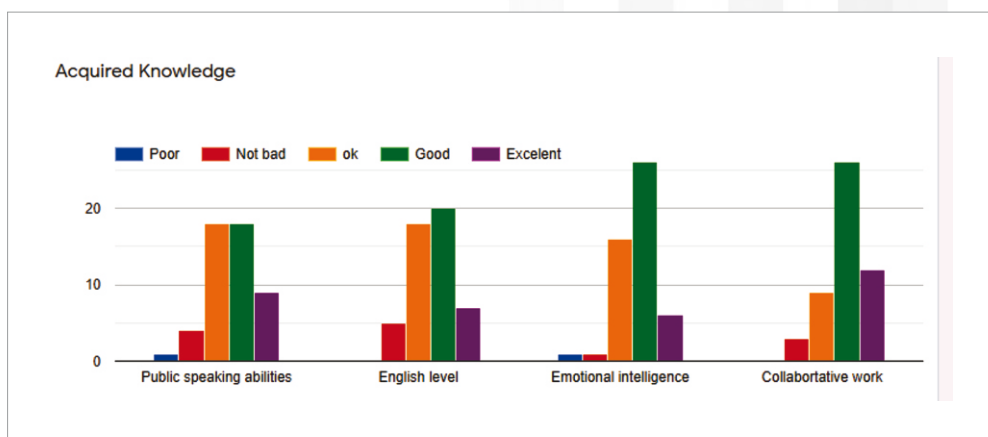
### *Empowering students, previous knowledge and autonomous work*

Designing contextualized teaching materials favors students autonomous work, if they are clear, attractive, and concise with the information. as well as if they give them the opportunity to make choices. Starting with class rules as it is seen in Figure 3. Giving students the opportunity to make their own choices allows teachers to access students' prior knowledge. As a result, they start empowering them by acknowledging their effort and the use of that knowledge. Once they have developed their empowerment, they can start an autonomous learning plan where they choose the activities that will help them to improve what they need to improve.



**Figure 5** Example of contextualized teaching material.

Source: Self elaboration.



**Figure 6** Results of its implementation.

Source: Self elaboration.

*Student 1:* [I learned to be a little more autonomous and some things about public speaking].

*Student 2:* [Good, he was very creative and helped us a lot in several aspects that we must face in the university].

(Informal Interview, Student 1 &2)

Including flipped learning approach in class benefit students' autonomous work by allowing them to make their own decisions towards their learning. As it is shown on the first poster, there were the classroom rules proposed and accepted by them, since they are the owners of the classroom and class development, then they should gain awareness of what their responsibility regarding their learning and what it involves. Based on these premises, they figured it out that based on their decisions they might favor their English learning not only regarding public speaking but also different areas like collaborative work, and also developing their emotional intelligence. As a result, once students can make their own decisions towards their learning and are conscious about their emotions when presenting a speech or an oral task, they become more empowered and confident.

## **CONCLUSIONS AND PEDAGOGICAL IMPLICATIONS**

Creating materials is a long process, since you need to know your students' learning process and needs, it can also help teachers to create closer relations with their students, once students feel comfortable with their teacher, public speaking starts being less stressful for them, and they start taking risks on speaking tasks and class participation. Creating contextualized materials also give teachers the opportunity to start being more creative when they need to plan or design activities, also it can test them on how they are going to stop being the main character in the class.

On the other hand, contextualized materials for flipped learning approach should be very attractive for students, with specific content, clear instructions and concise information that allow students to understand easier the knowledge they need to gain and develop during class time. It also benefits time class as students can solve doubts and have a more meaningful learning process in class, instead of having assigned homework or activities for home where most of the times they cannot find any help.

In the same line of thought, implementing flipped learning approach in a speaking class favors students' different dimensions, they start thinking about the importance of being part of a group, respecting the differences among them and supporting each other in their learning process. In addition, flipping the class empowered students, since it allows them to be aware about their learning process, their strengths and

weakness, it also made them to take their own decisions towards their learning, which implies that they also developed critical thinking. Finally, students' emotional intelligence is developed, therefore public speaking involves different emotions that can interfere the performance. Once they recognize their emotions, they can find solutions to manage them, the sense of security needed for public speaking is built collaboratively with the teacher.

Including flipped learning approach in a class implies that teachers should become a guide for students, a supporter during their learning process, and giving them the main role in the learning process. Besides, teachers need to plan classes taking into account students learning styles and needs, activities should be varied for giving students the opportunity to choose and realize by themselves their process. Another important factor is formative assessment, it also favors students' awareness on the aspects they need to improve, this way they can create their own learning strategies to become better.

Public speaking tends to be one of the most difficult skills to develop since it includes to expose physically, linguistically, and emotionally in front of an "unknown" group of people. For this reason, creating awareness and activities that enhance that emotional awareness are essential to develop public speaking because this is the first step to have a successful performance, recognizing and managing emotions when speaking in front of an audience. The second step is work on what are the most important aspects when being in front of a group (eye contact, body language, language factors, etc.). For doing this, it is advisable to plan activities focused on each aspect in order to help students with strategies to improve or better completing the tasks.

Following this idea, it is advisable to divide the process in 3 stages. First stage, self-awareness. Here students become aware of their speaking strengths and weaknesses, as well as recognizing the emotions that public speaking brings. Once they are aware about them, they can also start an autonomous learning plan to improve their performance. In this stage, it is advisable to use videos doing activities like reading it loud (poems or short stories), monologues or recorded presentations, doing so they can observe themselves and recognized their strengths and weakness.

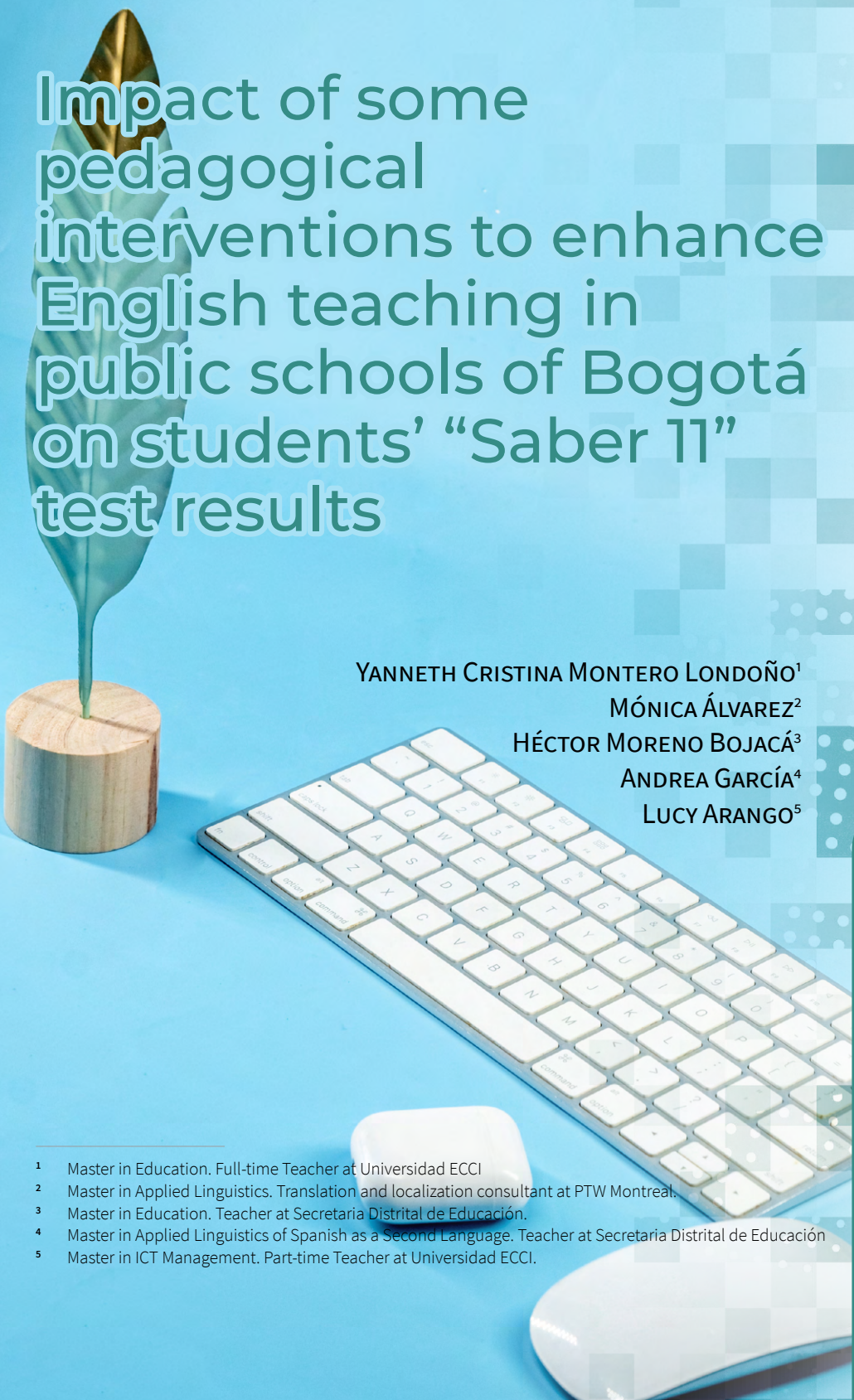
On the second stage, others' awareness; in this case students develop the awareness of the other. Here is when collaborative work starts happening, once students recognize their process, they can also share experiences and feelings to support each other. In this case, group presentation and station work are advisable before asking them to present their tasks to the entire group, advised activities are role plays, formal presentation, singing together. The last stage, awareness of

the unknown outsider, in this stage students should be aware of a real unknown audience, the real environment of a public speaking, here students should be challenged with groups that have the same level of speaking in order to recognize their public speaking process.

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# Impact of some pedagogical interventions to enhance English teaching in public schools of Bogotá on students' “Saber 11” test results

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## ABSTRACT

The improvement in the overall performance of English by public-school learners of EFL has been gaining a lot of attention in Colombia, so during the last decade, the Colombian Ministry of Education has implemented different programs aiming at achieving the set of learning goals established for that. A concrete example of these kinds of initiatives is The New National Bilingualism Program (2018 to 2022). As its main objective states, this project promotes a B1 level of English at the end of the secondary education level for all public schools' students. This level corresponds to the scale proposed by the Common European Framework of Reference (CEFR), which describes B1 level students as "independent users" of the language. Considering the attempts by the Colombian government to improve public school education, the present study tries to shed some light regarding the actual impact of English teaching policies on students' standardized test "Saber 11". To have a deeper view of the topic, "Saber 11" performance indicators, and teachers' interviews about pedagogical interventions were also considered in this study. In general, the statistical analysis of "Saber 11" (2018) showed that only a small percentage of the target population was above or close to the B1 level. Considering the effort, in terms of personnel, investment, and time that the implementation of certain pedagogical interventions implies, the analysis of the impact under the light of the "Saber 11" test results may seem not to be fair, but it becomes the only tangible way to determine the pertinence of those strategies. Probably, the recent implementation of the New Bilingualism Program could be one of the reasons to understand the low results.

**Keywords:** Saber 11 test, pedagogical interventions, CEFR, public schools' learners.

## INTRODUCTION

In Colombia, English education has been changing through the years, and different projects such as The National Bilingualism Program have been implemented to reinforce it. The present study focuses on the analysis of three different sources of information in order to determine the impact of recent English teaching related policies in public schools, in Bogota. Considering that Creswell, J. W. (2009) claims that mixed methods research allows to get a broader perspective about the same topic, “Saber 11” performance indicators, teachers interview about pedagogical interventions and the results of the “Saber 11” test 2017, 2018, and 2019 were qualitatively and quantitatively examined.

## THEORETICAL FRAMEWORK

As the focus of this study refers to the impact of some pedagogical interventions to enhance English teaching in public schools in Bogota on students’ “Saber 11” test results, it is relevant to explore some of the policies and strategies that have taken place in public schools throughout Colombian history, as well as some of the most recent strategies implemented by Secretaría de Educación Distrital<sup>6</sup>.

### *Bilingual policies in Colombia*

The pursuit of the development in the education system based on the improvement of the communication skills in English as a foreign language has been part of the Colombian government agenda for many years. During decades, the government has tried different strategies and policies to help students, as well as teachers, improve their mastery in English. There are some key moments of the history of bilingualism in Colombia worth to be mentioned:

- In 1979, the Colombian Ministry of Education issued a decree, which resulted in the establishment of English learning for both sixth and seventh graders, but French for tenth and eleventh graders; now, regarding eighth and ninth graders, English and French were going to be optional. (Mejía, 2004, p. 386). The creation of this decree was part of some of the international and political responsibilities assumed by the Colombian government after World War II.
- In 1982, the Colombian Ministry of Education joined forces with the British Council and the Centro Colombo Americano to create the program “Teaching English Syllabus” (TES). This project was aimed at introducing a universal English syllabus for 6th, 9th, 10th, and 11th grades through a communicative approach. However,

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<sup>6</sup> Equivalent translation in English: District Department of Education

The British Council (1989, p.8) expressed its discontent regarding the results of the program due to most school teachers did not have the oral proficiency required by the new approaches or were not familiar with them and continued to teach in ways they considered were more appropriate or more “comfortable” for them. Besides, the structural changes such as intensifying the number of hours in schools did not occur (cited by Valencia, 2007, p. 7).

- For a period of five years (1991 -1996), the Colombian Ministry of Education in cooperation with the UK government designed the project “Colombian Framework for English” (COFE). This project carried out in different universities of the country and intended to strengthen the teaching-learning strategies involved in the training process of preservice teachers, supply materials, give guidelines about reflective practices and research, and propose a framework to improve teacher preparation programs. Even though the project brought multiple benefits to the participants, McNulty & Usma (2005) pointed out that it was not possible to reach the main objectives of the implementation due to the lack of educational research processes, resources, leadership skills of managers, and the unclear structure of the programs in the universities.
- In 1994, La Ley General de Educación stated the school autonomy to establish curriculums and teaching practices according to the context. Besides, in articles 21, 22, and 23 the government enacted the teaching of a foreign language as mandatory from third grade (elementary school) onwards in order to look for the development of conversation and reading skills.
- During 1999, the Colombian Ministry of Education launched the Curricular Guidelines for Foreign languages that according to Ocampo (2002) pursued to consolidate foreign language approaches and methods as a Colombian Law. However, at the same time it limited teachers’ autonomy by establishing the conceptual frameworks in which educators should have developed their classes.
- Since 2004, The Colombian Ministry of Education has carried out a significant number of pedagogical interventions implemented within the National Bilingual Program (NBP) framework. The interventions, aimed at strengthening the impact of the Program based on five axes: a) ethnic education: to provide bilingual education to indigenous communities where Spanish is their second language. b) Flexible models of education: to adjust the foreign language teaching and evaluation in educational institutions for work and human development as language schools and universities. c) School language teaching: to regulate language teaching in private and public schools, monolingual or bilingual institutions to improve the current level of communicative competence. d) Professional development program: To build up pedagogical knowledge and English proficiency in teachers. e) Communication technologies: to support the use of new information and technology in the process of English teaching.

Among the strategies created to foster the Bilingualism Program, it is possible to find two of them with remarkable expectations. The first one is the Suggested Curriculum for the English area, which focuses on grades from sixth to eleventh. The document provides pedagogical principles and guidelines on how to create a school curriculum with the goal of improving the level of English language education in the country throughout the school years. The second is “Cartilla Know Now”. This booklet is part of a large number of supporting materials provided by the Secretaría de Educación Distrital with the help of the British Council, which aims at enhancing the students’ results in the English component of the Saber11 test.

### ***Suggested English Curriculum***

This strategy, launched by 2016 at a national level, has turned out to be the instrument that articulates the Basic Learning Rights, Guía 22, and CEFR. The former Minister of Education, Gina Parody, claimed that through them, it was possible to guarantee the same learning opportunities for public school students as the students from private schools.

The Suggested English Curriculum proposed for grades 6th to 11th, aligns different teaching-learning elements aimed at the standardization of the set of pedagogical strategies that take place in the learning environments. Since the first implementation in some public schools, teachers have received some official training to get them to incorporate the Suggested English Curriculum in their classes. The suggested curriculum proposes the development of the skills.

### ***Know Now Booklet***

The Secretaria de Educacion Distrital in partnership with the British Council implemented the Know Now strategy to prepare students for the test “Saber 11”. It is a tool available to the students of 11th grade from 360 public schools in Bogota, so they might prepare and strengthen their English language skills for the tests as planned by the District Foreign Language Plan. Thus, it was expected an increase in the number of students with an intermediate or B1 level of English. According to the results of the “Saber 11” tests, and as part of the overall commitment to improve the quality of education in Bogota, the challenge was for 10% of the students to graduate with better English skills by the end of a four-year period making use of the implemented pedagogical tools.

In addition, apart improving the proficiency in English, the Know Now strategy aimed to encourage community members, awarded the students and the teachers who achieved the highest overall performance scores on the application, the results analyze the students’ participation, progress, performance, and efficiency

when using the target language, as well as the teachers' guidance to their students. In the 2019 implementation, the students had to qualify for a trip to the United Kingdom. The mobility included round trip tickets, accommodation, food and several cultural activities scheduled once there. The requirements for awarding the teachers included not only attending the workshops regarding the use of the App and didactic material, but also the registration of their students in the App. Those teachers received a trip as a reward, for accompanying their students as a pedagogical consultant to the group.

The Know Now strategy has motivated teachers and students to participate, to challenge themselves and to promote the bilingual environment within the institutions. As a summary, the strategy aims to increase the proficiency level of English while engaging the public school leaders to profit of the academic projects, strategies and tools provided by the foreign language national project.

### **Population**

The target population of this study consists of students from several public schools in Bogota enrolled in 11th grade and who took the test known as "Saber 11", in 2017, 2018, and 2019. "Saber 11" is a standardized exam developed and published by the ICFES. Before graduation in Colombian high school final year, 11th grade students are required to take this official test. It assesses the students' development of competences in areas such as critical reading, mathematics, social sciences, natural sciences and English.

As it will be explained in the methodology section, this study is based on the results of "Saber 11" obtained by students in the English area. These results were analyzed contrasting two groups. One, the schools that made part of the agreement between the Secretaría de Educación Distrital and the British Council. Two, the rest of public schools in Bogota.

### **METHODOLOGY**

This research document follows a mixed approach design. According to Halcomb, E. & Hickman, L. (2015); Wisdom et al., (2012), Creswell and Plano Clark, (2011), "Mixed methods research is broadly accepted to refer to research that integrates both qualitative and quantitative data within a single study the collection and analysis of numerical data, whilst qualitative research considers narrative or experiential data" (p.3). Based on the before mentioned, it is possible to say that mixed research design suits this study because it helps the researchers to collect and analyze quantitative and qualitative information with the aim of describing situations, phenomena, or events.

This design is also suitable because the study took into account the results students from public schools got in the Colombian test known as “Saber 11” (2018 and 2019), the different pedagogical interventions implemented through well-recognized public agreements between Secretaría de Educación Distrital and the British Council. Besides, it was necessary to explore some teachers’ perceptions about the implementation and the main objectives described in the 2018-2022 National Bilingualism Program to determine the impact of the strategies implemented under the light of students’ Saber test results.

Data collection was carried out in three stages. First, it was necessary to analyze the performance indicators established in the “Saber 11” test to understand how students have been evaluated. Second, interviews of the level of teachers on the appreciation they had of the two pedagogical interventions (Know Now booklet and Suggested Curriculum for English), carried mainly out by British Council. Third, a statistical analysis of the results of the “Saber 11” test 2018 and 2019. Once the data was collected, results were triangulated to validate them based on the different perspectives as a way to find different paths and obtain a more comprehensive understanding and possible interpretation, of the phenomenon under study.

## **DATA ANALYSIS**

The “Saber 11” test in Colombia is a national test that seeks to measure the quality of basic education, being a standardized instrument that might influence the adaptation of the school Curriculum in terms of content, methodological approaches, core, and complementary material, etc. In this context, analyzing some of the pedagogical interventions done by Secretaria de Educación in partnership with the British Council requires a brief discussion which in turn might imply a reformulation of strategies that are compatible with the purposes of training required by the current dynamics of basic education.

### ***National Bilingualism Program***

In recent years in Colombia, a series of projects and strategies have been developed to strengthen the proficiency in English, as the official foreign language of the current curriculums. Since 2004, the government has implemented different bilingualism programs. For the ongoing four-year period, from 2018 to 2022, the new National Bilingualism Program was updated. Based on this document, it is possible to begin to analyze some results of the implementation of this policy and the impact it has had on students in public schools in the city of Bogotá in particular.

Thus, this document will be aimed at identifying and analyzing the data on the impact of the strategies for teaching English in public schools in Bogotá based on

the results of students in the “Saber 11” test, which are mandatory for high schoolers to graduate. Therefore, it is important to point out the objectives that are part of the 2018-2022 bilingualism program, which concern students and their language goals in terms of the language skills:

- “1. Promote a B1 level of English at the end of the secondary education level to ensure complete educational paths.
2. Decrease by 10% the number of students in Levels A0 and A1 of English in IE Type B and 5% in IE Type C in the Knowledge 11 tests”.

In other words, it is clear that the fundamental challenge is for students, in large numbers, to reach a B1 level according to the Common European Framework of Reference (CEFR) scale. To this end, the test “Saber 11” defines that within the numerical assessments, the students need to have between 68 and 78 points on a scale of 100 to achieve the mentioned objective. For this reason, it is relevant to observe the results obtained by students from 2018 to date. For this reason, we refer to the results of the tests in 2018 and others.

By the year 2018, around 44,000 students from more than 350 public educational institutions in the city of Bogotá, took the “Saber” tests. At that time, only 2755.9 students were above the values established by the bilingualism program, which is equivalent to 6.2% of those taking the test. This indicator shows the real need to manage more policies and strategies that enable the implementation of the new bilingualism program.

Nevertheless, it is worth noting that the Program was barely being implemented by the end of 2018. This event coincided with the scheduled date for the “Saber 11” test. Therefore, it is relevant to take data from the previous year and 2019 to establish points of comparison between the present and the future implementation of the strategies.

Thus, by 2017, around 48,000 students took the “Saber 11” tests at public and official schools. According to the data reported by Instituto Colombiano para la Evaluación de la Educación - ICFES, the entity in charge of conducting the tests, in this year, 5.6% of the students reached the level B1, according to the parameters of the test, which can be given as a starting point for the need for new strategies to implement into the bilingualism program. This is a minimum rate or indicator for the objectives and approaches of the programs at national level.

### ***Know Now Booklet and Suggested Curriculum***

Thinking about the results obtained by the students in 2019, it is thought that the improvement will be important, because, by the end of 2018, the Secretaría de



Educación Distrital, during the mandate of the then Mayor of the city of Bogotá, Enrique Peñalosa, unveiled a strategy designed to help strengthen the educational process of the eleventh-grade students and also obtain better results in the knowledge tests of 2019. This strategy was implementing a strategy called “Know Now”, which postulated, “A second language opens up opportunities and helps to fulfill dreams. That is why we are implementing strategies focused on increasing the quality of teaching and learning English” (2017), with an emphasis on offering more possibilities to students and breaking the gap with the university and improving the results in Saber 11.

In the “Know now” strategy, a booklet was distributed nationally, which included a series of practical exercises, starting with an initial diagnostic test, in which a series of 45 exercises are presented, based on the seven parts that are divided in the “Saber 11” test. This preliminary exercise allows the students to recognize strengths and weaknesses in their command of the English language, which is why the same edition provides a table of values in which the results obtained by each student are recorded.

<b>Puntos totales</b>	<b>Nivel</b>
0 - 5	A.1.1 Principiante 1
6 - 10	A.1.2 Principiante 2
11 - 24	A.2.1 Básico 1
25 - 36	A.2.2 Básico 2
37 - 40	B.1.1 Pre-intermedio 1
41 - 45	B.1.2 Pre-intermedio 2

**Figure 1** Test scores.

Source: Know Now Booklet.

The results obtained by the students should be recorded in a section that points out all the aspects to be evaluated in the test and to be able to define the students’ greatest strengths at the beginning of the process. Therefore, this data must be contrasted with a final diagnostic test, which consists of the same number of parts and exercises. This allows teachers to establish for each of the students the strengths and possible personal strategies to strengthen the weaknesses found.

Starting from the initial diagnostic test, the booklet establishes some parameters to work on, considering each of the seven parts of the test. Thus, the students together with their teachers could find a specific explanation to each of the parts and a series of complementary exercises related to the explanation given.

Each explanation is divided into three phases to work on: a) what does this section evaluate? b) How to answer this type of question? and c) Tips and Reinforce the

strategy, with a series of 5 exercises per part. In total, 35 practical-explanatory exercises allow both teachers and students to identify the main characteristics of the questions.

Besides implementing the Know now booklet, Secretaría de Educación joined in a strategic alliance with the British Council with the aim of empowering schoolteachers of English in the use and the articulation of the Suggested Curriculum. The strategy implemented in 2019, addressed 110 public schools and provided some practical workshops in which teachers had to familiarize themselves with the document. Besides, there were meetings in which the teachers, with the help of pedagogy mentors, had to set up their working plan and goals. Finally, the teachers had to update their school curriculum based on the school needs analysis, the Suggested Curriculum, and the goals established in the National Bilingual Program.

The results of this pedagogical intervention turned out to be meaningful for the schools, due to the fact they were able to determine the set of methodological strategies required to improve the students' English proficiency.

### ***Performance indicators Saber 11***

By 2019, in August, about 30,000 students from about 600 public schools in the city of Bogotá took the "Saber 11" test, thus establishing an important point to identify whether the implementation of the different strategies has strengthened the process of English language learning in students.

La Secretaría de Educación Distrital defined the target of achieving the 10% of students placed in a B1 level based on Saber test results 2019. The test provides a description of the levels going from A- up to B+, and the scores from zero to 100 points. Concerning the B1 level, the students required to get from 68 to 78 points to be categorized as independent users. For further information, check the image below.

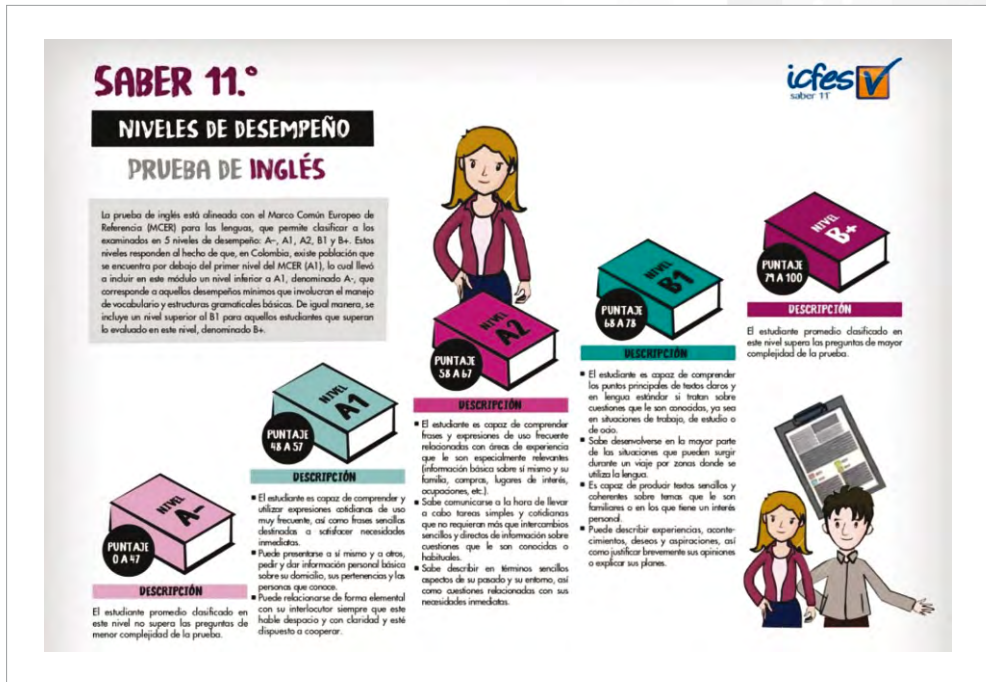


Figure 2 Levels and scores.

Source: <https://bit.ly/2SQMzoQ>

The results published by ICFES showed that 0% of the educational institutions in its weighted level met the standards established in the bilingualism plan, for level B1. However, 5% of the students in Bogotá obtained level B1 or above, according to data presented in the management reports between the Secretaría de Educación Distrital and the British council, this indicates to a certain extent that the parameters established in the bilingualism plan are not covered by a large number of students in the city and therefore the objective of guaranteeing complete educational trajectories for all students is not being met. On the other hand, 37% of the institutions maintain their weighting in the levels close to A1; approximately 17% are located in level A0, these data reflect that more than 50% of the data obtained do not support the strategies and dynamics established in the year 2019 to improve the results and levels of the students.

From another point of view and taking into account some informal interviews that were held with teachers from public schools in the city of Bogotá, the following aspects were established with respect to the strategies implemented in 2019:

- 1) Although the student is taught the type of question, the test (Knowledge 11) focuses on some linguistic, pragmatic, and semantic competencies where the

investigation of the student's knowledge of vocabulary, structure and language components is predominant, which cannot be developed in the implementation of a strategy –Know now– for only one year, trying to establish very high parameters in a very short time.

- 2) In the test saber, the reading competence is evaluated, associated with the comprehension and analysis of texts, which requires a very high development of the interpretative competences, which can be developed not only when implementing the primer and the exercises established there.
- 3) During the school year, the Secretaría de Educación Distrital calculates a pre-established number of classes and hours to be worked in the educational centers, ignoring the different Curriculumr and extraCurriculumr activities that are developed in each of the institutions. This aspect has a negative impact on the process of appropriation of the concepts and dynamics of the language and the test.
- 4) Together with the primer, a complementary activity was carried out, the use of a platform, in the form of an app, called Know now, which presented technical, methodological and instrumental flaws, not allowing for an appropriate use of the tool, since in most institutions the technological resources (computers, tablets and internet) were not available for such use. This is because most of the institutions did not have the technological resources (computers, tablets and internet) for such use.
- 5) The Secretaría de Educación Distrital, in conjunction with the British Council, provided a series of training sessions and workshops for teachers on the “know now” strategy; however, this was not effective given that not all teachers had access to and knowledge of the strategy and the material in the booklet, as the latter was not distributed in 100% of the institutions.
- 6) Another aspect that worked against the strategies implemented in 2019 was the haste and delay in the implementation of the pedagogical intervention, due to bureaucratic aspects established by the Ministry of Education and to protocols that slow down the implementation of the strategies.

Related to the Suggested Curriculum for English area, the articulation process has taken longer than expected, because there is still a need to clarify what the main objective of bilingualism among the Colombian students is. This needs also to ensure that the teachers of English are fully trained, qualified and certified to implement active pedagogies within the classroom for strengthening the implementation process. In addition, as stated by Baker (2011) “one expectation from this fractional viewpoint will be for bilinguals to show a proficiency comparable to that of a monolingual in both their two languages”, which would require a competent proficiency in the mother language.

Besides, the implementation of several strategies, require a strong and permanent presence of the educational system authorities as well as cooperation from the

institutions that promote bilingualism, as a means to communicate, interact and profit from the foreign language culture to ensure the benefits of second language acquisition. Among many reasons to acquire another language, Baker (1993) remarks that “second language learning is important because ‘the power language has to foster improved understanding between peoples of various cultural backgrounds’ which would certainly develop the intellect, the respect and the appreciation for both, local and foreign communities, overcoming the barrier of learning only as a part of the general academic education. In Reflections on English Language Teaching and Bilingualism in Colombia, Mejia insists not only in developing national programs for students benefit, but also in improving teachers’ qualification: “We would advocate providing teacher education and development for bilingualism and interculturalism to all language teachers, whether they teach the first language or a foreign language.

## CONCLUSIONS

The present study analyzed the impact of English education related policies in public schools in Bogota mainly considering students’ “Saber 11” test results. This investigation was conducted based on “Saber 11” performance indicators, teachers’ interviews about pedagogical interventions and the results of the “Saber 11” test 2017, 2018, and 2019.

According to the students’ results on “Saber 11” test 2018”, only 6,2% of the target population of this study reach a B1 level of English. It could be thought that the recent implementation of this strategy is the main reason for the low results.

However, the results of the previous year (2017) showed that 5,6% of the students reached B1 level. This reflects a slight percentage increase from one year to the other, but it is difficult to determine whether it was a direct result of the New Bilingualism program or not.

Regarding 2019 results, a substantial improvement was expected considering the new strategies implemented by the Secretaría de Educación Distrital to reinforce 11th grade students’ level of English by the end of 2019. Nevertheless, only 5% of the population obtained a B1 level. This shows that most of the population is not being able to meet the standards proposed in the bilingualism plan.

In addition, Interviews held with teachers from public schools in the city of Bogotá, highlighted different difficulties related to the implementation of the policies developed by the Secretaría de Educación Distrital to improve English level education. Related to the different pedagogical interventions, it is relevant to mention that some teachers expressed they feel overwhelmed with the number of responsibilities they have to assume when participating in projects from agreements

between la Secretaría de Educación Distrital and other institutions. This perception has to do with the lack of support of the external personnel that sometimes just supervises what teachers are doing, giving them more things to do.

The aforementioned suggests the necessity to enable strategies that facilitate the process of incorporation, adaptation, and strengthening of a new foreign language program. For this reason, it is critical to consider the profile and role of the students, teachers and institutions involved. This could encourage a smooth transition and promote better results in a shorter span of time.

Finally, the information outlined above allows us to state that Secretaría de Educación Distrital should work to establish academic programs that seek to address the different school grades providing them with comprehensive training based on the development of reading comprehension skills. These types of strategies will enable students, since first grades, to acquire vocabulary and improve their communicative skills. It is also important to mention that the Suggested Curriculum for the English area should be updated taking into account reading strategies as one of the axes used in the document.

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# Creation of an app towards language learning enhancement<sup>1</sup>

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## ABSTRACT

This paper describes an ongoing project performed within the Faculty of Engineering at Libre University. This study explores students' perceptions in regards of Language Learning with the purpose of enhancing their professional development through the implementation of a pedagogical strategy based on multimodality. Participants are engineering students enrolled in English classes from different semesters. The information was collected by means of students and professors' surveys, a focus group, reflections, and researchers' field notes. Data was analysed using the principles of axial codification. The first phase of this research was focused on students' views concerning autonomous learning and the technological instruments used towards academic success. Initial findings revealed that it is necessary to trigger students self-learning attitudes and transform their learning reality into practical language encounters as a necessary condition for enhancing English Language Learning.

**Keywords:** English for Specific Purposes, Engineers, App development.

## INTRODUCTION

English for Specific Purposes<sup>7</sup> is a necessary tool to further professional development, it aims at aiding professionals to get the required abilities to use language in a specific

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<sup>7</sup> ESP from now on.

academic field, inquiry, occupation or labor place (Basturkmen,2006). Although English Learning has been strengthened in recent years, it has actually been left out from bachelor programs in which technical courses tend to be more important. Globalization itself is witness of the relevance that English has acquired through the past of the time, and how it is also a requirement to obtain the professional degree in Colombia. The latest version of “Pruebas saber” reported an average score of 165 engineering students, who were in 8<sup>th</sup>/9<sup>th</sup> semester from the Faculty of Engineering at Universidad Libre. Also, 39% obtained an A2 level, and the 33% of students obtained a B1 level according to the National parameters of language ranking. Those which were established in regards of the Common European Framework<sup>8</sup> and determine whether any student may get graduated, or not. Unless this trend is considerably reversed, an estimated of 18% of engineering students from the Faculty of Engineering will face difficulties to finish their studies<sup>9</sup>.

Previous research and academic inquiry on ESP have focused on some primary topics. Several studies have examined it in terms of teaching English within the academic studies of any single vocational or professional area (Antony,1997). Other studies have focused on the absolute characteristics of ESP and how it could be understood to meet the specific needs of learners, it uses the specific means of the discipline it serves, and it is centered on the appropriate language in terms of grammar, syntax, lexis to be used in activities of those disciplines. Conversely, variable characteristics relate ESP to specific disciplines, differentiate the teaching situations of ESP to those of General English, associate ESP designing for adult learners or learners at secondary levels with an intermediate or advanced language level and establish that ESP assume some basic knowledge of the language system (Dudley & St John,1998). This research has led to numerous perspectives towards learners’ importance as the core of teachers’ responsibility in terms of planning, designing, and assessing courses based on students’ needs (Hutchinson & Waters,1987., and Dudley & St John, 1998). Fewer studies have examined ESP as the students need to achieve English competence due to their necessity to accomplish academic or labor goals, not simply for pleasure either they are interested in acquiring the English culture (Robinson, 1980). It is interesting for the researcher studying ESP, since it has been conceived as a case of general categories of special purpose language teaching (Stevens,1998)<sup>10</sup>. He further revealed that the definition of ESP is needed to distinguish between four absolute and two variable characteristics. For example, the four absolute characteristics of ESP consist of English language teaching, and they may refer to:

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<sup>8</sup> MCER from now on

<sup>9</sup> Resultados Pruebas Saber 2018.

<sup>10</sup> Agustina, ESP: An Approach of English Teaching... Beta Vol. 7 No.1 (Mei) 2014 | 39.

- 1) The designing of courses to meet specific needs of learners.
- 2) Content (i.e. in its themes and topics) related to disciplines, occupations, and activities.
- 3) Activities centered on the adequate language for those activities in terms of syntax, lexis, discourse, semantics, and discourse analysis.
- 4) Courses differentiated from General English ones.

Meanwhile the two features as variables of ESP may be, but are not necessarily:

- 1) Restricted as to the language skills to be learned (e.g. reading only).
- 2) Not taught according to any pre-ordained methodology.

Minimal research attention has been directed toward the attends to define ESP and they do not focus its essence on utilitarian purposes but on the learner needs and their characteristics and abilities when learning a foreign language. Hutchinson & Waters (1987) have defined ESP as an approach to language learning which is focused on the learner needs which tries to answer the question of why a learner needs to learn a foreign language. Thus, ESP centers its attention on all decisions concerning what, how, when and where somebody learns a foreign language instead of instrumentalizing the concept itself.

Hence, the concept of English for Specific Purposes has evolved through the times and the different conceptions of teaching and learning as well. For instance, during the 1960s, where the early beginnings of ESP are tracked, English was associated to Specific Purposes with the grammatical analysis and translation of technical texts. By the last part of such decade and close to the starting point of the 1970s discourse analysis got academic relevance and the emphasis on the learners' skills ended up in the growth of need analysis. The 1980s focused the public eye on the learner centered approach and materials development addressed by the time. Also, the latest constructs of English for Specific Purposes (ESP) could be defined and understood in a wide range of statements according to the scholars. Whether general concepts may be stated and most of them relate ESP with teaching English for a Specific Purpose. It could also be defined in terms of teaching English within the academic studies of any single vocational or professional area (Anthony, 1997). Besides, ESP is typically (but not always) associated with adult language learners who are attending a university or higher education program. It also means those learners ought to belong to homogenous groups sharing similar learning goals and needs to be identified by a teacher of ESP courses.

Existing studies of ESP are mainly qualitative with a focus on outcomes and variables stated from theoretical constructs analysis (Pallonen cited by Cresswell, 2012). Therefore, qualitative research rejects the quantification of human being aware of

the context, the role of the population and the conveyed meanings (Montero, 2017). Moreover, qualitative research involves the exploring a phenomenon and its inner acquaintances among data collection, data analysis and theoretical constructs (Strauss & Corbin, 1998 cited by Carrillo, 2016). Also, a qualitative study is settled from a deeper analysis of any phenomenon and the multiple variables emerging from the diversity of axial connections and the role of participants within a research project (Carrillo, 2020).

Thus, language professionals and engineering students from the Faculty of Engineering may work together to build up a qualitative proposal in which students' needs, lacks and wants address the common barriers and difficulties to enhance their professional development through the implementation of a pedagogical strategy based on multimodality and ICT's. With this understanding researchers can better determine the new trends of technology and Language Learning Enhancement to facilitate students learning approach.

## **LITERATURE REVIEW**

The aim of this literature review is to encompass the main theoretical aspects concerning this study.

### **ESP**

Despite English Learning is a challenge that most of Colombians do not reach after studying many years, as human beings we are all able to acquire or learn a foreign language.

In this research, we focused on ESP since we are not aiming at the language as a goal, but as a tool for engineers. Basturkmen (2006) highlights that ESP should be related to a methodology centered in helping learners understanding. Hence, engineers may get the required abilities to use the language in their specific field of study.

Therefore, English Learning is related to multiple skills and engineers are subjects who address English as an important but external task that requires effort but not the core of their attention. Although, it is somehow instrumentalized, engineers are more efficient than other users for short-term acquiring sessions, exploring their needs and abilities becomes an essential part when learning a foreign language. Hutchinson & Waters (1987) have defined ESP as an approach to language acquisition or learning which is dedicated on students' needs. Thus, it lies on the importance of learning a foreign language.

Likewise, Evans & St. John (1998) define ESP in terms of absolute and variable features embed within the whole process for reaching needs and context. Discipline

becomes fact, due to habits and small practices. ESP could be strengthening from daily methodologies in which the determined assignments may switch from context to context and the specific means of knowledge could depend on the reliable variables from each academic context.

### ***Flipped learning***

Language teaching communicative approaches tend to be useful and general, throughout history teachers have tried to use several approaches to teach, and it is likely there is not a hundred percent effective approach (Carrillo et. Al. 2018). However, due to the interesting settings in which the following paradigm is established, there are some elements emerging from the pedagogical perspective of including different elements in regards of eliciting autonomous learning.

Musallam (2011), Hamdan & McKnight (2013) say that the flipped Classroom approach initially appeared early in the 19th century. The United States Military Academy at West Point created a set of teaching methods in which students used sources provided by their teachers to learn before class, while classroom time was applied for group cooperation to mutually solve problems. This teaching method perfectly reflects the basic concept that underlie the Flipped Classroom.

Thus, the flipped classroom is ultimately a more student-centered approach to learning whereby students receive lecture materials before class - generally in some digital format - and spend the actual class time undertaking more active, collaborative activities. This approach allows students to learn about the topics outside of class, at their own pace, and come to class informed and more prepared to engage in discussions on the topic and apply their knowledge through active learning.

According to Bergmann and Sams (2012), Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter. In addition, there are 4 pillars which define such an approach that could be stated as a flexible environment in which students choose when and where they learn. A learning culture where instruction shifts to a learner-centred approach, where in-class time is dedicated to explore topics in greater depth and creating rich learning opportunities; intentional content where educators use Intentional Content to maximize classroom time in order to adopt student-centred methods , active learning strategies, depending on grade level and subject matter and finally, professional educators who are reflective in their practice, connect with each other to improve their instruction, accept constructive criticism, and tolerate controlled chaos in their classrooms.

In the same way, Suzanne Straw, Oliver Quinlan, Jennie Harland and Matthew Walker (2015) state that in flipped learning, delivery of content is undertaken via video instruction accessed online. Class time is focused on supporting students in working out the problems themselves. The activities undertaken in the classroom should, where available, be informed by online data (such as that collected through practice questions) which will show teachers what their students are doing and the pace they are moving at.

In addition, in the flipped classroom the teacher prepares and adapts materials for students to access instruction on concepts outside the class; students watch online videos to do exercises as part of homework to prepare for lessons. Also, class time is devoted to active learning, extension activities and supporting individual students and they receive support from teacher and peers as needed, and the teacher's role is mainly to facilitate student-led learning.

Finally, Demirel (2016) argues that flipped learning is rather a new concept and model for teaching. Flipped learning is a form of learning that makes use of technology to make learning in the classroom easier and more comfortable and in that way, it gives the teacher the opportunity to save all class-time into teacher-student interaction instead of lecturing. Flipped learning provides the teacher extra time to get in touch with the students in class, transferring the lecture time to homes through pre-recorded videos.

Hence, flipped learning is somewhat one step ahead of using videos in classes. It emphasizes the difference between previously used methods via computers or educational TVs and inverted classes since it is clearly stated that inverted classroom concept is novel with its regular and systematic use of interactive technologies in the learning process.

Despite the previously described method was not implemented as whole within this research, it is relevant to mention it, due to the intend of using the app within the classroom, but in an upcoming book, all the pedagogical elements will be described in detail.

On the other hand, this is an ongoing project where the most important elements to be described in this chapter involve the progress from the technological perspective.

## **ICT**

Information and communications technologies (ICT) is a word which has been recently used in the field of education and pedagogy. Thus, multiple authors try to define it and associate it with communication. The upcoming challenges have

brought the integration of telecommunications computers and necessary software which enable people to access and manipulate information mainly for academic purposes. The expression was first used in 1997 in a report by Dennis Stevenson to the UK government and promoted by the new National Curriculum documents for the UK in 2000. According to the government ICT refers to technologies which give access to information through telecommunications. It is quite similar to Information Technology (IT) but it focuses its attention primarily on communication technologies. This includes the Internet, wireless networks, cell phones, and other communication means. Accordingly, the European Commission states that the importance of ICTs lies less in the technology itself than in its ability to create greater access to information and communication in underserved populations, serving to erase the already-existing economic gap between technological “have” and “have not” areas.

Therefore, Roussev (2008) defines the information and communications technology - or technologies (ICT's) as a core term that indexes any communication device or application, encompassing: radio, television, cell phones, computers, network hardware, software development, satellite systems and more. Also, multiple services and applications associated with them, such as videoconferencing and distance learning are being used in particular contexts, such as education, health care, or libraries. It means Roussev highlights ICT like a concept that furthers the application of software, but also the use of hardware with the purpose of learning.

Likewise, Celebic & Ilija Rendulic (2004) associate the concept of ICT to all technical means that are used for managing information and aiming communication, including computers, network hardware, communication lines and all the necessary software. In other words, ICT is comprised of information technology, telephony, electronic media, and all types of process and transfer of audio and video signals, and all control and managing functions based on network technologies. Besides, the process of learning related to those technologies is known as e-learning and it is used to describe the process of learning or sharing knowledge without direct teacher-student contact using ICT technology.

On the other hand, Lloyd (2005) argues that the acronym ICT is used to stand for information and communication technology or alternatively information and communications technology. This acronym can also take a plural form (technologies) where it is understood to entail the specific devices or processes which collectively make up the “Technology.” Thus, the pluralized form is sometimes written as ICTs. The term ICT must be seen as an evolution from the antecedent and more narrowly defined term IT (information technology) which maintains its usage in government, business, industry and in relation to tertiary and other academic courses dealing with such areas as programming, database design, and expert systems.



Finally, the British Computer Society gives a definition of ICT considering the scientific, technological and engineering disciplines and the management techniques used in information handling, processing and disseminating their use and applications as well as the computers, networking and communication and their integration with men and machines. So, ICT enables an organization or a society to access large amount of information as well as to communicate and transfer information from one place to another at a very rapid rate.

### ***B-learning***

Garrison & Vaughan (2008) argue that the simplest definition of the term blended learning is the use of traditional classroom teaching methods together with the use of online learning for the same students studying the same content in the same course. It is a “thoughtful fusion of face-to-face and online learning experiences. In other words, blended learning is a term applied to the practice of providing instruction and learning experiences through some combination of both face-to-face and technology-mediated learning. Also, the authors explain that during the technology-mediated components of these learning experiences, students are not required to be physically together in one place but may be connected digitally through online communities. For example, one blended learning course could involve students attending a class taught by a teacher in a traditional classroom setting while also completing online components of the course independently, outside of the classroom, on an online learning platform.

Friesen (2012) announces that b-learning basically refers to a combined course delivery which takes advantages of both face-to-face and eLearning. The same author states that one of the first mentions to blended learning was done in 1999 by an American training company called EPIC Learning.

Similarly, According to Lalima & Dangwal (2017) blended learning is the concept that includes framing teaching learning process that incorporates both face to face teaching and teaching supported by ICT. Blended learning incorporates direct instruction, indirect instruction, collaborative teaching, and individualized computer assisted learning. Hence, the concept of blended learning is linked to some concepts which explain its nature. Concepts such as face to face teaching, student interaction with course content, peer group interaction, group discussion and exchange of ideas, accessing e-library, virtual classroom, online assessment, e-tuitions, accessing and maintaining educational blogs, webinars, watching expert lectures on YouTube, online learning through videos and audios and virtual laboratories could be used as core concepts defining b-learning as an emerging approach with multiple benefits that include getting more time in the classroom for creative and cooperative exercise for teachers and students, gaining advantage of online learning without losing social

interaction element and human touch of traditional teaching. It provides more scope for communication, students get enhanced digital fluency, and they develop qualities like self-motivation, self-responsibility and discipline and it updates course content so it gives new life to the making and establishment of academic programs.

The department of Education and early Childhood development in Melbourne (2011) relate blended learning to teaching and learning methods from both face-to-face, mobile, and online learning and that it includes elements of both synchronous and asynchronous online learning options. In addition, it argues that within the Australian context blended learning can also be the integrated combination of traditional learning with web-based online approaches. These simple, practical definitions are supported by eminent researchers who have defined blended learning as essentially traditional in-class learning supplemented by online activities and resources and blended learning is currently conceived as the combination of technology and traditional face to face instruction.

In a similar way, the American government (2008) defines blended learning in general terms as the combination of online delivery of educational content with the best features of classroom interaction and live instruction to personalize learning, allow thoughtful reflection, and differentiate instruction from student to student across a diverse group of learners.

### ***Mobile learning***

Mobile learning (m-learning) appeared in the world of education as a new term at the end of the previous millennium as people involved in the field of teaching started exploring the use of mobile technologies in teaching and learning environments. Thus, by the 2000s, some attempts to define mobile learning have emerged.

Stosić (2013) places the origin of m-learning by the 1970s and 1980s when Alan Key and his colleagues proposed to make a minicomputer that would replace the book and whose name was the Dynabook. However, it was not until the early 21st century, the European Commission began to support projects related to m-learning and multicounty project called MOBlearn.

According to Stošić mobile learning involves connecting through downloading and installation of materials and work over a wireless network or mobile phone and connect with the systems in institutions (Virtual learning environment - Eng. Virtual Learning Environment - VLE). In addition, m-learning could be associated to three main characteristics as it follows: 1) the functionality of the hardware, 2) the functionality of the software and 3) the right connections. Thus, the author states that mobile learning is inconceivable without the use of mobile devices.

Nail Bukharaev and Ammar Wisam Altaher (2017) also define Mobile learning as the use of hand-small and portable wireless devices such as mobile phones, personal digital assistants (PDA devices), cell phones, smartphones, personal computers and small tablet PCs, to achieve the flexibility and interactivity.

In addition to that, Mobile learning, which is called m-learning, is learning that occurs when using small portable devices small/portable computing devices which include cell phones, smartphones, personal digital assistants (pdas), and handheld devices. Thus, m-learning depends on the use of wireless devices in the communication between teachers and learners, websites, and through its services: msm (text messaging), mms (multimedia), wap (wap), smn (messages msn-hotmail-msn-messenger), gprs (instant firmly radio), and blth (Bluetooth).

Similarly, Behera (2013) understands Mobile learning as the use of mobile or wireless devices for the purpose of learning while on the move. Typical examples of the devices used for mobile learning include cell phones, smartphones, palmtops, and handheld computers; tablet PCs, laptops, and personal media players can also fall within this scope. In addition, m-learning involves the idea that a student can learn from any place at any time using portable learning devices and it is any sort of learning that takes advantages of learning opportunities offered by mobile technologies.

From the perspective of Rosman (2008), m-learning or mobile learning describes an array of ways that people learn or stay connected with their learning environments - including their classmates, instructors, and instructional resources - while going mobile. Devices utilized include Mobile Phones, PDAs (such as a Palm or Pocket PC) - or the combination of the two in a Smart Phone (such as a Treo or Blackberry or Apple iPhone) - and digital audio players such as an iPod. In line with such an idea, m-learning can redefine the concept of “training” for someone who accesses a lesson literally “just in time” while faced with a new challenge and they have to turn to their mobile device for instant answers.

Finally, Kambourakis and colleagues (2004) defined it as: The point at which mobile computing and e-learning intersect to produce an anytime, anywhere learning experience. Also, Georgiev (2006) reinforces the previous idea by saying that mobile learning is exactly that: mobile. M-learning as an educational method is new and more flexible than previous e-learning applications. Learners can have the opportunity to review course materials, or correspond with instructors or colleagues, while sitting in a restaurant or waiting for a bus; they are not made immobile by the restrictions of desktop computer technology.

## **METHODOLOGY**

This research was framed under the constructs of a qualitative research; hence, the main objective of this research entails the view of teachers within the role of action researchers, who seek to explore the variables emerging from academic contexts (Sanchez,2015). Likewise, action research tends to explore classroom issues towards understanding and appropriating own practices. Action research encompasses the transformation of the proximal context, a deep view of learning through collaboration and multiple benefits of narrowing the gap between students and learners. Thus, qualitative research is addressed from the adaptation of the established criteria determined by the objectives (Creswell, 2002).

Although there are several models of qualitative research involving both, teachers and engineers over the loop of planning, acting, observing and reflecting (Lawin,1949), the correlations among elements facilitate the blossom of research as a logic path of settings (Kemmis, 1985). Also, research itself triggers knowledge's acquisition and action is conveyed to reflect on procedures (Usher, 1989). Thus, practices were addressed to the new trends in the field of EFL, not only under traditional principles of research, but also empowering autonomy from ICT's usage, especially to what it is conceived as the development of mobile Apps. Qualitative evidence encompasses a complex spiral model in which the three main concepts contribute to regulate analysis, reflection, and action (Stringer, 1999).

Therefore, a different view of action research examines language learning with computer programs, and it is known as CALL. This perspective states identification, planning and exploring solutions in which data collection implies qualitative instruments to measure impact (Beatty, 2003 cited by Sanchez, 2005). Thus, understanding of human behaviour through collaborative activity addresses perfectly this study, in which practical solutions aim reflection and innovation. Action research involves daily engagements in context and developing adjustment in school is its main principle (Ferrance, 2000).

On one hand, qualitative research has become relevant in social sciences due to the emerging studies arising and the rigorous implementation of scientific techniques. On the other hand, qualitative data and quantitative data have varied in terms of how open science allows researcher to face different modalities within research. Regarding numerous studies qualitative and quantitative contexts may belong to a unique approach named mixed research (Cresswell, 2012).

### **Context**

This study takes place at the Faculty of Engineering at Universidad Libre in Bogotá, Colombia. The Faculty of Engineering offers four different Engineering programs:

- Computer Systems Engineering
- Mechanical Engineering
- Environmental Engineering
- Industrial Engineering

In this study participants belong to different programs, most of them to the Computer Systems Engineering program. They contributed to analyse ICT's usage in the English courses from the faculty, as well as designing, and implementing mobile apps to foster language learning in the faculty.

This is an ongoing project, and still in its implementation phase. Data will be collected in a control group of English learners from different levels. To develop mobile apps, it was necessary to explore the virtual contents used in class, as well as students' needs, lacks, and wants concerning language learning. Topics of the first version of the app were taken from English III, the middle level of the English courses that students must complete to get graduated.

Engineering students who aim at obtaining a professional degree from Universidad Libre have two options. They must complete five levels of English as a requirement to obtain their professional degree or they may also certify a B1 level according to CEFR with an international exam, issued by a national approved certification centre.

Likewise, eight computer systems engineering students from the faculty of engineering are members of the junior research group 'Brain it!'. They all have contributed to carry out different phases or tasks throughout this project. The first stage included the design of the general layout, which was conceived by them and after analysing user requirements it was set up initially as EFLApp, the first software developed by engineering students for engineering students in Universidad Libre, who may be interested in learning foreign languages. French was the selected language to start the development of apps and it was due to the doble degree agreement between Universidad Libre and the University of Poitiers. Contents within the app were recorded and adapted by the principal researcher with contributions of the engineering students of the faculty. Besides, French class methodologies are easily recognized for students who have had French classes at the faculty, the emotional meaningful dimension was explored from the usage of common expressions adapted from the class to the virtual environment.

Likewise, enhancing language learning is not only a must in regards of policies or requirements, it is also the strategy of Universidad Libre from the Faculty of engineering to offer a plus within the academic field. Both, English, and French were part of the policies of bilingualism. However, English practices were also explored by the professors from the foreign language area, it took more time to ensure a high level of competence may be reinforced by fostering students autonomous learning.

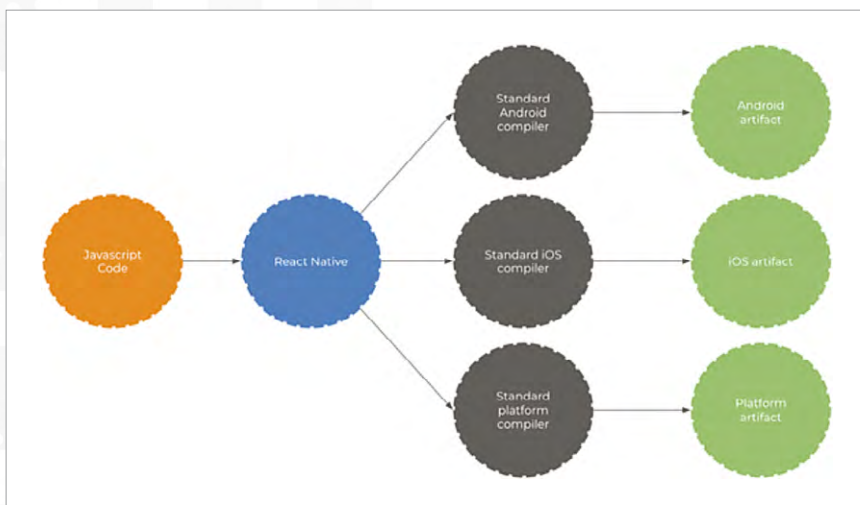
## Technical design

This chapters belongs to an active research project, and it is an ongoing project as mentioned before. Thus, the following methodological descriptions encompasses the role of engineers throughout the project.

First, the software was implemented by using cloud and bridge technologies with the goal to facilitate the development of the mobile application. In this part, the architecture and the implementation of the solution are going to be explained.

Accordingly, it is essential to start with the definition of the used technologies. The core of the mobile application is built using the React Native Framework, which is a React-based bridge framework, that allows compiling an entire application built using JavaScript as the main programming language to native languages, in this case, Android to Java.

There are three ways to build mobile apps nowadays: Native, Bridge, and Hybrid. The first one is using the native language that companies defined as “standard” to develop, for example, Android use Java, iOS use Objective-C or Swift. The second one creates a bridge between the native languages and one language, for the case of the React Native, it is JavaScript, which helps developers use one language to build native apps across platforms like this diagram shows:



**Figure 1** NB: some have tried but only for mobile development with opinionated approach (1).

Source: Self elaboration.

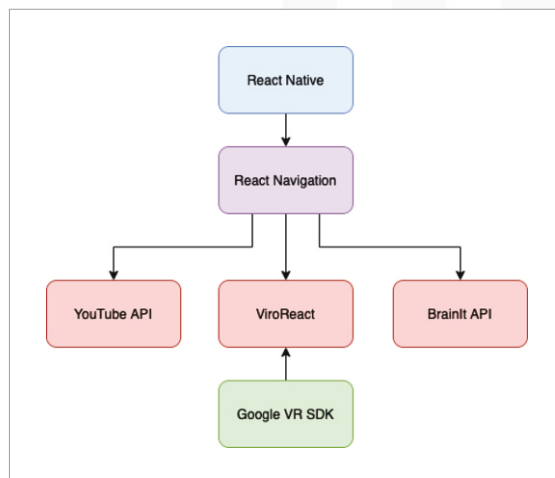
Likewise, the third one is a hybrid technology, which is basically a web app rendered in a browser that simulates a native app, using some other common libraries like Cordoba that brings native features like, camera, notifications, and others giving the approach of native apps.

### Why React Native?

Mobile apps are developed separately for different platforms-Android and iOS. For developer and engineering teams it is hard and expensive to build to different apps for sharing the same solution across platforms. React Native developers only needs JavaScript knowledge and web development basics to brings that pattern to mobile environments (2).

### How 'Brain It!' was built?

The following diagram describes the high-level architecture of the app considering the client-side. Bringing the libraries and services used to build the solution. As mentioned before the React Native Tool was the core of the development, using the popular library for all the navigation (React Navigation). As the requirements marked the app provides online media to share the course lessons. They decide to use YouTube content and rendering into the app using their private API. As one of our added value was Virtual Reality, Android provides the SDK for building mobile solutions on VR. To use it ViroReact brings the approach of the SDK and works perfectly on React to Native environments. After that, the app has its own services to store all the data become from our users.

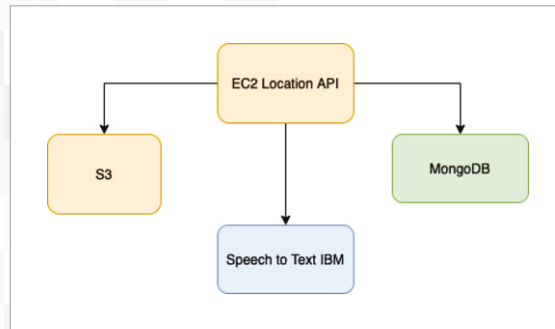


**Figure 2** React native app architecture.

Source: Self elaboration.

## Server Side

As the infrastructure was built by cloud services, there is here a high-level composition of the server-side architecture:



**Figure 3** Cloud architecture.

Source: Self elaboration.

Basically, the team built an API service that allows the interaction with the client mobile app. In the diagram two kinds of cloud providers are pointed out, which are AWS and IBM. The decision to take this was about the costs to keep them at a low price for academic purposes.

*Service definition:*

- EC2 is a virtual machine based on Linux OS where the service is located.
- S3 Simple Storage to store multimedia content.
- Speech to Text IBM allows us to detect the voice and transform it into readable text.
- MongoDB No SQL database to save users' data.

The current project has strengthened both, programming and language skills of participants who decided to be part of the junior research group 'Brain it!'. The Faculty of Education and the Faculty of Engineering are currently working on the development of contents and virtual setting as a strategy to enhance students language learning.

## CONCLUSIONS

The present study is an ongoing project and still require participants from different Faculties to continue its development. Cooperative groups between Faculties have strongly complemented their work and after generating and modulating new adds within the app it is remarkable to analyze the potential of this initiative.



First, students and teachers' perspectives towards language learning in the faculty of engineering has become positive due to the implementation of a pedagogical strategy based on multimodality. Also, participants from different Faculties are working together to build interinstitutional alliances that may lead the scientific development to be addressed from the multidisciplinary.

Although data still need to be analysed from different instruments, it is remarkable the practical advancement using students' views concerning autonomous learning and the most common technological instruments used for academic purposes.

Therefore, initial findings revealed that it is necessary to trigger students self-learning attitudes from pleasant lectures, real-world classroom practices and a coherent plan to model autonomous learning from accurate usage of technology.

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## Innovation in ETL

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This book, *Innovations in ELT*, compiles the importance of research in different contexts and situations and shares interesting information about the Implementation of Flipped Learning, English teaching in Public Schools, Creation of APPs Towards Language Learning Enhancement, Autonomous Language learning, Contextualized Materials to Enhance Public Speaking using Flipped Learning Approach.

Educators around the world have worked hard, for many years, for an educational reform and improvement and its results have not been satisfactory enough. For that reason, many teachers and professors have been aware of the importance and need of looking for more effective ways to teach and to learn.

We are living in and facing a **rapidly changing world**. How are we, as teachers, preparing children, adolescents, teenagers, and youngsters for the future? Our students are going to have to work with **knowledge that has not been given yet**, to work on **technology that has not been invented yet**, as well as to face **new ways of being taught and new ways of learning**.



How can we, as Teachers, meet their needs, interests, expectations, and challenges of tomorrow? We should be using science to change the odds.

We must be changed in order to change, we should be motivated to motivate, and be convinced to convince.

Our main task, as Teachers, is to inform, to form and to transform; to understand others, and to be understood by others.



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