

Interaction and Technology in Education during the Covid-19 Pandemic in Colombia

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Trabajo de Grado para Optar al Título de
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Dedication

To my mom, who has been my greatest support during my college process.

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Resumen

Título: Interacción y tecnología en la educación durante la pandemia de Covid-19 en Colombia^{1*}

Autor: Aura Cristina Suárez Tumay^{2**}

Palabras Clave: Aprendizaje en línea, interacción, tecnología, aprendizaje durante la pandemia.

Descripción: La modalidad escogida para este trabajo de grado consistió en los *Cursos en Especialización, Maestría o Doctorado*. Bajo esta modalidad, se tomaron las asignaturas de Educación y TIC y Teorías del Aprendizaje de la lengua (segunda y extranjera). El objetivo de este trabajo de grado es expandir conocimientos referentes al área de la enseñanza y aprendizaje de un idioma. Con base en este objetivo, se buscó profundizar en estrategias que aporten a intervenciones pedagógicas y didácticas para que sean más significativas y tener las herramientas tanto en un entorno presencial como virtual. Finalmente, se logró aprender sobre estrategias didácticas mediadas por las tecnologías emergentes después de la pandemia del Covid-19. Se realizaron varias lecturas y actividades para llevar a cabo todas las temáticas del curso. Algunas de estas clases fueron virtuales y otras presenciales. Esta experiencia fue positiva puesto que se aprendió sobre temas nuevos y se pudo profundizar en otros igualmente. Así, fue posible realizar una revisión literaria acerca de la interacción y la tecnología en la educación durante esta pandemia en Colombia.

^{1*} Trabajo de Grado

^{2**} Facultad de Ciencias Humanas, Escuela de Idiomas. Directora: Edga Mireya Uribe Salamanca, Doctora en Didáctica de las Lenguas y las Culturas.

Abstract

Title: Interaction and Technology in Education during the Covid-19 Pandemic in Colombia^{3*}

Author: Aura Cristina Suárez Tumay^{4*}

Key Words: Online learning, interaction, technology, learning during pandemic.

Description: The modality chosen for this degree work was *Cursos en Especialización, Maestría o Doctorado*. Under this modality the subjects taken were Education and ICT and Language Learning Theories. The objective of this graduation project is to expand knowledge in the area of teaching and learning a language. Also, to deepen in strategies that contribute to pedagogical and didactic interventions to make them more meaningful and to have the tools both in a face-to-face and virtual environment. Finally, to learn about didactic strategies mediated by emerging technologies after the Covid-19 pandemic. Several readings and activities were done to carry out all the topics of the course. Some of these classes were virtual and others face-to-face. This experience was positive since new topics were taught and it was possible to go deeper into others as well. Thus, it was possible to conduct a literature review about interaction and technology in education during the pandemic in Colombia.

^{3*} Graduation Project

^{4*} Facultad de Ciencias Humanas, Escuela de Idiomas. Director: Edga Mireya Uribe Salamanca, PhD in Didactics of Languages and Cultures.

Résumé

Titre : Interaction et Technologies dans l'Éducation pendant la Pandémie de Covid-19 en Colombie ^{5*}

Auteur : Aura Cristina Suárez Tumay ^{6*}

Mots clés : Apprentissage en ligne, interaction, technologie, apprentissage pendant la pandémie.

Description : La modalité choisie pour ce travail de fin d'études était les *Cursos en Especialización, Maestría o Doctorado*. Dans le cadre de cette modalité, les matières abordées ont été *Éducation et TIC* et *Théories de l'apprentissage des langues*. L'objectif de ce travail de fin d'études consiste en élargir les connaissances dans le domaine de l'enseignement et de l'apprentissage des langues. De cette manière, il s'agit d'approfondir les stratégies qui contribuent aux interventions pédagogiques et didactiques pour les rendre plus significatives et disposer des outils tant dans un environnement présentiel que virtuel. Enfin, cette modalité a été importante pour connaître les stratégies didactiques médiatisées par les technologies émergentes après la pandémie du Covid-19. Plusieurs lectures et activités ont été faites pour suivre toutes les matières des cours choisis. Certaines des séances étaient virtuelles et d'autres en présence. Cette expérience a été positive pour les nouveaux apprentissages et l'approfondissement des acquis pendant la licence. Ainsi, une révision de la littérature sur l'interaction et les technologies dans l'éducation pendant la pandémie en Colombie a été réalisée.

^{5*} Travail de fin d'études universitaires.

^{6*} Facultad de Ciencias Humanas, Escuela de Idiomas. Directrice : Edga Mireya Uribe Salamanca, Docteur en Didactique des Langues et des Cultures.

Introduction

Since it was possible to decide the modality for this graduation project, the modality of *Cursos en Especialización, Maestría o Doctorado* was the one chosen. It was a modality where it was possible to work alone and learn about desired subjects. The master chosen is offered by the *Universidad Industrial de Santander* and it is called *Maestría en Didáctica de la Lengua*. One of the objectives of this program is to train language educators capable of making highly didactic decisions in the processes of language learning mediation. This master's degree is offered to postgraduate students, it means that they must have a professional undergraduate degree, preferably in one of the language sciences or educational sciences.

The students in these two subjects were already professionals working in the field of education. As a requirement of this modality, it was mandatory to choose two subjects. The ones chosen were *Educación y TIC* (26747) and *Teorías del Aprendizaje de la lengua* (26744). The motives to make this decision derived from the following personal objectives, 1) to expand knowledge in the area of language, teaching, and learning, and 2) to deepen in strategies that contribute to pedagogical and didactic interventions to make them more meaningful and to have the tools both in a face-to-face and virtual environment.

It was a great experience and it was possible to learn a lot and reinforce things and topics already learned so far in the Foreign Language program at the university. To talk about this experience, this graduation project will be divided into the following aspects. First, a description of the subject and methodological strategies. Second, the activities done in class and a brief literature review about interaction and technology during the pandemic in Colombia. Finally, some conclusions about this experience.

1. Chapter 1: Subjects

Two of the subjects offered in the Master program in Language Didactics for the first level are *Education and ICT* and *Language Learning Theories*. Here, a description of the subjects, methodological strategies and personal assessment will be provided.

1.1 Education and Information Communication Technology (ICT)

The total number of hours is 48, distributed in 16 theoretical hours and 32 practical hours. The class schedule was Fridays from 5 pm to 9 pm and Saturdays from 8 am to 2 pm with some breaks in between. The classes started on September 3rd and ended on September 25th of 2021. This course was carried out virtually through the Zoom platform by Professor Kaithie del Mar Ramírez Correa. The methodology used in class was based on synchronous and asynchronous work. Readings or material corresponding to the subject matter of the class was assigned beforehand so that we could read it during the class time or before class asynchronously. The professor made use of presentations to explain topics. The students also made group presentations explaining a topic. The pedagogical mission of this course is to raise critical thinking about how we use technology in the field of language, teaching, and learning. The general objective of this course is to increase critical reflection on the use of technology in education, specifically in language learning. In addition, it discusses how ICTs are incorporated into everyday life in a globalized society. Also, another objective is to learn how to apply and design strategies to incorporate technology in language learning. The following chart will show how the professor distributed the topics for all the eight classes:

Table 1*Education and ICT classes*

Date	Topics
Friday, September 3rd ONLINE	Introduction to the Cloud and ISTE standards.
Saturday, September 4th ONLINE	The SAMR and TPACK models.
Friday, September 10th ONLINE	Bloom's Taxonomy for the Digital Age and Hyperdocuments.
Saturday, September 11th ONLINE	The advantages of technology.
Friday, September 17th ONLINE	21st Century Skills.
Saturday, September 18th ONLINE	Flipped Classroom.
Friday, September 24th ONLINE	Invisible Learning and SOFLA.
Saturday, September 25th ONLINE	Reflecting in class.

Note. Professor's distribution of the topics.

1.1.1 Assessment

During the course, many activities were carried out individually and in groups such as the creation of didactic material, videos, presentations, etc. However, only three of those activities were evaluated. The first activity was a forum where it was necessary to read about the ISTE standards for students and make a reflection in no more than three paragraphs on the following questions: 1) How do I see my teaching practice and the integration of technology? 2) Do I consider technology as a means to generate meaningful learning spaces? 3) Have I seen that technology can help my classes? 4) Do I consider technology as a classroom distraction? Additionally, it was required to respond to the classmates' answers in the same forum.

The second assessment activity was taken from group works where it was required to present topics assigned randomly by the professor.

The last activity evaluated was the creation of a portfolio that will serve as a resource bank for the student's future reference. This tool will be very useful for when the teachers or future teachers want to implement technology in our classrooms. The portfolio could be a document, presentation, web page or an online document. There it was required to include all those things seen, discussed and created in class.

1.2 Language Learning Theories

This course was carried out in eight sessions starting on October 1st and ended on October 23rd. The classes were on Fridays from 5 pm to 9 pm and Saturdays from 8 am to 1 pm with some breaks in between. The professor assigned for this course was Luz Mary Quintero. The objectives of the class are directed to create spaces to foster an understanding of the principles and processes that govern second language learning and to develop the ability to think critically about research findings in the field of second language learning and use.

This course was carried out 50% virtual, through the Zoom platform, and 50% face-to-face at the Universidad Industrial de Santander. However, since some students were living in a different place than Bucaramanga and because of the difficulties for them to move every weekend, they decided to take the course 100% virtual. The topics were varied and interesting. The following chart will show how the professor distributed the topics for all the sessions and if they were virtual or face-to-face:

Table 2*Language Learning Theories classes*

Date	Topics
Friday, October 1st	Glocal Languages, Coloniality and Globalization from
Saturday, October 2nd	Below.
ONLINE	Translating Culture in Global Times.
Friday, October 8th	Development of language.
Saturday, October 9th	Motivation.
FACE-TO-FACE	
Friday, October 15th	The Sociocultural Approach to Second Language
Saturday, October 16th	Acquisition.
ONLINE	
Friday, October 22nd	An Identity Approach to Second Language Acquisition.
Saturday, October 23rd	
FACE-TO-FACE	

Note. Professor's distribution of topics.

To carry out these topics, the professor opted for a seminar method. Thus, there were some readings assigned about the topics for the class. Then in class, the professor oversaw leading the discussion throughout participation and asking questions to answer individually or in groups. There was a high level of participation and the student's questions were answered. During the eight sessions, many strategies were conducted to discuss the topics: for example, professor-lead talks, presentations, round table, peer reading, and open discussions.

1.2.1 *Assessment*

In the first class of the master program subject, the professor talked about the activities she was going to assess. Also, she provided space and opportunity to propose a different procedure. In the end, everyone agreed on three evaluative activities for the course. The first activity was about student-led reading discussions with a 30% of the total grade of this subject. Here, students had to get into groups of three people. Then each week, they had to read an article about a different topic but related to the topic of the week's session. Additionally, each group had to design a mind map or graphic organizer in which the text was summarized. Thus, it was necessary to provide a descriptive and critical interpretive account of the article with a 25 minute presentation and 10 minutes more for questions or comments from the audience.

The second assessment activity was the delivery of the problem identification and description with 30% of the total grade of this subject. Here, most of the classmates had to identify, document, analyze, and write about the research/classroom or institutional problem that they wanted to address in their project. However, as not all students are official students of this master, it was not necessary to carry out an investigation for those who do not belong to the master's program. That means that for this graduation project, such investigation is not considered. Instead

of this, these students had to deliver a written assignment very similar to this final delivery of the graduation project where it described the subject and the activities carried out here.

Finally, in the last activity it was assigned to write reflections every week about the two sessions carried out on Friday and Saturday since during those two days specific topics were discussed. This final assessment had a 40% value. Apart from the reflections, it was necessary to comment on at least two of the classmates' texts. From this activity everyone could take advantage of the classmates' knowledge and strengthen their ideas with their comments and opinions.

2. Chapter 2: Activities

The main purpose of the second chapter is to report in detail on the development of the subjects taken class by class with an ethnographic approach which means to personally relate the experience during the classes. This chapter will be divided into two main sections: first subject and second subject. In the first subject, the activities done during the course called *Education and ICT* will be discussed. In the second subject, the activities in *Language Learning Theories* will be discussed too.

2.1 First subject: *Education and ICT*

A table is created in order to introduce the sessions. It will show the day when the class was carried out and the topics of the lesson.

2.1.1 Cloud storage and ISTE standards

Table 3

First class

Date	Topic of the lesson
Friday, September 3rd	Introduction to the Cloud and ISTE standards.

Note. Date and topic of the first class.

2.1.1.1 Cloud storage. The professor requested to join a Google Classroom as the platform to see homework and material uploaded by her. The class started by discussing what Drive, Dropbox, and iCloud were and what they were for. It was learned that cloud storage is an access to information, programs and services through the Internet. Then the professor talked about history and it was not until 1963 that people started talking about virtualization. In the late 90's it became a reality not only for the government but also for the common people with Amazon. Google emerged in 2006 and then launched its cloud storage. Then Apple launched iCloud and that's when cloud storage was known (Ramírez, K., personal communication, September 3, 2021).

The professor said that cloud storage is a server that is everywhere on the globe coordinated by Google and Amazon. It means that accessing the cloud is accessing a remote computer. After that, students reflected on the use of the cloud and how it is used every day when people upload data on the cell phone and when the photos are saved in Google photos. The class came to the conclusion that the cloud is something we use every day but people are not aware of it or how the internet comes home.

2.1.1.2 ISTE standards. Finally, the professor talked about the ISTE standards that seek to ensure that educators and pedagogical leaders in the world ensure that technology is accessible

to all people. They are standards that help educators guide students in their learning process (Estándares ISTE: Para Docentes, 2019). There are ISTE standards for both teachers and students, in this class, students learned both. ISTE standards for teachers:

Figure 1

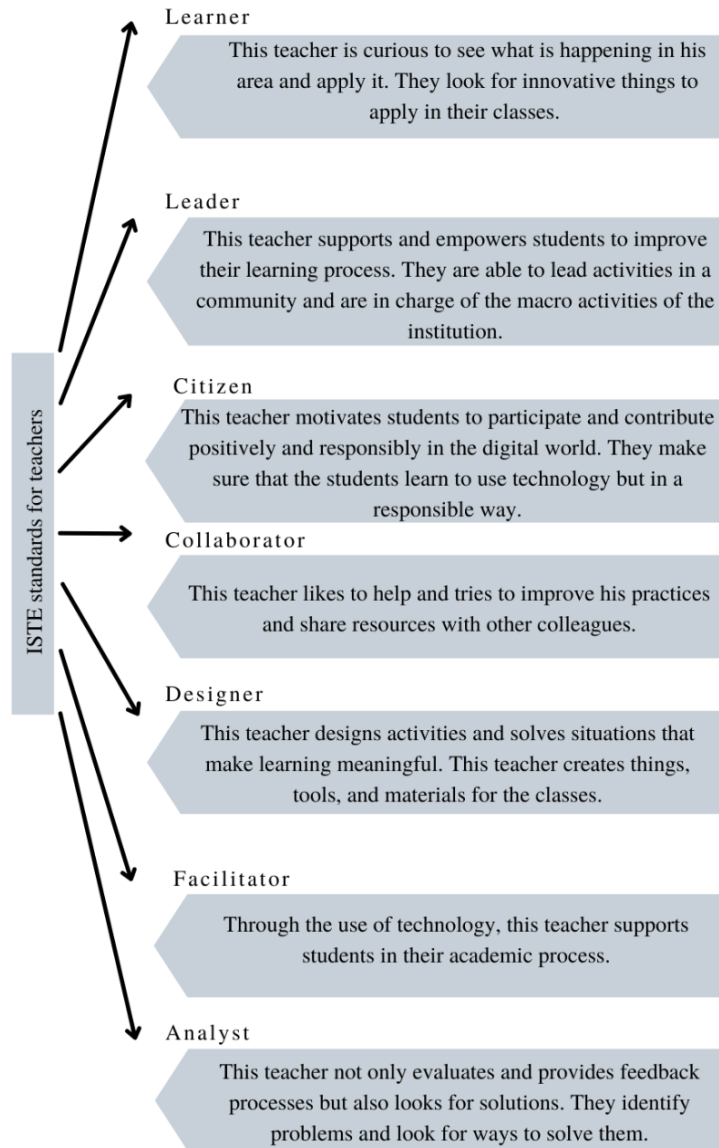
ISTE Standards for teachers in Spanish



Note. This figure is a screenshot of the professor's presentation about ISTE standards for teachers in Spanish since most of the classes were in Spanish.

Figure 2

ISTE Standards for teachers



Note. This table shows the classification of the standards proposed for teachers in class.

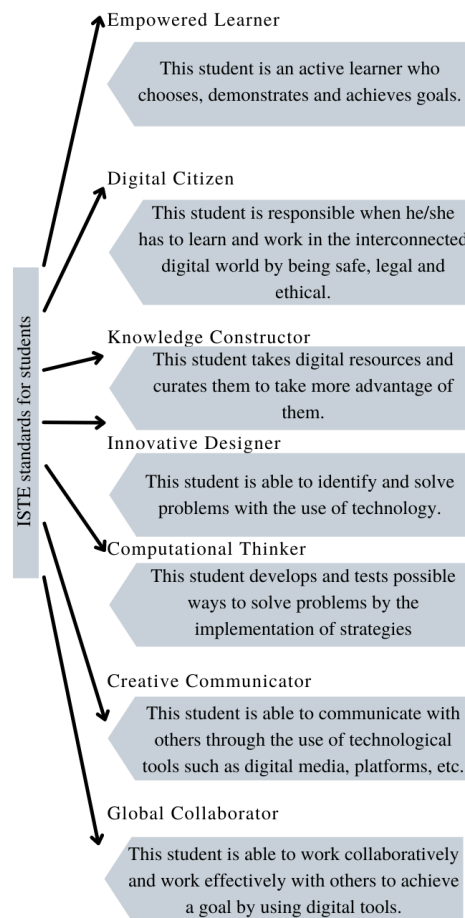
A reflection was made in class after all this and it was discussed about what type of teacher everyone was. Then, in breakout rooms (using Zoom), the following questions were discussed: 1)

What can I do to achieve some of the above characteristics? 2) Can I rely on my peers? 3) How do I know if I am achieving them? and 4) Do I have to have all of them?

Finally, the other standards were taught which are the ISTE standards for students (Estándares ISTE: Estudiantes, n.d.).

Figure 3

ISTE Standards for students



Note. This table shows what the standards for students are proposed in class by the professor.

With this new information, it was necessary to participate in a forum where the following questions had to be answered and commented on by the other students: 1) How do I view my teaching practice and technology integration? 2) Do I see technology as a means to generate

meaningful learning spaces? 3) Have I seen that technology can help my classes? and 4) Do I consider technology as a distractor in class?

A conclusion for this class was that during classes, teachers must innovate or create different activities that not only serve as entertainment and fun, but also that the students can take advantage of and learn through technology. Technology has helped teachers to be more didactic although in the virtual spaces, it has been difficult to make the students interact more with each other.

2.1.2 SAMR and TPACK models

Table 4

Second class

Date	Topic of the lesson
Saturday, September 4th	The SAMR and TPACK models.

Note. Date and topic of the lesson of the second class.

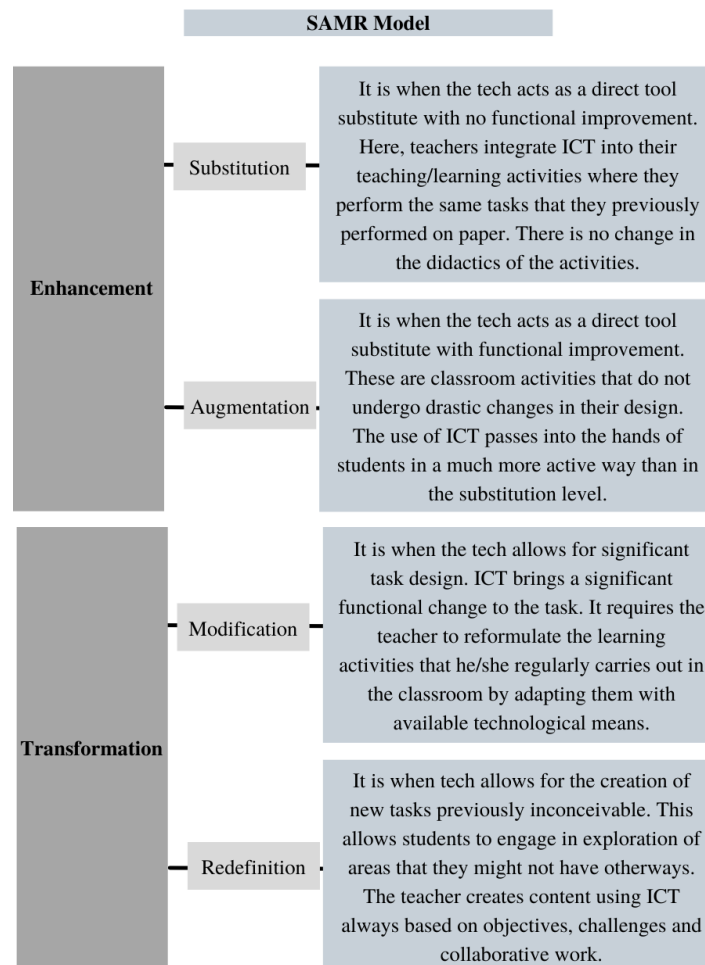
2.1.2.1 SAMR Model. The first two hours of class were asynchronously. We were assigned to watch some videos and read about the SAMR model and take notes about it. The following links were suggested by the professor: 1) [The Impact of the SAMR Model with Ruben Puentedura](#) and 2) [Modelo SAMR - Dr. Ruben Puentedura _ traducido español.](#)

Then in class, the professor explained this model and students were able to consolidate their knowledge on this topic. SAMR is a model that helps to improve the integration of ICT in the design of activities (García, 2015). This model is categorized by levels; the following descriptions are based on conversations in class.

After this model, we learned about a new one that also makes use of ICT. This is called the TPACK model.

Figure 4

SAMR Model



Note. SAMR Model framework created by Dr. Ruben Puentedura

2.1.2.2 TPACK Model. This is a theoretical-methodological model that focuses on the planning or guidance for conducting a class (Kurt, 2019). There are three types of knowledge defined according to the professor’s explanation and classmates’ comments:

Figure 5

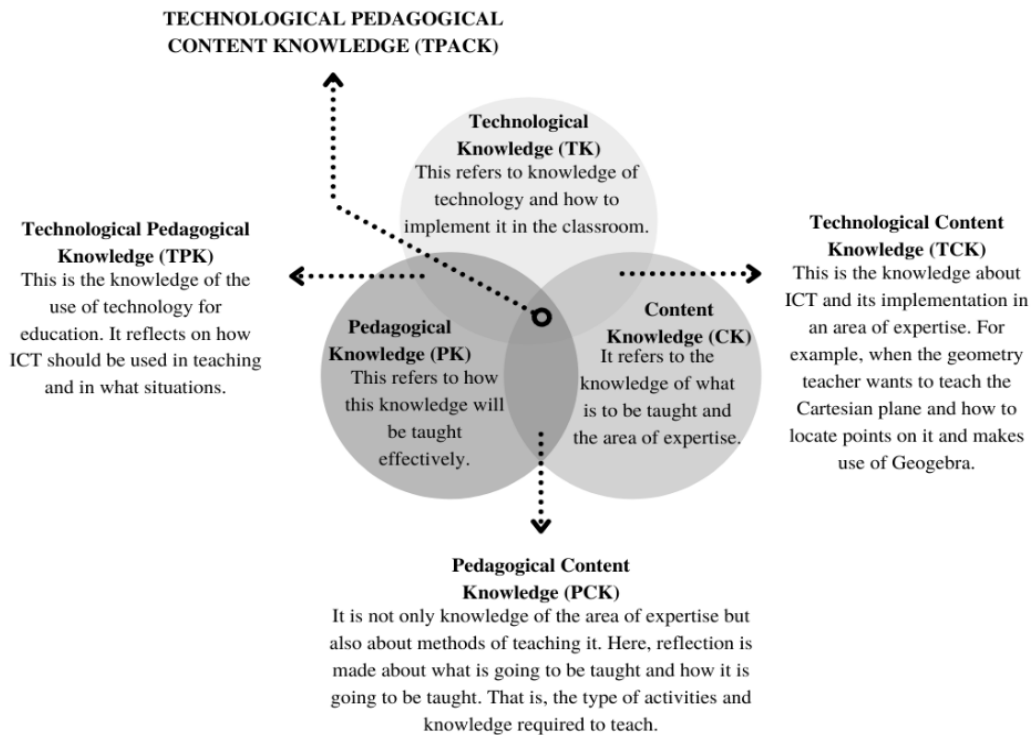
Types of knowledge in TPACK Model



Note. This figure is a screenshot from class where the professor defined each component.

Figure 6

TPACK Model scheme



Note. This table shows how the different dimensions of the model can be combined.

In conclusion, (TPACK) technological, pedagogical, and disciplinary knowledge is the interrelation of all the components made before. After this second explanation, the professor sent students to breakout rooms in order to discuss these two models.

2.1.3 Bloom's Taxonomy and Hyperdocuments

Table 5

Third class

Date	Topic of the lesson
Friday, September 10th	Bloom's Taxonomy for the Digital Age and Hyperdocuments.

Note. Date and topic of the third class.

2.1.3.1 Bloom's Taxonomy for the Digital Age. Here students read an online article in order to write a summary. The article is called "*Taxonomía de Bloom para la Era Digital*", written by Churches (2009). Bloom's Revised Taxonomy is adapted to traditional classroom practices and restricted to the cognitive domain, but it does not address new objectives, processes and actions and is not adapted to new technologies (ICT). That is why it is necessary to digitize the new taxonomy. The present taxonomy for the digital era uses cognitive elements, methods and tools. It also uses technology to remember, understand, apply, analyze, evaluate and create.

Collaboration is essential in the 21st century. There are several technological resources that enable collaboration. For example, Wikis, classroom blogs, collaborative document tools, social networks, and learning management systems.

It is important to teach knowledge in context. If people deliver knowledge without context, student's retention of the information is very low. In the 21st century, there is a greater emphasis

on students being able to recall and understand knowledge in order to use and apply skills that lead them to analyze and evaluate processes and to elaborate, create and innovate. The stages are the following:

- **Remembering.** Although it is at the core, it is a fundamental and crucial part of learning. It is something that does not happen at a single level but accompanies all levels as one progresses. With the increase of information to remember, it is almost impossible for the individual to retain everything. That is why it is very important to make use of technology to help us remember and store that information. This is possible when we use bullet points, highlighting, social media, etc.
- **Comprehend.** Here, the student creates relationships and constructs meanings with the information he/she remembers and knows. He/she can explain, describe, summarize and paraphrase processes and concepts. Some examples of the use of technology at this level are performing advanced searches, journalism in the form of blogging, categorizing and tagging, commenting and annotating, and subscribing.
- **Apply.** It is about using knowledge in the development of models, presentations, interviews and simulations. For example, this can be done with the use of digital tools when operating software and computer applications, online games, uploading and sharing, hacking (applying a simple set of rules to achieve a goal or objective), and editing.
- **Analyze.** It is a mental process that allows differentiating, organizing and attributing to concepts. Some of the things that can be done with the use of technology are recombining, linking, reverse engineering, and cracking.
- **Evaluate.** It is to make judgments based on criteria and standards. For example, blog/vlog commenting and reflecting, publishing, moderating, collaborating and networking, testing, and validating.

- **Create.** It refers to generating, planning, producing, and forming in a coherent and functional way. For example, program, film, animate, broadcast video, broadcast audio, mix, remix, direct, produce, and publish.

2.1.3.2 Hyperdocuments. There are some stages that should be followed in order during class to create hyper documents. These types of documents help students engage and explore what is being taught. Also, it makes students more autonomous since they have this material to explore it alone. In class, each stage was defined as following:

Figure 7

Hyperdocument stages

Hyperdocuments	
Engage	In this step, there must be an activity that calls the student's attention. For example a video, image, quote, etc.
Explore	Here, students start exploring and knowing the topic through the use of videos, infographics, images, readings, etc.
Explain	The hyperdocument contains the explanation of the topic in this section. Here students will find the objective of the class. This is the part where the topic is taught.
Apply	The student's knowledge should be applied by using different strategies in order to create, collaborate or connect with the class.
Share	Students must share an outcome proposed in the last stage in order to give feedback and show it to a real audience.
Reflect	One of the last steps include reflection on the process and work students had during the use of the hyperdocuments. There, they can review knowledge and give ideas to set new goals or improve it.
Extend	During this stage, the teacher can add more material for the students to extend their knowledge in this topic or related to it.

Note. This table shows the order of the stages in which the hyperdocument should be planned.

2.1.4 Technology advantages

Table 6

Fourth class

Date	Topic of the lesson
Saturday, September 11th	The advantages of technology

Note. Date and topic of the fourth lesson.

Technology helps people develop 21st century skills. The following are characteristics of how technology can be useful for teaching and learning. These are ideas proposed in class with the professor and classmates:

Figure 8

Advantages of technology

Advantages of technology	
Instruction and modeling	In this stage some activities are present such as transferring info and explaining concepts.
Discussion	The activities present are to engage through conversations and to share ideas.
Collaborative tasks	In this stage some activities are present such as transferring info and explaining concepts.
Assessment	The important activities in this characteristic are assessing students, giving instructions, scaffolding and reteaching.
Practice and review	The activities present here are to connect online to practice, review activities, reinforce understanding of concepts and refine skills.

Note. This table shows the different advantages proposed by the professor and classmates in class.

2.1.5 21st Century Skills

Table 7

Fifth class

Date	Topic of the lesson
Friday, September 17th	21st Century Skills

Note. Date and topic of the fifth class.

In class, it was concluded that these skills provide citizens with a sense of competence and prepare them for what the 21st century demands in a professional/labor environment. Developing these skills is a pedagogical and technological challenge for educators. While students learn the basic subjects, they also learn about digital, environmental, business, economics, health and global awareness. These skills can be taught in any pedagogical model. This helps students gain abilities and attitudes when faced with problem solving.

2.1.6 Flipped Classroom

Table 8

Sixth class

Date	Topic of the lesson
Saturday, September 18th	Flipped Classroom

Note. Date and topic of the sixth class.

In class, the professor explained that Flipped Classroom is presented when in a lesson, the students get to know the knowledge and class content at home before the class. However, Flipped

Classroom is not to provide students with content like just online videos, to replace teachers with videos, to study just online, to work without structure or to spend the whole class online.

According to the professor's comments, the advantages implementing this methodology are that it promotes autonomy, keeps students engaged and focused, and helps teachers to develop this topic more in class with discussion or debates (Ramírez, K., personal communication, September 18, 2021).

2.1.7 Invisible Learning and SOFLA

Table 9

Seventh class

Date	Topic of the lesson
Friday, September 24th	Invisible Learning and SOFLA

Note. Date and topic of the seventh class.

2.1.7.1 Invisible Learning. The following summary was taken from the book chapters “*Aprendizaje Invisible. Hacia una Nueva Ecología de la Educación*” written by Cobo and Moravec (2011).

- ***From society 1.0 to society 3.0.*** Here, the issues surrounding invisible learning are exposed. This is discussed in the framework called "society 1.0 - society 3.0", which illustrates the transformation from industrial societies to knowledge societies, and now to innovation-centered societies. The challenge ahead is to create a 3.0 education that meets the needs of a post-1.0 society.
- ***Invisible use of technologies and competencies for globalization.*** The book reviews studies developed by international research centers, including the World Bank and the OECD. The invisibilization of technologies and the development of digital competencies from the perspective

of educational policies is reported. This is linked to a broader framework of invisible learning that includes the development of personal knowledge and the creation of capacities to act and to apply knowledge (innovation) in a deliberate way.

- ***Cases and experiences for learning.*** Here ideas about edupunk, lifelong learning, incidental learning and ubiquitous learning are explored, all of them as invitations, from very different perspectives, to explore more flexible, innovative and creative learning patterns. This is based on the understanding that people can learn at any time and in any place, generating a continuum of experiences and interactions.
- ***Tools and methodologies to study the future of education.*** The need to stay "ahead of the curve" requires new approaches that allow people to think about the future and act in that direction. Grounded in the idea of "do it yourself" (DIY), inputs, resources and examples are offered to explore a transforming present.
- ***Vox populi and in-conclusions.*** This is followed by an inventory of ideas gathered from interviews with experts. In addition, a synthesis of international experiences in full harmony with the postulates of invisible learning is included.

2.1.7.2 SOFLA (Synchronous Online Flipped Learning Approach). In class, the professor delivered a presentation about this topic. She explained that there are four spaces where the student has a voice:

Figure 9*SOFLA Fertile Spaces*

Note. This figure is a screenshot from the class about the fertile spaces in Spanish.

- **Equity.** The students have access to the contents regardless of their conditions.
- **Involvement.** The students are involved in the development of the activities.
- **Enrichment.** The students are different beings who can enrich the classes with their opinions.
- **Exploration.** The students are empowered in their own learning process (autonomy).

The Stages to carry out SOFLA are pre-work, sign in activity, whole group application, breakouts, share-out, preview and discovery, assignment instructions, and reflection (Ramírez, K., personal communication, September 24, 2021).

2.1.8 Reflection

Table 10

Eight class

Date	Topic of the lesson
Friday, September 25th	Reflecting in the master's class

Note. Date and topic of the eight class.

In this session, there was space to reflect in class about the activities, knowledge received and feelings at the end of the course. Also, each student presented a portfolio that can work as a bank of resources for the future and when it is necessary to implement technology in the teaching practices. This portfolio could be a document, presentation, web page, etc. There they had to include all the things seen, discussed and created during the course.

2.2 Second subject: Language Learning Theories

In this section, reflections of the sessions will be presented grouped in two days. It means that the classes on Friday and Saturday are one session since in class that was the way in which the topics were carried out. Here, it will be introduced not only personal reflections but also what was learnt there. To start writing about each of the four sessions (each session had two classes here with a total of eight classes at the end). The following chart will present two aspects: date and topic of the lesson. Then a description below it.

2.2.1 Session 1

Table 11

First and secondclass

Date	Topic of the lesson
Friday, October 1st and Saturday, October 2nd.	Glocal Languages, Coloniality and Globalization from Below. Translating Culture in Global Times.

Note. Date and topic of the lesson of the first and second class.

During all the master's classes, students reflected on readings and topics. Some of the conclusions that emerged in these two days was that many times when it is said that someone is learning English, people ask if they are learning American or British English. It is not a reason for people to get angry at this type of questions because most people have been taught that those are the only two correct Englishes. However, there are people who get very angry at this question. It is important to reflect and try not to let this show in the English classes with the students. It is necessary to at least try to teach students that there is no one correct accent and no one culture that they should follow or study. If they only look at the United States or England, it is leaving aside those other countries whose history tells of impositions of this language and imperialism from elsewhere.

It is important to know that teaching or learning English is not something bad. The idea is not to reject this language learning. However, as teachers, it is mandatory to be conscious of how English is being introduced to students.

2.2.2 Session 2

Table 12

Third and fourth class

Date	Topic of the lesson
Friday, October 8th and	Development of language.
Saturday, October 9th.	Motivation.

Note. Date and topic of the third and fourth class.

Decolonization. It matches perfectly with what it has been discussed before in the previous sessions. The class was not just talking about the theory or what it is and objectives but also about listening to some examples, activities or ways to apply it in the educational setting. Many times people know very good theories that can “revolutionize the world” but in the end, there are no insights about how to take them in real classrooms and that is why they become a utopia. In class, the professor defined decolonization aims to analyze, recognize/identify, problematize, and criticize ideologies left by past colonization processes. Some things that can be done to put this into practice is discussing hidden stories, using literature, films, etc. promoting critical thinking, practical activities, decentering the colonial episteme, and there are more things to do (Quintero, L., personal communication, October 9, 2021).

Furthermore, talking about decolonization in ELT, it is necessary to think and talk about how English is perceived in education. It is not that English should be rejected and not taught and learned. However, it is not okay when English is imposed in many scenarios like higher education where it is a requirement to graduate. Also, if someone does not see English as something necessary or important, it should not be mandatory. Even though, if teachers want to make a

difference, they must think in the methodologies, ideologies and materials they are implementing to not to prioritize knowledge and thoughts from northern countries.

In conclusion, it is important to reflect properly on this because it is easy to talk about these topics but quite difficult to put them into practice, more so in a country where thinking critically is not easy. Again, it is not about being against English, if someone loves languages, they are free to choose which languages they want to learn depending on their objectives, perspectives, desires and ways of thinking. The topics discussed so far with Professor Luz Mary are quite interesting and it is a great opportunity to be in this course because it promotes critical thinking and questions oneself about pedagogical practices.

2.2.3 Session 3

Table 13

Fifth and sixth class

Date	Topic of the lesson
Friday, October 15th and Saturday, October 16th.	The Sociocultural Approach to Second Language Acquisition.

Note. Date and topic of the fifth and sixth class.

During this class, students from the master's program learned about mediation and how people can acquire knowledge depending on the opportunities they have of mediated learning experiences. Another aspect to mention is the attitude of integrating and adapting to a new culture and community using a language. Students learned that motivation is related to the sociocultural approach. Also, that motivation has three dimensions called effort, enjoyment and investment.

With these dimensions, it is possible to know the motivational intensity or how much effort is put into something, the attitudes towards learning the L2 or how much enjoyment something produces and the desire to learn. Additionally, it was taught about intrinsic and extrinsic motivation and how they can influence the student's learning process. However, a new type of motivation called "integrative motivation" appeared in the reading. Basically, this type of motivation is related to how interested a person is regarding joining a community by using the target language. It also has three important dimensions 1) students' positive attitudes and beliefs towards the other community, 2) interest in foreign languages, and 3) reasons for learning the L2. All this reflection was taken after reading Ortega (2009).

2.2.4 Session 4

Table 14

Seventh and eight class

Date	Topic of the lesson
Friday, October 22nd and Saturday, October 23rd.	An Identity Approach to Second Language Acquisition.

Note. Date and topic of the seventh and eight class.

According to Ortega (2009), mediation is the type of help, strategy or tool used to construct the development of the physical, social and mental process. With good mediation, teachers can provide students with a comfortable environment and provide feedback. In that way, the student will become capable of doing the task with the guided experience. A type of mediation is self-

regulation. This self-regulation is the capacity students must make decisions for their own learning in an autonomous way.

The topic of identity was very interesting too. In class, the students and the professor talked about imagined communities which are those perceptions or views people have about the other. Also, the Identity Approach describes how the students think of themselves. Additionally, identity exists in language. This language identity tells that everyone is different and unique in the process of language learning.

3. Chapter 3: Assessment and conclusions from the experience

This last chapter will present not only the assessment and final conclusions of the experience in my degree work but also a personal extra work. This extra work is personal research on topics covered in the subjects of the master's degree. This research will seek the results of the Interaction and technology in education during the Covid-19 pandemic in Colombia.

3.1 Interaction and Technology in Education during the Covid-19 Pandemic in Colombia

Covid 19 has been a trigger for many global changes. Many things that people knew before no longer work the same way, such as learning and education. During the pandemic in Colombia, measures such as quarantine were taken. This made it impossible for face-to-face learning in classrooms, institutions, schools and universities. It was difficult for the educational institutions to continue with their standard procedures for imparting education and knowledge in the way they used to. One of the mechanisms for academic institutions to continue this work was to opt for online learning. Thus, the term “online learning” started to be used more and more. However, not all educators were prepared for this new learning environment (Baber, 2020, p. 286). Consequently, the advantages and challenges of online teaching with respect to interaction using technology became better known. In this literature review, it will be considered some research

towards online learning as something mandatory but necessary to continue with the learning process. Some advantages and challenges will be discussed, and what the perceptions have been for those who suddenly received this education, the students.

3.1.1 Colombian education law

In Colombia, education is a right and a public service. It means that the government must provide the opportunities for students to be able to receive schooling. According to *Ministerio de Educación Nacional* (2018), articles 67 and 68 of the *Constitución Política de 1991* says:

La educación es un derecho de la persona y un servicio público obligatorio que tiene una función social, cuya responsabilidad es compartida entre el Estado, la sociedad y la familia. La Constitución autoriza que este servicio sea prestado por particulares, creando y gestionando establecimientos educativos bajo las condiciones establecidas por la ley y garantizando el cumplimiento de los fines de la educación y la calidad en la prestación del servicio. [Education is a right of the individual and a mandatory public service that has a social function, whose responsibility is shared between the State, society and the family. The Constitution authorizes this service to be provided by private individuals, creating and managing educational establishments under the conditions established by law and guaranteeing compliance with the purposes of education and quality in the provision of the service] (para. 1).

The government must guarantee this service to every Colombian student who needs it. In other words, during the pandemic, it can be inferred that it was the state's obligation to provide the resources to make online learning possible in Colombia.

3.1.2 Online learning

Online learning was first introduced in 1995 (Singh and Thurman, 2019, p. 289). However, since then many definitions have been given to this term. Online learning is the umbrella term but for the purpose of this literature review, it will be defined it as “learning experience through the internet/online computers in a synchronous classroom where students interact with instructors and other students and are not dependent on their physical location for participating in this online learning experience” (Singh and Thurman, 2019, p. 302). This aspect of interaction mentioned before will be analyzed according to some studies carried out so far in Colombia.

3.1.3 Advantages of online learning

To meet students and teachers' perceptions, this literature review will first explain the advantages and challenges in this online learning environment in general. According to Farrah and Al-Bakry (2020, p. 71-73) some of the advantages and challenges are that E-learning improves student’s technological skills, recording of lectures helps to rewatch lectures missed, E-learning encourages collaborative activities and group work through social media applications, and participation in online courses increases confidence.

Additionally, Mukhtar et. al. (2020) state that other advantages are the reduced use of transportation means which leads to cost reduction and better use of time. Apart from that, it helps with some administrative activities such as recording of lectures and calling attendance.

3.1.4 Challenges of online learning

Possible challenges are that E-learning increases the size of assignments and the studying hours, the lack or slow internet connection, lack of concentration since students get distracted easily, lack of teacher’s skills in E-learning, lack of real interaction, lack of E-learning skills of

some students, recorded lessons encourage students to not attend classes, and noisy surrounding environment (Farrah and Al-Bakry, 2020).

Furthermore, something that people cannot take advantage of in online learning is the practical hours. Students are unable to attend a laboratory or place to do practical work since online learning during Covid-19 pandemic prevents it. Another interesting aspect mentioned by these authors is that students could access and search for online information when they were assessed in an exam, for example.

3.1.5 Colombian Education during Covid-19 pandemic

Nonetheless, it was not possible for all Colombian students to reach the online learning standards mentioned before such as the internet and devices as computers. It means that Colombia was not ready for such a sudden change in education. Without technological tools and lack of internet, it is not possible to talk about an interaction in online learning. As written by Valencia (2020, para. 5) in an article called “*Covid-19, TIC y Educación: ¿Por qué no estábamos preparados?*”, Colombia was and is not prepared to make this transition. He also proposes two possible problems for this: 1) the low level of access to basic technological elements and connectivity and 2) the lack of skills of teachers and schools regarding the use of technology in education. Furthermore, it is possible to add one more apart from the ones proposed by Valencia and is corruption. In an article issued by Semana (2021), they reported the misuse and exploitation of public resources. In 2022, there were irregularities in the implementation of these resources that would help improve the situation during the sanitary emergency. The article mentions a contract in 2020 for more than one billion pesos. This project would bring connectivity to many places that needed it in Colombia. However, due to improper processes, it was not fully implemented.

3.1.6 Research about Colombian Education during Covid-19 pandemic

In Colombia, there has been some research about this topic. For example, Sánchez (2020, p. 16) wrote an essay about “*La Educación Digital en Colombia en Tiempos de Covid 19 y su Impacto en las Organizaciones Educativas*” and Fuentes and Silva (2020) carried out a mixed-method study called “Online Teaching during Covid-19: How to Maintain Students Motivated in an EFL Class”.

3.1.6.1 First study. In Sánchez’ report, he mentioned that things that should improve in Colombia and that were a challenge during the pandemic were good Internet connection, impact of digital education applied in emerging technologies, pedagogical strategies, etc.

Considering some of the advantages and disadvantages of online learning mentioned before, the perceptions of some students during the Corona pandemic will be presented. Osorio et al., (2020, p. 5-8) carried out a mixed approach study in Cali, Valle del Cauca with 108 students from the *Pontificia Universidad Javeriana*. The students answered a questionnaire about their perceptions related to feelings and learning/teaching process from the Covid-19 pandemic.

The results showed that 95% of the students had a computer but that 21% of them had to share it with another member at home. Only 9.8% of them mentioned having an excellent internet connection but the rest of students said they had a good (56.1%), regular (31.7%) and deficient internet (2.4%). Regarding teaching strategies, 95% of the students perceived that they could reach the learning objectives.

The last information showed that, although most students had access to a technological device, it did not belong to them, so they could not use it all the time. However, although most students had a technological device, only less than 10% of students had an excellent connection to

access the platforms without internet problems. Finally, for this group of students, the results were positive since 95% of the students perceived that they achieved their objectives.

3.1.6.2 Second study. Another study was the one carried out by Fuentes and Silva (2020) and it aims to know how this new modality during quarantine has impacted students in some places of Santander, Colombia. The authors opted for a mixed-method research approach. It means that they combined qualitative and quantitative data. They implemented a questionnaire in Google forms to know the perceptions of students and teachers about topics related to advantages and disadvantages and teachers' and students' roles.

The results of this study showed important aspects related to interaction and access to technology from the participants. Although the participants agreed on the facility for them to get unlimited access to information online, some other aspects did not seem to work under this modality, online learning. For example, the negative feeling of confinement during quarantine, the inconvenience of connectivity and Internet access and another factor that was mentioned in the disadvantages section above, the distractions that each student surrounds himself with at home or place of study. All these factors make impossible a good interaction, participation and engagement by the student.

3.1.7 Conclusions

To sum up, in Colombia there were no guarantees to ensure that 100% of the students could receive classes during the pandemic. Although this literature review is limited by the few existing studies available in Colombia and because of the length required for this graduation project, it can be said that the results are not favorable. Interaction in online learning during this educational environment should be linked to the opportunities for students to enter online classes (technological tools and internet access). However, this was not 100% assured since not all

Colombians had access to electronic devices and good internet connection. Without these fundamental elements to receive online classes, it is not possible to talk about interaction in online learning. Also, even if the student was in class under this new modality, some challenges they could face were lack of concentration, external noises, lack of real interaction, etc., as mentioned by Farrah and Al-Bakry (2020, p. 71-73). Finally, it is important to mention that this does not mean that an online teaching is a failure and a difficulty to succeed in teaching/learning. All this happened because it was an unexpected change in which teachers, students, parents and administrators were not prepared for this chaotic situation as the quarantine. Moreover, not everything has been negative since in Sanchez' study, according to the students' perceptions, they were able to achieve the objectives.

3.2 Experience assessment and final conclusions

In 2021, the modality of *Cursos de Maestría* was chosen as the graduation project. It was a pleasure to be able to assist in those classes and to be surrounded by nice people who are currently in the master's program at UIS. Learning experiences were fulfilled with the professors and from classmates who contributed with their knowledge in the education field since they are already working as teachers.

During the first subject "Education and ICT", it was a very rewarding experience. Also, the professor Kaithie del Mar Ramírez Correa always tried to make the classes interactive. For example, when she explained a topic, she constantly asked about examples and encouraged reflection and discussion about them. All this information learned in the course helped students to understand that it is possible to go beyond with the material provided to the students. Sometimes, teachers only substitute material and don't take advantage of the ICT to make it more significant.

In “Language Learning Theories” it was discovered things that go around English like perceptions people have and how to analyze individual differences in language learning. The methodology used by the professor Luz Mary Quintero was accurate to carry out the themes worked in class. There was a lot of discussion and this allowed students in the master to provide their own ideas and comments.

In conclusion, the experience was very positive. Many new things were taught. For example, the ISTE standards, the SAMR and TRACK models, the hyperdocuments and choice boards which are learning strategies that are very good to start implementing in the teaching practice for sure. What was most important was the amount of reflection obtained from class. Only positive things can be taken and good material to implement both in a face-to-face and virtual classroom. Everything has been very interesting.

Apart from the knowledge learned, it was also possible to question certain things about education, teaching practices and how little by little education has evolved in Colombia. The intention at the end is that teachers are not spectators of evolution and progress, but agents of change. Finally, it is possible to say that the expected personal objectives were achieved. One of them was to expand knowledge in the area of language, teaching, and learning and it was fulfilled since during classes we learned about different methodologies or strategies that can be used in class. The other objective was to deepen in strategies that contribute to pedagogical and didactic interventions to make them more meaningful and to have the tools both in a face-to-face and virtual environment. This last objective was accomplished in both subjects since in Interaction and TCI, the professor focused on new ways to teach with technology and how to make them more meaningful in the classroom and in Language Learning Theories, the professor focused on topics

related to make classes meaningful without just teaching what a curriculum says but going beyond with critical thinking.

Of course, the extra research on interaction and technology during Covid 19 in Colombia contributed to my personal knowledge and a lot of reflection about Colombian's situation. Many times, people don't know how other people in their own country are facing the same things they are facing and even with less opportunities. Also, knowing that there was corruption during the process of investing in technology for these areas of Colombia was very frustrating.

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