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Bogotá D.C.

2019

Reg. SNIES: 106242

Vigilada MinEducación

Working Paper – Resultado de Investigación

Grupo de Investigación Innovation on Bilingual Education - INNOBED Categoría B Colciencias

Dirección de Investigaciones

Calle 19 No. 2ª-49, Piso 3

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DOI: https://doi.org/10.26817/paper.07

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ABSTRACT

This paper reports on a preliminary study carried out in a private University and a private college in Bogotá within the language and bilingual education programs. The target population is twenty-five pre-service teachers majoring in languages, who are taking Language Didactics classes in fourth and seventh semesters. The study sought to learn about pre-service teachers' perceptions regarding self-regulation in preparation for a flipped learning implementation. The data were collected through a survey, interviews, a focus group and researchers' field notes. Data analysis procedures took into account thematic analysis. In this first stage of the project, results elucidated pre-service teachers' ideas regarding self-regulated learning and the roles teacher educators play in the construction of their identity as self-regulated beings and future educators. Based on these initial results, the need for training on self-regulatory behaviors for all learners arose. Findings also depicted the necessity to conceive a change in the teacher educator's role into the *Professional Educato*rs described as observers of students' performance, providers of feedback, assessors of students' work, and reflective professors within the Flipped environment. Thus, the above-mentioned necessities clarified the panorama for the researchers as to the necessary conditions and accommodations for flipped learning to be effectively implemented in the two teacher education programs under study.

***Key words*:** Self-Regulated Learning; Pre-service Teachers; Teacher Education; Flipped Learning.

INTRODUCTION

As teacher educators, the authors have concluded through informal classroom observations, discussions with students, and class delivery that pre-service teachers see their professors as models to follow in their future teaching practice. Students highlight innovations, and voice their perceptions towards class activities, ideas and practices to be included in their own teaching repertoire. As suggested by Toeteson (as cited in Cruess, Cruess & Steinert, 2008), "we must acknowledge . . . that the most important, indeed the only, thing we have to offer our students is ourselves. Everything else they can read in a book" (p. 690). Consequently, the teacher educator becomes a role model for students providing best practices through modeling behaviors in their own classrooms.

Unfortunately, traditional teaching in which the professor is at the center of the learning process is still common in Colombian teacher education programs as evidenced in most of the classes in the institutions under study, leading to the perpetuation of transmissive teaching practices precisely in a time in history when education needs a transformation. The different frameworks for educating in the 21st century invite educators to transform their practice and prepare students beyond knowledge acquisition since the world we currently live in demands other skills (Lai & Viering, 2012). As it can be evidenced in Figure 1 below, the three different frameworks referenced (P21, National Research Council's framework and ATC 21) agree on skills needed by people inserting in the workforce in the 21st century, and none of them are related to knowledge accumulation or the ability to regurgitate facts.

Research-based construct	P21 Framework terminology	NRC Framework terminology	ATC 21 Framework terminology
Critical thinking	Learning and innovation – critical thinking	Cognitive – critical thinking	Ways of thinking – critical thinking, problem-solving, and decision-making
Collaboration	Learning and innovation – communication and collaboration	Interpersonal – complex communication, social skills, teamwork	Ways of working – communication and collaboration
Creativity	Learning and innovation – creativity and innovation	Cognitive – non-routine problem solving	Ways of thinking – creativity and innovation
Motivation	Life and career skills – initiative, flexibility	Intrapersonal – self-development, adaptability	Living in the world – adaptability, flexibility, self-direction
Metacognition	Life career skills – self-direction, productivity	Intrapersonal – self-management, self-regulation	Ways of thinking – metacognition or learning to learn.

Figure 1. Mapping of the 21st century skills frameworks (Lai & Viering, 2012: 6)

Most of the skills refer to interpersonal and intrapersonal attributes and skills that allow the person to be a contributing member of a team. Thus, there is a loud call for teachers to radically change to be able to help learners develop the necessary skills and attributes for a 21st century citizen and to heighten their potential within the classroom setting so that once they leave school, they can respond to the challenges presented in the real world.

During their quest for more innovative alternatives to traditional instruction, the teacher-researchers identified flipped learning (FL) as an appropriate approach to create fertile learning

spaces (H. W. Marshall, personal communication, October 16, 2015), where pre-service teachers could learn the content of their pedagogy classes, but also be exposed to instructional strategies based on active learning for their toolkit as future teachers. However, as a couple of the main factors for flipped learning to work are autonomy and motivation, the researchers' initial hunches about the limitations observed in their settings in regards to self-regulatory practices drove them to inquire about students' perceptions of their self-regulated learning (SRL) to determine the optimal departing point for the implementation of flipped learning. Thus, the researchers wrote a research proposal that involved three constructs, teacher education (since both contexts are teaching programs), self-regulation and flipped learning. The purpose of the full study (which lasted eighteen months) is to respond to the following research inquiry: *what are pre-service teachers' perceptions, beliefs and behaviors towards SRL based on the use of flipped learning in two language teacher education programs in Bogotá, Colombia*? However, the purpose of this initial stage of the project (reported in this paper) was to diagnose the initial perceptions and needs of students in terms of self-regulatory practices for flipped learning to work during subsequent stages of the project. Thus, the sub-question that guided this part of the study was *What are students' perceptions, beliefs and behaviors towards self-regulation in two teacher education programs in Bogota?*

The main constructs of this preliminary study are also t*eacher education, self-regulated learning* and *flipped learning.* The first one, *teacher education* analyzes the influence of the institution where pre-service teachers get educated since they will replicate teaching practices lived on their students, and they will teach very similarly to what they were taught (Krulatz & Neckoleus, 2017). The second one, *self-regulated learning,* aims to explain the behaviors that might ensure deeper learning for students when they are agents of their own process. As defined

by Zimmerman (1989), "self-regulated learning strategies are actions and processes directed at acquiring information or skill that involve agency, purpose, and instrumentality perceptions by learners" (p. 2). Finally, *flipped learning* supports this study as the approach that fosters active learning and students' engagement in transforming the traditional way to teach. Flipped learning can be defined as "an innovative educational model in which content that is traditionally presented in class is completed at home, and in class, students work on applying what they have learned at home to engage in interactive and collaborative activities" (Kostka and Marshall, 2018, p. 223).

LITERATURE REVIEW

This section reports on the literature pertaining to teacher education, self-regulated learning, and flipped learning.

Teacher Education

The two teacher education programs involved in this study are concerned with providing prospective teachers with the knowledge, attitudes, behaviors, and skills they require to perform their tasks effectively in their academic communities. Although teacher education programs should be arranged as a continuous process, according to Taylor (2016), teacher education may be divided into two stages: pre-service and in-service. The former involves the education that comes before teachers enter the job market; the latter is the education that teachers are given after the beginning of their career.

Nevertheless, it is considerable to highlight the importance of constant training, in other words, professional development. In that respect, Richardson and Díaz Maggioli (2018), ascertain that teacher learning does not conclude when amateur teachers finish their initial teacher training. This assumption means that professional development should be carried out as a

regular basis by teachers. The latter claim is also connected to what González (2003) establishes, saying that EFL teachers ought to keep on expanding their professional development. Thus, this process is always dynamic. That is why, teacher education programs must be up-to-date and aware of the latest developments and trends. Hence, it is important to instill in future teachers the need of evolving as a lifelong learning activity. As Kumaravadivelu (2012) illustrates, even more, the rapid increase and development of technology as well as the dissemination of research findings on our globalized society have renewed the need for higher quality teacher education programs.

Furthermore, the main principles that characterize effective programs have been provided by diverse research studies in teacher education as well as organized reviews of professional development (Richardson & Díaz Maggioli, 2018. pp. 7-8). These principles are:

Impactful: Teacher education programs have a great impact when changes carried out in teaching result in enhanced students' learning. In other words, effective changes in teachers' performance result in improved learning outcomes for their students. In fact, teacher education programs have a great influence when they deal with the several needs of teachers and learners.

Needs-based: Teacher education programs should respond to the different necessities that teachers and learners have every day. Actually, they must take into consideration the socio-political, educational, and cultural contexts where teaching and learning take place (González, 2007); the institutional culture and its requirements; and the real working circumstances of teachers and their learners' needs. Consequently, teacher education programs ought to be pertinent in relation to the context and the needs where teaching and learning happen. In other

words, they need to be suitable for the setting, learners, teachers, managers, and the time involved in the teaching and learning processes (Kumaravadivelu, 2012).

Sustained: Teacher education needs to be prolonged. Firstly, because it is necessary to create the conditions for intense and enduring changes in teacher knowledge and performance. Secondly, because teachers need significant time to gain information about strategies and apply them effectively in their classes. However, for an education program to be effective, it needs to consider, not only the duration, but also the essence of the tasks and the availability of support during the extent of the program.

Peer-collaborative: Support and feedback from co-workers and authorities in the field is pivotal for teacher education programs to succeed. In fact, it has been evidenced that this collaboration has proved to be effective in teacher education programs since it fosters the co-construction of contextual knowledge (Musanti & Pence, 2010). Therefore, it is useful for individual teachers, particular groups of teachers, and the education centers.

In-practice: This principle concerns a classroom-based focus implying that teachers learn by doing (Norton, 2005). That is to say, teachers face real problems or needs and figure out a plan to solve them. Indeed, teachers tend to be more successful when they experiment on new practices and observe the impact they produce on their students (Farrell, 2003).

Reflective: Teacher education programs need to include a reflexive component which means providing teachers with opportunities to reflect critically on their practice in order to refine their performance (Bailey, 2012). It may be done by means of inquiry cycles of investigation which may transform teachers' pedagogical beliefs, enrich their knowledge, and change their development (Farrell, 2003; Edge, 2011; Liu & Zhang, 2014).

Evaluated: One of the main goals of teacher educator programs is to support teachers to make them realize the impact that their performance has on their students' learning. In other words, it means understanding learning from our students' point of view. Thus, it implies that teachers need to evaluate the quality and the impact of their performance to become active explorers of the result of their teaching (Ross & Bruce, 2005).

In addition to the principles mentioned above, it is necessary to take into consideration that students, educators, learning, learning resources, and learning contexts have changed exponentially. Based on the latter, Stevens (2011) instances that teacher educators need to be updated with the latest resources and trends that society is using nowadays. Thus, if educators keep updated, this action will most likely be replicated by pre-service teachers with their future pupils, and in this way, education can keep evolving.

It is a well-known fact that the current world is within a constant change. One such example is that different aspects of our current society, like politics, economy, environment, technological advances, and social issues impact the way that both teaching and learning occur (Mejía, 2012). This can be elucidated as an advantage for teaching because it means teachers cannot keep standstill, on the contrary, there is a colossal responsibility to awake the innovative spirit that is inherent in them. The aforementioned realities need teachers to be trained on skills to transform learning positively in their classes (Hernández, Morales & Shroyer, 2013). Hence, due to the current dynamic world, the teaching profession cannot be neglected, as it is the basis for a better society where progress and learning are essential.

Besides, the pervasiveness of technology is embracing education and teachers ought to be empowered to teach contextualized and meaningful classes according to what the world offers to and demands from students today. Hence, as Marshall and Rodríguez-Buitrago (2017) suggest:

"teacher educators must not only keep updated on the latest developments in instructional technology but should also model such developments by utilizing them wherever appropriate" (para. 2). Furthermore, modeling and experiential learning are important strategies for teacher education programs, hoping pre-service teachers replicate the instructional strategies used on them with their own students as Carr et al.'s research (2014) showed.

Experiential teacher training

Teacher education programs are plagued with experts preaching from the stage, and students expected to become autonomous and think critically about their learning process, but at the same time expected to listen to the expert teacher who holds the knowledge (Bergmann & St.Clair Smith, 2017). As agents involved in teacher education, it is important to ponder over the significance of using class time to construct meaning as opposed to just transmit information. Likewise, cognitively dissonant practices such as asking students to become autonomous telling them exactly what to do, or demanding them to be active participants by delivering every class as a lecture compromises the effectiveness of teacher education programs (Struyven et al., 2010; Carr et al., 2014). In other words, professors in teacher education programs have a great responsibility regarding teaching quality. On the one hand, because we are laying the foundations of our future language teachers and on the other hand, because we need to prepare the way for active learning.

In the same vein, experiential learning should be a key aspect to be considered in teacher education programs since it consists of how we learn best through experience and reflection. According to Kolb (2014), knowledge is the resulting mixture of *grasping* and *transforming* experience. The former refers to acquiring information, and the latter, to how people understand and act towards that information. Hence, experiential learning takes into consideration two ways

of grasping experience: Concrete Experience (CE) and Abstract Contextualization (AC). Also, there are two interrelated modes of transforming experience: Reflective Observation (RO) and Active Experimentation (AE). Learning *per se* takes place when all the four modes are interconnected, where the learner has contact with all the stages of the cycle, experiencing (CE), reflecting (RO), thinking (AC), and acting (AE). Immediate or concrete experiences are the basis for observations and reflections. These reflections result into implications and these, in turn, can serve as a guide to create new experiences (see Figure 2).

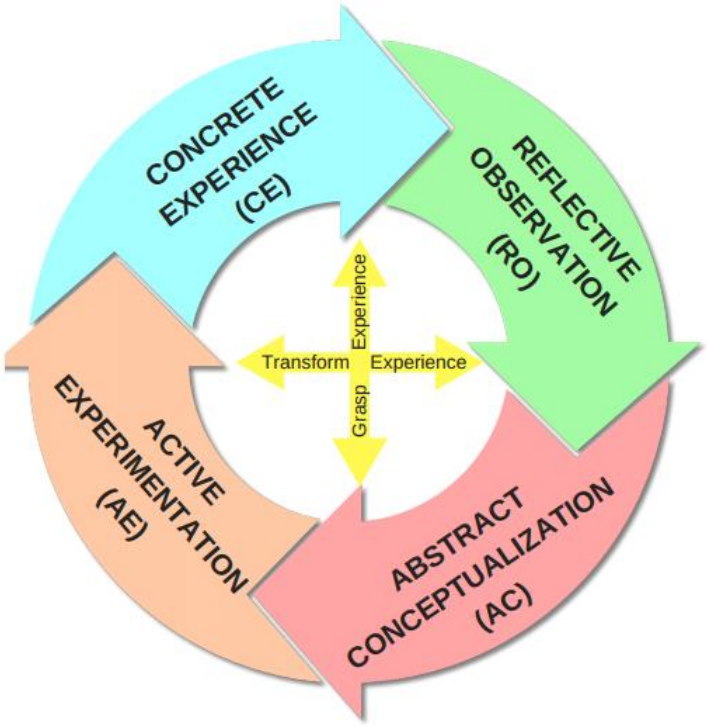

Figure 2. Kolb's experiential learning cycle.

According to Kolb (2014), in the first stage, learners are actively involved in an activity. In the second stage, learners consciously ponder on that experience. In the third stage, learners try to conceive a theory of what is perceived in the previous stage. Lastly, in the fourth stage, learners attempt to organize how to test a theory, model or plan for a prospective experience.

Likewise, Kolb (2014) recognized four learning styles that match the four stages of his experiential learning cycle and emphasize the conditions under which learners learn better. These styles include: assimilators, convergers, accommodators, and divergers. The first ones learn better by being exposed to sound logical theories; the second ones learn better by doing practical applications of concepts and theories; the third ones learn better by doing 'hands-on activities'; whereas the last ones learn better by observing and collecting an extensive variety of information. A teacher educator can then design class activities aiming at the different learning styles within class but can also foster self-regulated learning as a way to empower students to find learning opportunities suitable to their own style. For example, the theory proposed by La Ganza (2008) suggests:

> that it is not sufficient to define learner autonomy as the learner's taking control, or taking responsibility, or knowing how to exercise learning strategies, or being self-directed: the extent to which the learner can realize these achievements depends upon his or her relationship with the teacher (La Ganza, 2008, p. 65)

Thus, the role of the teacher-educator in the development of learners' autonomy is pivotal as an inspirer of these processes, but also as the person who holds students accountable for their work in developing their own self-regulatory practices. Thus, teacher educators have an important responsibility towards students' development as an integral and empowered teacher who can self-regulate, be critical thinkers, apply knowledge to the betterment of their teaching practices, take autonomous decisions towards their learning, but also towards the improvement of their students' learning as well. Teacher educators might not be fully aware, but their role in the development of the future teacher is of utmost importance.

Self-Regulated Learning

For flipped learning to be effective, students need to endorse self-regulatory practices and behaviors. However, self-regulated learning (SLR) is an elusive characteristic of Colombian learners as proposed by Cuesta, Anderson and McDougald, (2017). SRL is defined as the "process through which learners personally activate and sustain conditions, affects, and behaviors that are systematically oriented toward the attainment of learning goals" (Schunk & Zimmerman, 2008, p. VI, cited in Cuesta et al, 2017). Also, according to Zimmerman (2002), self-regulated learners have personal motivation and constancy. They focus on how they activate, alter, and sustain learning processes in social and solitary contexts. In other words, self-regulated learners' evidence self-efficacy and agency towards their own learning. These definitions will be clarified in turn.

Bandura defines self-efficacy,

> as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes. (Bandura, 1994, para. 1)

As it can be observed, one of the most striking features of self-efficacy, according to Bandura (1994), has to do with the person being aware of how to perform actions that may lead to being successful in certain aspects about learning. Because of that fact, teacher educators should help students fathom and apply these principles, that might be beneficial for their lifelong learning skills, and for them to break paradigms inherited from home in regard to their own

capabilities for learning. In that way it is possible to assure a bit more that future teachers will reproduce this behavior in their coming labor contexts.

On the other hand, Mercer (2012) suggests that learning agency is "a belief that [learners'] behavior can make a difference to their learning" (p. 41) and that the learner's initiative and active engagement with learning make language learning successful (van Lier, 2008, cited in Mercer, 2012). Based on that assumption, interpreting that learner agency has a pivotal role within learning, it is possible to say that educators should train their students on this matter in an explicit way, so that they can become more aware of what, how and why they are learning. Thus, self-efficacy and learner agency are crucial for the attainment of learning goals and the development of a growth mindset (Dweck, 2006).

Self-regulatory behaviors seem to be learned from different sources throughout students' academic lives. Weimer (2010) states that "large differences have been observed between the way novices and experts view their learning. Novices rely on feedback from others; they compare their performances with those of others. They fail to set goals or monitor their learning" (para. 3). Thus, understanding the initial state of students' self-regulation became pivotal for the researchers.

Pre-service teaching programs still need to foster more independent and empowered learners since, as mentioned by Cuesta et al., (2017), "in Colombia, the standard language-teaching curriculum has been static for over a decade" (p. 122). Identifying this issue in licensure curricula is the first step for teacher educators to create opportunities for learners in Colombian pre-service teaching programs to go beyond content acquisition and to foster independent learning. As suggested by Lai and Hwang (2016) "without proper guidance or assistance, most students might show low self-regulated behaviors and little responsibility in the learning

process" (p. 127). Thus, by enhancing self-regulatory behaviors in pre-service teachers, programs can have an effect on Colombian learners since teachers are likely to replicate this education model in their future classrooms.

For students to become self-regulated learners, they must be aware of and to be able to make decisions regarding their learning process. As suggested by Cuesta et al., (2017), "success in learning is often associated with the understanding and practice of strategies that help learners identify, take, and monitor the actions needed to perform given tasks" (p. 89). For that reason, the urgent and explicit inclusion of knowledge about how students learn in pre-service teaching programs could exponentially change the way education happens in Colombia (Fandiño, 2013). Admittedly, "more metacognitively aware students seem to act more strategically and perform better than students who are less metacognitively aware" (Bandura, 1977, as cited in Cuesta, Anderson & McDougald, 2017). Hence, inviting student-teachers to think about the way they think, giving them tools to identify their learning strengths and weaknesses, and providing them with the strategies to develop a growth mindset can have an important impact on learning and teaching in Colombian settings.

Cuesta et al., (2017) recommend the use of learner-centered perspectives and the humanization of the classroom to favor self-regulated learners and learning. So, we identify flipped learning and its principles as the approach to pave the way for SRL to happen naturally within the teacher education setting. Brinks-Lockwood (2018) makes the case for flipped learning as one way to humanize any classroom given the changes in class dynamics and the teachers' approachability. Thus, the connection between SRL and FL in the teacher education setting is seamless as "this learning mode [FL] emphasizes self-paced learning and supports students in solving problems through guidance" (Lai & Hwang, 2016, p. 127). Therefore, it is

hypothesized that flipping teacher education classrooms can prepare environments for self-regulatory behaviors to occur more naturally, and vice versa. A strong self-regulation in students strengthens flipped environments since their empowerment and motivation towards autonomous learning actions facilitate flipped instruction.

Flipped Learning

The Flipped Learning Network (2014) has defined FL as

> 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. (Flipped Learning Network, 2014, p. 1)

In this approach, there is a pedagogical shift in order to strengthen the group learning space so that students can engage in Bloom's high-order thinking tasks while in their Zone of Proximal Development (Vygotsky, 1896-1934; Brame, 2013). As a result, teachers craft the out-of-class learning experience so that students can access direct instruction in the independent learning space, and design meaningful learning experiences for the group learning space. Even though most people relate FL especially to videos, flipped learning is about the in-class activities, not the videos (Sohrabi & Iraj, 2016). However, as many teachers replace their direct instruction through self-made or curated videos, student training on how to maximize educational video viewing is still necessary. According to Bergmann and Sams (2012), teachers should "encourage [students] to turn off iPods, phones, and other distractions while they watch the video. We [teachers] then teach them that they now have the ability to 'pause' and 'rewind' their teacher" (p. 14). Students need to be aware of the importance of engaging with the content

while in the individual learning space as they would with the teacher in class by asking questions, taking notes, and reflecting on the material being accessed.

On the other hand, FL is concerned with the transformation of the group learning space once it has been liberated from the direct instruction given by the teacher. By moving direct instruction outside of the classroom in diverse forms, class time multiplies allowing the teacher to craft a myriad of learning experiences and integrate other strategies that would not work in a traditional classroom (Schlairet, Green, & Benton, 2014). In those lines, the pivotal question Bergmann and Sams (2014) invite teachers to ask to transform their classroom is "what's the best use of my face-to-face time?" (p. 162).

With this in mind, FL is also a very efficient approach for busy and overscheduled university students since the time they invest in class preparation is now compensated with the wealth and depth of practice accomplished in class. In this respect, Bergmann and Sams (2012) state that "students today are busy, busy, busy. Many are over-programmed, going from one event to the next. Our students appreciate the flexibility of the flipped classroom because the main content is delivered via videos, students can choose to work ahead" (p. 22). This decision-making opportunity places students at the center of their learning process and help them build autonomous behaviors and self-regulatory practices to cope with the demands of the flipped environment.

Also, it is important to highlight the value of meaningful activities for students. Marshall and Rodríguez-Buitrago, (2017) argue that "in ESOL classrooms where the instructor is implementing flipped learning, students dedicate in-class time to language use, application of material introduced in the course, and meaningful interaction with fellow students as the instructor observes, provides feedback, and conducts informal assessments" (para. 1). In teacher

education classrooms that are flipped, time can be spent on innovation, simulations, case studies, problem generation and problem solving, inquiry-based learning, etc. guaranteeing an enriched environment on strategies for student-teachers to select for their own teaching practice and also modeling the role of the teacher as a facilitator.

Additionally, for a flipped learning setting to work, there needs to be student buy-in (Brinks-Lockwood, 2014). Considering that most of the innovation that takes place in the classroom happens thanks to the decrease in time spent by the teacher explaining concepts at the front of the classroom, it is crucial that students engage actively with the materials prepared for the individual learning space. Having ways to hold students accountable for what they watch or read independently yields very important information about students' progress and facilitates planning. One way to do this is by using student data, as suggested by Kostka and Marshall (2018), "instructors can use real-time information to gather data about students' language learning and gain rich insight into how they are progressing" (p. 229). Integrating data into the face-to-face lesson reinforces the value of independent work and assures to students that engaging independently with the materials is worth their time.

Another important aspect to consider in a flipped environment is planning. A teacher implementing FL will have to change the way lessons are conceived to guarantee that there is a balance between the individual learning and the group learning space and that Bloom's taxonomy is considered to achieve high-order thinking skills at every step of the instructional ladder. In this regard, Talbert (2017) proposes a seven-step framework for designing flipped learning experiences. The steps are:

1. Come up with a brief but comprehensive list of learning objectives for your lesson.
2. Remix the learning objectives so that they appear in order of cognitive complexity.

3. Create a rough design of the group space activity you intend students to do.
4. Go back to the learning objectives list and split it into basic and advanced objectives.
5. Finish the design of the group space activity.
6. Design and construct the individual space activity.
7. Design and construct any post-group space activities you intend students to do. (pp. 103-104)

In addition, a grounding aspect to consider is the four pillars of FL since they form the basis for its sound pedagogical implementation. The pillars as explained by the FL network (2014) and Bauer (2017) are Flexible Environment, Learning Culture, Intentional Content and Professional Educator, and are explained as follows.

Flexible environment: Flipped Learning can be applied to varied learning modes and spaces. Normally, teachers take into consideration the new realities to innovate the way of teaching, hence, instructors adjust their classes to be more motivating for their students. For instance, teachers can implement strategies, such as group or individual work, and/or make use of technology to foster autonomous learning, etc. These environments are flexible, since learners might choose when and where to study, of course all of this depends on the learners and their ages.

Learning culture: Learning is part of the human nature; however, in education sometimes it is sadly seen that students' motivation is rooted on scores, not on learning. For that reason, FL aids teachers in shifting attention to what is more important, it is learner-centered, class time is to explore topics more deeply and to create a meaningful learning environment. In consequence, learners are highly involved in constructing knowledge since they participate and assess their learning in a personalized and significant way.

Intentional content: FL educators are all the time thinking about helping their students build up concepts in an understandable manner. As careful analysis of content and materials is crucial for the learning experience to be as fruitful as possible for learners, planning and an eye for detail play a pivotal role in FL (Le Cornu, 2018). Educators maximize face-to-face interaction to have classes that are student-centered, where active learning takes place.

Professional educator: As teachers and teacher educators, it is necessary to think about how to improve our teaching practice. For that reason, it is very important to make connections with other professionals that are innovating in their classrooms. In this way, constructive criticism and the teacher's reflective practice are helpful to foster a meaningful environment in class. Connectedness and improvement through reflective teaching become pivotal for the teacher in a flipped environment to become a professional educator and transform his or her practice. The literature reviewed for this paper revealed the need for more active teacher education programs in which attention is paid to students' development of self-regulatory practices and the adoption of active learning techniques as a way to model the profession for future educators. In that sense, our study contributes to the literature in teacher education programs, but also to the construction of further research about self-regulated learning in flipped learning environments.

RESEARCH METHODOLOGY

The research observed a multiple-case study methodology (Yin, 2002). Even though authors like Stake (1995), Merriam (1998), Yin (2002) and Hancock and Algozzine (2006) have all characterized and prescribed procedures for carrying out case study research, this research observed Merriam's (1998) more flexible definition of case study as "an intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a

process or a social unit" (p. xiii). In the case of this particular study, two different courses with similar characteristics at different institutions were examined in order to understand students' perceptions and beliefs regarding self-regulated learning in the hope of determining the pre-existing conditions for flipped learning to be implemented. According to Hancock and Algozzine (2006), "through case studies, researchers hope to gain in-depth understanding of situations and meaning for those involved" (p. 11), so in this study students, teachers and administrators supported the inquiry leading to an understanding of the phenomenon of self-regulated learning in two language teacher education programs in Bogota, Colombia.

Objectives

The broad goal of this stage of the investigation was to diagnose students' perceptions, beliefs and behaviors towards self-regulation in order to determine their level of readiness for the flipped learning approach to work in their context. Two key objectives led the study and served as cornerstones for this part of the project.

Objective 1. To determine pre-service teachers' perceptions, beliefs and behaviors towards self-regulation practices for their academic success in two language teacher education programs in Bogota.

Objective 2. To determine the necessary accommodations to make in the Pedagogy and Didactics courses for the implementation of flipped learning to be carried out successfully.

Context

The reported study took place in one private university and one college with one of their language and bilingual education programs located in Bogotá, Colombia. One of them is a teachers' college and has only one major, Bilingual Education. The uniqueness of the program causes small numbers of applicants per semester resulting in a total population of 159 students in

the whole institution. The other one is a large private university, which offers programs in different areas. The School of Education offers three majors in Physical Education, Children's Pedagogy, and Spanish and Foreign Languages. This study took place in the Spanish and Foreign Languages Program. Even though both institutions are private, they serve mostly students in low socio-economic strata.

The classes in which data were collected were Pedagogy and Second Language in one institution and English Didactics in the other. In terms of content, both classes are similar and intend to give pre-service teachers the conceptual basis for English Language Teaching. Topics in both classes include Language Learning Methods, Content-Based Instruction, Teaching the Language Skills and Systems, etc.

Participants

This project involved eight students from institution 1: two men and six women whose ages ranged between 19 and 28 years old; and seventeen students from institution 2 Students from this institution 1 were older than the ones from institution 2, twelve men and five women whose ages ranged between 18 and 24 years due to the fact that English Didactics is a subject offered in the seventh semester of their program, whereas in Institution 2 the Pedagogy and Second Language Class occurs in the fourth semester of the program. In both institutions, this class is taught in English. However, in Institution 1 a challenge is observed since the class does not have any course prerequisites. Thus, students sometimes do not have the proficiency level required to be able to take a subject which is totally taught in English.

Students who belong to this group have different personalities and learning preferences as well as different attitudes and motivation towards learning the language. Although this is a small group, its diversity makes it heterogeneous. One of the key elements that differentiates them is

the fact that most of the students in this group have part-time jobs and are parents. As a result, the amount of time they devote to studying is quite lower compared to the time a student whose parents pay for their studies and who do not have any other obligations at home may spend.

Out of the seventeen participants from institution 2, five students hold scholarships, which poses additional academic challenges for them in maintaining an expected GPA to keep their financial aid. Even though the other twelve students do not have any financial aid, the presence of the scholarship holders in class tends to push them to thrive academically.

They are self-motivated and inquisitive. They read course content thoroughly and come fully prepared for class. The group is heterogeneous in terms of personalities and learning styles. However, they maintain a positive attitude towards others and towards class activities. Most students in this course are dedicated to studying and those who have work responsibilities do it on the weekends or with some private lessons; only one student holds a part-time job. This class is the first approach students have to English Language Teaching methodology and it is also the first time they face the challenge of thinking as teachers when lesson planning and delivering micro-lessons.

Data Collection

The main sources of information were four different instruments: a student survey about their autonomous behaviors and other topics related to self-regulation and organization applied in both institutions (Appendix A), a teacher survey about their perceptions and practices in regards to autonomous learning applied in Institution 1 only (Appendix B), a focus group interview in each setting (Appendix C), an interview to stakeholders at institution 2 (Appendix D), an interview to the professor that is teaching "Theory and Practice of Autonomous Learning"

in institution 2 (Appendix E), and an interview to the professor that created this class at the same institution (Appendix F).

The first instrument was applied to the participants at the beginning of the study to determine their autonomous learning behaviors and use of tools and strategies at the outset of the project. The second instrument was applied to teachers in Institution 1 based on the results of the student survey and the apparently different set of beliefs evidenced in the curriculum of Institution 2. After reflection on the difference of the data found in the first two instruments and the level of depth of the data found with them, a new instrument was applied to corroborate information and expand on students' motivations for their self-regulated behaviors or the lack of them. Thus, a focus group was conducted in each one of the settings. The focus group in Institution 1 was conducted with 4 students and lasted seventy-five minutes, the one done in Institution 2 was conducted with fifteen students and lasted fifty-one minutes.

Based on the information obtained from the focus group applied in Institution 2, where pre-service teachers referred to the high impact that a class had on them, the researchers considered it was necessary to implement a couple of new instruments to inquire further in that subject. Hence, interviews to stakeholders, and professors who have taught 'Theory and Practice of Autonomous Learning' in institution 2 were carried out. It was pivotal to know why this class was created, the contents, and how feedback was given since student-teachers considered it decisive in their learning process.

Data Analysis

Three researchers and a research assistant participated in the analysis of the data. Firstly, the researchers and the research assistant tabulated the data using Google Sheets facilitating the

collaborative nature of the exercise. In order to validate the findings, then, what Denzin (1970) calls *multiple triangulation* was employed, specifically of the following types:

a. *Data triangulation*: multiple sources of information were consulted to confirm information and reconcile biases from different perspectives (teachers, students and stakeholders). The quantitative data originated in the survey was analyzed using Excel, and graphs were created to visually represent the numeric results. In regard to qualitative data, it was organized and described in detail to identify themes, topics that were significant and thought-provoking in the data.

b. *Methodological triangulation*: multiple sources of data were used to strengthen the validity of results; focus group and individual interviews and a questionnaire.

c. *Location triangulation*: the data were collected from two different institutions; a big private University in the West part of the city and a small teacher's college located in the downtown area of Bogota.

d. Investigator triangulation: there were three different researchers who read and analyzed the open-response items in the questionnaire and interviews separately first.

Multiple styles of triangulation allowed the researchers to be sure about the validity of the results. According to Cohen, Manion and Morrison, (2011) "triangulation techniques in the social sciences attempt to map out, or explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint" (p. 195). In addition, researchers went further and explained the identified themes as proposed in the thematic analysis (Braun &

Clarke, 2006) to establish connections with the data initially collected through the survey and to reveal patterns and categories that allowed the researchers to respond to the research question.

RESULTS AND DISCUSSION

The research question guiding the study was: *What are students' perceptions, beliefs and behaviors towards self-regulation in two teacher education programs in Bogota?*

The resulting main categories are: *Self-regulatory behaviors* and *Teacher-educator's role* (Figure 3) evidencing that for participants in the study self-regulatory behaviors such as time management and organization, planning and practicing, setting learning goals and the creation of action plans are the most important conditions for academic success to happen. On the other hand, and even though it was not part of the research question, we discovered that the role of the teacher educator proved to be determining in the development of self-regulation for learners. The categories along with their sub-categories will be presented and discussed below:

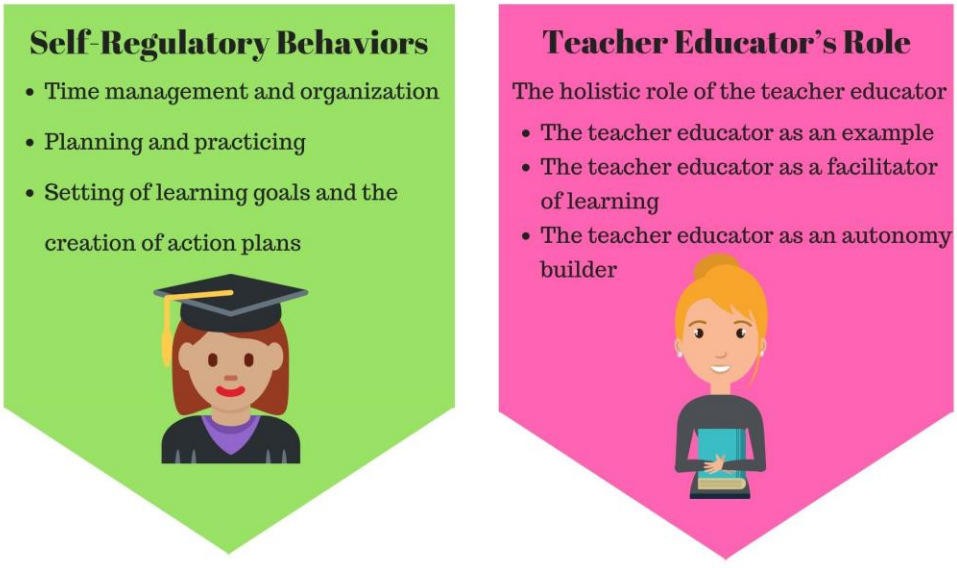

Figure 3. Data Analysis Categories (Own source)

The data were collected both in Spanish and in English, but for the purpose of readability and consistency, all the excerpts were translated into English by the researchers.

Self-regulatory behaviors

The first category responds to the research question stated for this study. *What are students' perceptions, beliefs and behaviors towards self-regulation in two teacher education programs in Bogota?* The results for this category evince the perceptions and behaviors of the students regarding their own self-regulatory practices and self-regulation in general.

The results from the current study reveal the differences and similarities in self-regulatory behaviors that students in two pre-service teaching programs evidenced by means of the data collected. It was interesting to notice that even though students in both institutions came from similar socio-economic and family backgrounds, their perception of self-regulation and the need for them to evidence self-regulatory behaviors for the sake of their academic success was somewhat different. This study evidenced similar results as the ones argued by Cuesta et al., (2017),

> *the respondents being positive about the presence of SRL in both their training and their own practices. However, they also seem to have a very narrow, even limited, conception of SRL, which suggests that the way that self- regulation is conceived and taught in teacher education requires review, consideration, and adjustment. (p. 101).*

The results of this category are presented in the light of Zimmerman's (2002) propositions asserting that "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). Thus, it is accurate to assert that throughout their University studies, students can strengthen their self-regulatory muscle becoming better learners.

As self-regulatory learning behaviors, such as setting goals, selecting strategies to achieve goals, monitoring progress and using time efficiently are not necessarily natural to all learners, and they are crucial for FL to work, the researchers decided to diagnose students' existing behaviors to determine future necessary curricular and instructional actions for both academic programs.

In this particular study, results showed that students in Institution 2, despite being in only fourth semester (out of ten), appeared to have more learner agency and thus seemed to be *skillful self-regulators* while students in Institution 1, seventh semester students (out of ten), could be considered *novice self-regulators* given their teacher-dependency and need for validation of the strategies they use and the quality of their work. The reasons for these different attitudes were varied and provided by the focus group interviews and the autonomous learning survey applied in both institutions. Students in Institution 1 attributed their dependence to bad habits acquired in high-school and perpetuated in the University by the protective attitude of some professors as it can be evidenced in the following excerpt:

> *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. Institution 1. Focus Group Interview. November 21st, 2017).*

On the other hand, participants from Institution 2 mentioned some factors that influenced their initial development of learner agency and self-regulation to training offered by their professors, and in particular, to a first-semester class called 'Theory and Practice of Autonomous Learning';

> *... maybe because we took those courses with Professor X about, eh, theory and practice of autonomous learning, was like excellent for us to understand that we have responsibilities and we have to look for other sources in order to get better results [sic]. (Student 5. Institution 2. Focus Group Interview. November 8th, 2017).*

The data analysis showed that the self-regulatory behaviors evidenced by the different participants in this study varied in nature and these differences formed the subcategories presented as follows. Some of these practices are related to time management and organization (i.e. keeping a calendar, organizing tasks to do systematically, sticking to a schedule, etc.); others refer to planning and practicing (i.e. preparing for lessons thoroughly, practicing the topics worked in class after and before the following lesson, and anticipating complex concepts and difficulties); others refer to the conscious setting of learning goals and the creation of action plans to follow through (i.e. being aware of learning difficulties, diagnosing one's own understanding of topics and acting upon the generated struggles, etc.). The different behaviors within the general category of self-regulation will be discussed in turn.

Time management and organization.

This sub-category refers to the process of organizing and planning, how students distribute time between academic and non-academic activities. Students at both institutions seemed to be aware of the importance of managing their time wisely in order to accommodate all their activities in their day. However, some of them seemed discontent by their inability to track time accurately for some tasks sometimes. Two students' responses from the focus group interviews at both institutions revealed their similarities.

> *"... it's also to organize our time, to have like better habits in order to search for information and all those things". (Student 8. Institution 1. Focus Group Interview. November 21st, 2017).*

> *"...when I'm doing the work, the homework the last night or something, I feel really guilty, I could do it like one week ago, so, it's how, since the beginning, we as students have that awareness of how to invest our time better" (Student 3. Institution 2. Focus Group Interview. November 8th, 2017).*

Students recognize the value of planning and having better studying habits to be more effective learners. Also, as Zimmerman (2002) mentioned, since self-regulation is a self-

directive process, the level of commitment students evidence varies according to their own life situation and studying style. For example, as explained by a student in Institution 1, students with families (spouses and children) demonstrate better practices in time management because their personal situation demands it. On the other hand, younger, less restrained students surrender to distractions and entertainment more easily since they possess more free time.

On the other hand, the use of different strategies to keep track of the activities students have to do at different times during the week is also important for them. However, strategies vary depending on each student and their preferred studying style. For example, students in Institution 2 mentioned the use of physical tools such as schedules, calendars, journals, and lists. Whereas, others prefer a more immediate and electronic approach like the in-built apps offered by their phone's operating system or downloadable apps from the store. Regardless of the tools, planning visually and systematically seemed important for students in institution 2.

For students at Institution 1, the choice of a practical tool to take notes of schedules and planned activities is not as important as having a clear idea of what they have to do. They make more emphasis on the action of planning time, than on the instrument used to do so, as evidenced by the comment below.

> *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. Institution 1. Focus Group Interview. November 21st, 2017).*

However, Stutts, Beverly, and Kelley (2013) mention that learners remember more and obtain better results in tests when they take notes. In fact, their memory is stimulated when they take notes and review them afterward. Thus, an opportunity for teaching students effective note-taking and the use of tools to self-organize arises.

Another interesting finding about students' time management and organization is their overall perception of productivity. Through observation, we have realized that most university students tend to waste their time in a myriad of leisure activities ranging from social media to online gaming. However, the participants seemed to be very focused on their academic life and to disregard free time as a loss in productivity. The comments below show the hyper valued concept of time and productivity some of the students evidenced:

> *"I'm very organized. I think that 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 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, when I have gaps in my schedule, I try to take advantage of them" (Student 3. Institution 1. Focus Group Interview. November 21st, 2017).*

> *"I use a Sharpie, and it is a black one (to scratch down the tasks). I feel so good when I finish something, so when I see all the paper is black, this is my like...the reward" (Student 6. Institution 2. Focus Group Interview. November 8th, 2017).*

However, when asked directly, in the autonomous learning survey, about their time management, the responses were more diverse. Thus, it can be concluded that students have a lower self-perception of their own time management habits when inquired for them in general, but their behaviors evidence the role of scheduling in the accomplishment of their academic and personal goals (as shown in the figure below).

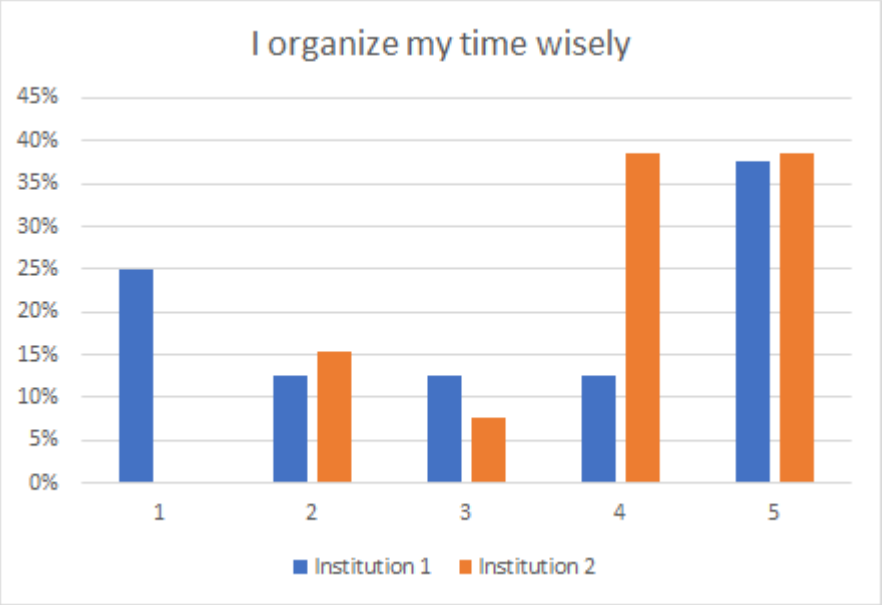

Figure 4. Time Organization (Autonomous Learning Survey. Section 3)

In any case, for the pre-service teachers participating in this study, time has a high value and organizing it in order to optimize their academic results is crucial for them as learners. In this respect, it is important to mention that the teacher educator needs to train students in an explicit manner about time management, so that the outcomes are positive. As it was mentioned by Lai and Hwang (2016), if students do not have proper guidance, they will show low self-regulated behaviors and limited responsibility towards their learning process. This precept goes hand in hand with what Cuesta et al., (2017) suggest regarding learning success, which is the result of understanding and practicing certain strategies after setting and monitoring actions to perform tasks, in this case, time management.

Planning and practicing.

This sub-category refers to the way students plan and deliver specific actions to improve their learning process. Planning for participant students is tightly connected to pragmatic

behaviors such as study routines and scheduling. However, the need for practice is perceived differently depending on the class they describe.

Students at both institutions mentioned their different practices regarding planning their time and fitting all their assignments in. Nevertheless, practices seem to differ from person to person. For most students, 'to stay organized' means to be able to cope with all the assignments required by teachers, so their concept of organizing is still rooted on compliance more than on agency since students are more interested in doing what the teacher says than on autonomously deciding on actions to improve their learning. As stated by Lindgren and McDaniel (2012):

> *The notion of agency as contributing to cognitive processes involved in learning comes primarily from the Piagetian notion of constructivism where knowledge is seen as 'constructed' through a process of taking actions in one's environment and making adjustments to existing knowledge structures based on the outcome of those actions. The implication is that the most transformative learning experiences will be those that are directed by the learner's own endeavors and curiosities (p. 346).*

It means that when students have the initiative to make decisions that will benefit their own learning process, it is when agency occurs. Fortunately, agency, as most cognitive and metacognitive processes, can be developed in different settings with the teachers' help. In other words, in this process teachers need to provide an environment where students make choices, feel relaxed, and face challenges in class, so that they can learn to monitor and evaluate their performance naturally.

On another topic, in the autonomous learning survey applied at the beginning of the study, participants were inquired about their behaviors regarding tasks and homework. We could evidence differences in students' actions in both institutions when asked about what they did with pending tasks and the value they gave to them regardless of their quantitative value. This

information was interesting since as proposed by Ramdass and Zimmerman (2011), "self-efficacious students believe that homework completion would lead to successful learning outcomes" (p. 198); thus, by inquiring about their beliefs regarding homework, we could foresee students' levels of self-efficacy and self-regulation. This newly acquired knowledge helped the researchers envision instructional design decisions to be made for future flipped lessons to include a self-regulation component so that all students alike (self-regulated and not) could benefit from homework in a balanced way.

About doing pending tasks without being asked to, the results at Institution 1 are partialized since half of the students do tasks even if the teacher does not ask for them, while the other half either does not do them or does not even care. On the other hand, at Institution 2, most students do the tasks even if the teachers do not ask. This attitude reveals the different value that students give to accountability and validation from the teacher and that students' choices regarding the tasks that deserve their attention vary from institution to institution. Figure 5, below, illustrates students' responses when asked about unassigned tasks.

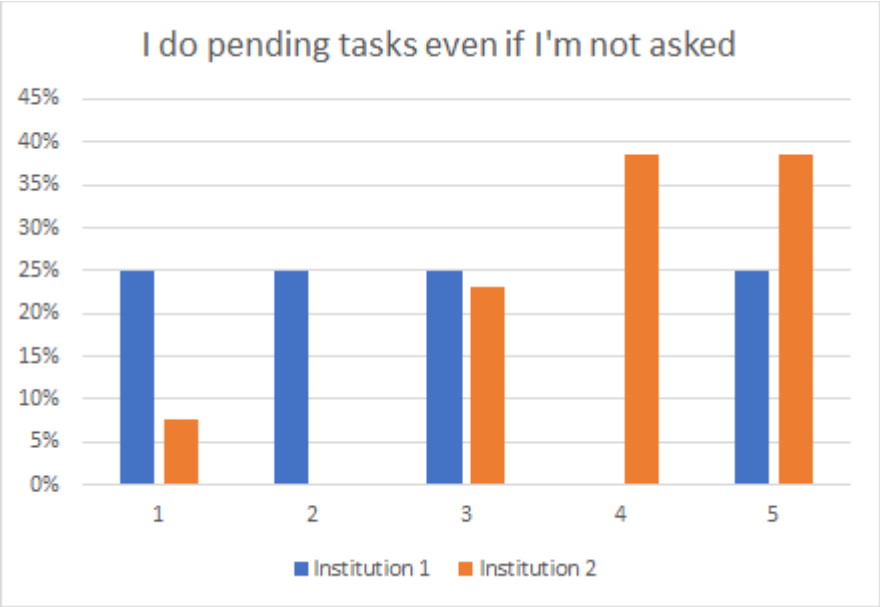

Figure 5. Pending Tasks (Autonomous Learning Survey. Section 3)

In relation to the question exploring students' commitment to do all the proposed tasks regardless of their quantitative value (grade), once again, only half of the students in Institution 1 said they do them whereas at Institution 2, most of the students answered affirmatively. With these data, we can conclude that students at Institution 2 keep tasks and activities proposed by the teacher as highly important and worth tackling, while students at Institution 1 seem to bound value in activities to grades or points. Figure 6 shows the numeric data to support this claim.

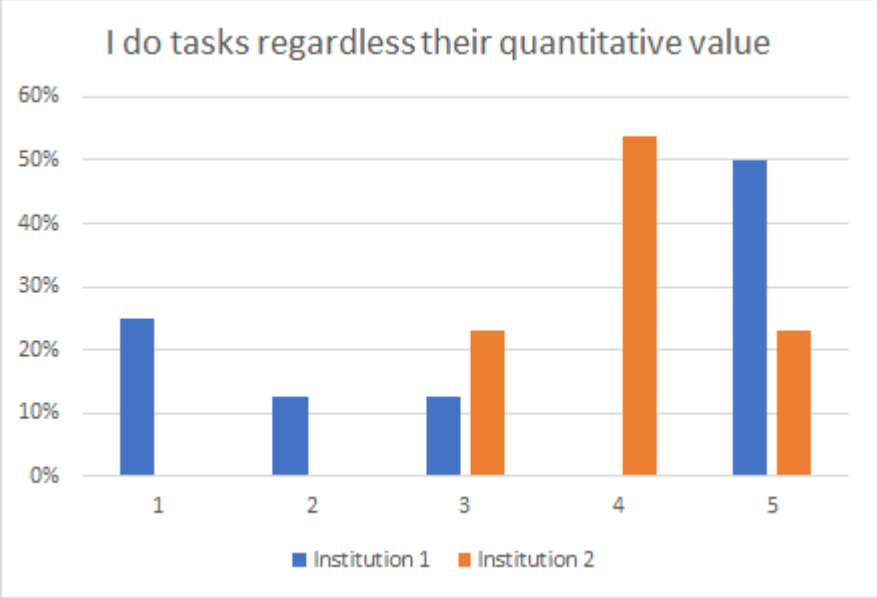

Figure 6. Graded Tasks (Autonomous Learning Survey. Section 3)

In regard to practice, one may think that, when learning a language, any exercise students do is evenly important. However, that is not true at all. Practice demands time which is worthy for students. If students are engaged in learning and practicing with precise actions, they will go further and faster.

Students in Institution 1 consider practice as essential since their opportunities to learn and practice are restricted to their class time and they determine how to cope with that issue founded on their desire to deepen their knowledge; this aspect can be seen in the quote below:

> *I think that at the university we don't have the enough time [sic] to cover all the topics so we have a lot of things to study, so we have to go deeper by our own [sic] because I think it is hard to go deeper in a topic just in two hours, nor in four hours (Student 3. Institution 1. Focus Group Interview. November 21st, 2017).*

Likewise, students in Institution 2 deem practice as necessary and they make their decisions regarding what to tackle based mostly on teacher-provided feedback; "*if we have a bad grade, it is important to see that grade like an opportunity to improve" (Student 1. Institution 2. Focus Group Interview. November 8th, 2018).*

All things considered, deliberate practice is a crucial aspect for noticeable improvement, and this practice does not need to be imposed by the educator. When students make decisions as to what they need and want to practice, and take conscious action on it, their results are positive and leading to success (Duckworth, 2016). Students need to practice what they are learning in order to learn quickly and effectively. In other words, repeated and deliberate practice is a must if students want to perform any skill smoothly and independently. However, the decision to practice a skill needs to come from the learner, attesting self-regulation.

Setting of learning goals and the creation of action plans.

Setting goals implies the development of an action plan designed to give the learning process direction to boost students' motivation and self-confidence (Schunk, 2001). If students want to succeed, first they need to set goals. Without them, they lack focus and direction. In addition, to accomplish those goals, students need to know how to set them. Goals must be motivating, precise, measurable, achievable, and pertinent. Students may tend to be more focused on the outcome, so they forget to plan the steps needed along the way. Having the

individual steps clear and marking them as done as they complete them will make students realize they are moving forward towards their final goal.

However, participants in this study reflect differing views and practices in regard to goal setting and action plan design. In the survey, students showed their differences in the creation of an action plan. As it can be seen in the Figure 7 below, students in Institution 1 either disagreed or were neutral (2 and 3) to the question of whether they created an action plan for their goals, whereas, students at institution 2 tended more towards the agreement end in the Likert scale. Anyway, none of the students completely agreed on creating an action plan which makes room for curricular and instructional change for the subsequent stages of the project. The data from the focus group corroborates this finding.

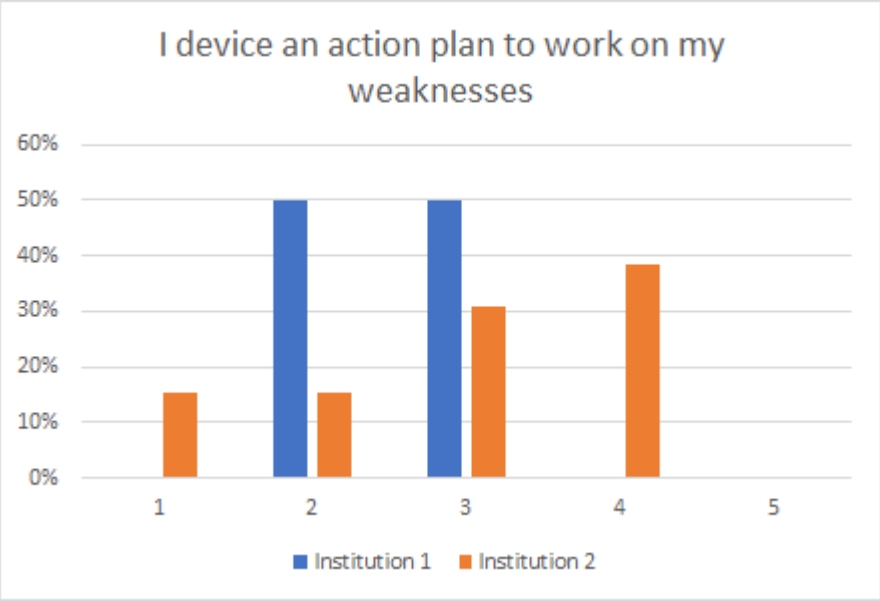

Figure 7. Action Plan (Autonomous Learning Survey. Section 3).

Also, students in institution 1 explicitly mentioned in the focus group that they do not think an action plan is a necessary step to overcome identified weaknesses as evidenced by the comment below:

> *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. Institution 1. Focus Group Interview. November 21st, 2017).*

Students disregard the importance of a formal action plan because they have not been instructed how to do it, or because metacognition may have been culturally ignored. Thus, once again, there is a window of opportunity in terms of instructional design so that teachers plan for students to organize their improvement effort and may review it based on their progress and reflecting on their goals. Students at these two institutions need to learn the value of plans and the procedures to create them. Since at this point, students plan informally (they do not follow a specific format but rather make decisions about their learning based on their own needs), they spend more time trying to learn, see little progress towards their goals and feel frustrated about their learning process. So, during the second part of the project, teacher educators can show students the value of formal action plans within the class setting for them to start doing it on their own.

Even though in the focus group done in institution 2 there were no explicit mentions of students' action plans, the rest of the comments allow the researchers to infer that students do not design them either, but focus on the planning of individual tasks, activities, or specific outcomes.

From a different perspective, the professors' survey applied in Institution 1 also reflects on goal setting and creation of action plans. For one of the professors, being autonomous: *"means to be aware of the use of learning strategies, the establishment of goals, use of learning pathways"* (Professor 1, Teacher Survey Institution 1, Question 1). For another professor: *"[being autonomous] allows students to set some objectives regarding their learning and take charge of their learning"* (Teacher Survey Institution 1, Question 1, Professor 5). As Cuesta et

al. (2017) establish, when students succeed in their learning, it is due to the fact that they understood and applied strategies to identify, take, and monitor their own actions to carry out specific tasks. Hence, teachers can teach students in an explicit way that it is better to have an action plan with achievable objectives, monitor it constantly, and evaluate it to improve.

All in all, the first category revealed the perceptions, beliefs, and behaviors of the participants towards their own self-regulation and showed the researchers the importance that scheduling, planning, and organizing bears for student-teachers in the construction of their own learning path. The following section examines the second category emerging from the data; the teacher-educators' role.

Teacher-Educators' role

This category emerged from the data collected from stakeholders, teachers, and students about their perceptions and beliefs regarding the development of self-regulated learning in teacher education programs. Unexpectedly, when asked about factors affecting the acquisition of self-regulatory behaviors and the development of autonomy in student-teachers, most participants' responses pointed towards the role of the teacher educator and the desired characteristics of an educator of teachers. Thus, this category reveals what appeared to be the pivotal role that a teacher educator plays in the construction of self-regulated pre-service teachers. It is undeniable that pre-service teachers see their professors as models to follow (or not to) in the future, but this is not exclusive in the teaching profession, novices see their tutors as role models. However, in the language teacher education profession, the professor's' responsibility extends the teaching of language content and procedural knowledge of teaching a lesson and goes as far as to helping learners mold their identities as teachers and define the methods they will later use in their own classrooms.

Currently, and as suggested by Wilkington (2005), most teacher education programs focus more on "developing functional competence (evident through 'supervision') than on developing the long-term professional identity of the future teacher (through 'mentoring')" (p. 56). The data collected in this project contributes to the identification of characteristics that can shape the ideal and **holistic role of the teacher-educator** in an academic and an inspirational domain. The importance of the role of the teacher-educator for student-teachers perceptions' of class experiences and also for professors themselves and other stakeholders, as well as the construction of the student teacher identity as professionals were also emerging results from the study. The results of this category will be presented below.

The holistic role of the teacher educator.

For students in both institutions, the role of the teacher educator is that of a model in different domains of their life. They assessed the impact of teachers within their own learning experience; and data showed that sometimes students rated the role of the teacher as weak and other times as effective depending on the teaching practices used, personality, and work related to characteristics evidenced. On the other hand, stakeholders at institutions also have set expectations in regard to what professors in teacher education programs should do and be. Figure 8 illustrates the desired characteristics of teacher educators for the different participants in the current study. Aspects such as humility, personal approachability, and empathy allowed the researchers to conclude that the role of the teacher educator extends that of a transmitter of knowledge to a more human and transformational arena. This finding was very interesting given its close connection to the fourth pillar of flipped learning, *professional educator*, which demands the teacher to be an active thinker, a role model and a collaborator. Thus, FL was

corroborated as an effective approach for teacher education programs since its principles align to the desires and goals of all involved in this area.

Looking at the data collected in the focus groups, interviews and other instruments, the researchers found six main characteristics expected from teacher educators. As it can be observed in Figure 8 below, teacher educators are not content transmitters, but need to evidence characteristics that can be emulated by students and that sometimes are deemed unimportant by professors and administrators. Our study shows that characteristics such as humility, personal approachability and a facilitating attitude are important for future teachers to observe in their professors.

Figure 8. Desired Characteristics of a Teacher Educator (Own Source)

The data also clarified that these characteristics conform three very particular teacher-educator roles. Thus, the information pertaining to the different roles of the teacher-educators will be discussed below.

The teacher-educator as an example.

In teacher education programs the roles of the professors extend the mere transmission of knowledge because students will inevitably see them as role models of what to do, but also of what not to do when in the profession. For example, one of the stakeholders in Institution 2 said she wants to "have professors who are inspiring to students because of their brains and their capacity to get along with knowledge, to solve problems." For her, it is important for students to say *"I want to be like that!"* when they finish classes every day. She is clear about the determining role that professors have in modelling desired behaviors. The same stakeholder even expressed her preference towards hiring professors who evidence high human qualities over those who might have impressive credentials but evidence a presumptuous attitude. She says: "*I don't need inflexible, arrogant gurus who think they know it all. What I need are people who are curious, kind, empathetic, creative, innovative, and ready to co-construct. (Stakeholder 1. Institution 2. Interview. December 2, 2017)."* Since the college is small and young and serves a low-income population, professors who are willing to work hard for students, the program, and the college are preferred. Thus, the hope is that students can witness these behaviors and emulate them in the future.

Teacher educators are also exampling of a thriving attitude for students. Students appreciate when professors talk about their life experiences, their obstacles as people and as teachers and also tell them about how they overcome those difficulties, they can relate and see life and the teaching profession differently, through the lens of someone who like them, had rough beginnings, difficulties and obstacles but who thrived to accomplish his goals and became a professional. The following comment illustrates this idea: *"so you see the experience through his life and you think, if he can, everybody can" (Student 4. Institution 2. Focus Group.*

November 8th, 2017). Students see their future selves and the people they can become through the experiences and stories of inspiring teacher educators. This fulfills the stakeholder's desire to hear students say, "*I want to be like that*".

At institution 1, students also consider some professors as role models who contribute to their professional development because they serve as examples of values, attitudes, and behaviors that a teacher must have. For students, it is motivating to have professors who pursue knowledge and are willing to go beyond the class contents with them as evidenced by the student's comment from the focus group 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. Institution 1. Focus Group Interview. November 21st, 2017).*

Just the same, professors at both institutions acknowledged their intentional transparency about themselves as learners in the interest of being role models for students. The professor at institution 2 highlighted the importance of the learning community, *"it is something I constantly do, I am a constant learner and I tell them about my learning process too and my frustrations, and what I have done to face them, then they realize we are a learning community" (Professor 1. Institution 2. Interview February 5th, 2018).* While professor 5 at institution 1 highlighted the promotion of autonomous learning as a successful approach to 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. Institution 1. Survey).* However, for autonomous learning and self-regulation to be sustainable in both institutions, there needs to be a mind shift that permeates every class, and every academic space.

Likewise, as professors can be a model of best practices, attitudes and behaviors, they can also set a bad example with their actions. Students differentiated both type of role models and explained their characteristics in the instruments applied. The excerpt below illustrates a student's discomfort and the frustration they feel when professors assign superficial tasks, do not plan lessons or fail to 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. Institution 1. Focus Group Interview. November 21st, 2017).*

We usually condemn compliance over learning, but sometimes their passiveness is a product of the obedience culture (Coleman, 2017) they have grown in and the example set by their teachers throughout their educational experience. In a way, in most educational settings, teachers are role models. However, for teacher educators' stakes are higher since they are educating future generations of teachers who might transform the way teaching is done, or simply continue perpetuating mediocre teaching practices that lead students to hate school (Robinson & Aronica, 2016). A teacher educator should set the example for students of the enjoyment of the teaching profession. Teaching is not just another job, it is a calling.

The teacher-educator as a facilitator of learning.

Traditionally professors, even in higher education, have played the role of leaders in the classroom. In other words, they exert a dominating role on students' activities, deadlines and methods for learning. However, it is crucial for students' success that teachers observe their progress, provide feedback, and intervene when necessary. Therefore, the role of the teacher-

educator as a facilitator of learning is critical since they must be a support and guide for students to learn the required skills to achieve the expected outcomes.

According to the data collected, one of the roles a teacher educator plays in relation to guiding his students is that of facilitating learning. As stated by Kojima and Kojima (2005), teachers have strong skills in group dynamics that help them to provide efficient classroom routines and smooth transitions. They organize instructional tasks logically and understand how to use different types of grouping (including individual, pair, small group, and large group work) to encourage specific types of learning (p.68).

In view of the above, educators are responsible for facilitating the acquisition of knowledge and competences by building a positive learning environment. Moreover, teachers as facilitators direct learners by providing guidelines, feedback and advice during their learning process meaning that teachers must offer support when needed and provide the required scaffolding and teaching of skills when necessary.

As stated by one of the professors at Institution 1, *"[in an autonomous learning environment] the teacher is only a facilitator, helper and a guide" (Professor 4. Institution 1. Survey, Question 3)*, as affirmed in the flipped learning community, transforming teachers into "guides on the side" instead of "sages on the stage" (King, 1993). In other words, professors boost the learning process by helping students to get involved with the information presented rather than receiving it in a passive way or just memorizing it. Thus, professors need to create learning spaces where students can develop as active, autonomous and engaged learners.

At both institutions, teachers and stakeholders interviewed mention the importance of the professor to become a facilitator of learning, not only referring to cognitive processes and the acquisition of knowledge, but also to the development of other cognitive and metacognitive

skills, as it can be evidenced in the excerpts below. One of the professors in Institution 1 stated that "*[being an autonomous learner] requires careful guidance by tutors/teachers and a great deal of compromise by the students' side" (Professor 1. Institution 1. Survey)*. On the other hand, in Institution 2, the administrative member interviewed, when discussing the type of teacher-educators hired in the institution, suggested "*[we need to have teachers], who use flipped learning models, where the big activity is performed by the student and not the teacher and the teacher becomes a facilitator" (Stakeholder 1. Institution 2. Interview. December 2, 2017).* Even though transforming traditional teachers into facilitators is easier said than done; flipped learning is a way to make it happen since it can generate the need for students to take charge of their own learning and feel empowered towards making decisions that will affect their process.

The teacher-educator as an autonomy builder.

The relation between learner autonomy and professor autonomy is undeniable (La Ganza, 2008). Professors' perceptions and teaching practices of autonomy have a direct impact on its development in learners. Accordingly, it seems crucial to enlighten future teachers to first act autonomously themselves for them to foster autonomy in their learners. Students and professors in both institutions acknowledge relevance of autonomy building and the incipient levels of autonomy and self-regulation with which students arrive in college. Thus, we have concluded that autonomy is not natural to students and it requires training from the part of the teacher as it can be revealed in some of the data collected.

For instance, in the survey applied in institution 1, professor 2 attests the following: *"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. Institution 1. Survey).* Moreover, professor 1 sustains this idea by highlighting 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. Institution 1. Survey).*

Even though professors acknowledge the lack of autonomous behaviors students' evidence when arriving at the University, they do mention their role in helping students develop it. Thus, most university professors in the examined teacher education programs have decided to include autonomous learning in their curriculums in order to facilitate the process. Some professors use formats to help students visualize their thinking in regard to self-regulatory behaviors (i.e. learning contracts, action plans, goal-setting, the Wish, Outcome, Obstacle and Plan model (WOOP), etc.) and include explicit instruction on how to fill them out and track their progress throughout the semester enhancing students' ability to self-regulate.

An "Action Plan" (Appendix G) is carried out by professors with their students at institution 1. It is given to the class at the beginning of the semester. Students are to establish their own goals regarding each of the skills, as well as the vocabulary and grammar components. The teacher keeps this record, then, in every term, students assess how much they have achieved what they established at the beginning, so that they can reflect and make adjustments depending on their performance. This is a way to help students become more aware of their own learning goals and what they have to do to improve, giving opinions themselves with the help of the teacher.

At institution 2, there is even a class in the curriculum to develop autonomous learning in the hope that their students not only become more autonomous themselves, but also replicate the

strategies learned in their future classrooms. The curriculum for that class, which happens in the first semester deals with topics proposed by the professor like reading for learning, writing goals using the WOOP system, using process writing to learn about oneself as a writer and a learner. There are also topics rooted in educational psychology such as setting goals, creating and analyzing action plans, and reflecting on one's performance through checklists (Appendix F). Also, there are topics from psychological traditions like the fixed and growth mindset (Dweck, 2006), positive psychology and mindfulness (Seligman & Csikszentmihalyi, 2000). The topics discussed and studied in this class come as a surprise to students who had never heard such concepts and are then replicated in small dosages by other professors in the program (especially language teachers).

A pivotal aspect in here for students to get trained on becoming more autonomous and likely aware of their own learning, is to have them write down reflections towards how they have felt while doing certain tasks. The teacher must dialog with students about it, in a personalized way, so that they can be conscious of the aspects they are good at and the ones that may need some improvement.

Awareness of the need for more autonomous behaviors in students is a key factor in finding time and space in professors' lessons for their development. As mentioned by one of the professors in Institution 1, "*autonomous learning is a very important concept in foreign language learning. It facilitates learner's independence at every stage of the learning process and should be applied to every age group and at every level of advancement" (Professor 4. Institution 1. Survey, Question 1).* As Benson and Voller (2014) establish, *autonomy* and *independence* are a paramount aspect within language education. Lifelong learning skills are crucial, especially for student teachers.

Expanding on the implementation of autonomous behaviors and their training, a professor in institution 1 compares it to "hacking" a system. He considers that by informing students of their own learning preferences and limitations, they *"become like a hacker of their own system" (Professor 1. Institution 2. Interview. February 12th, 2018).* Hacking a system suggests deep knowledge, thus, in our context, it would mean that by knowing their own processes, students could own them and make their own decisions in regard to their learning. However, acquiring this knowledge is not a seamless and immediate sub-process, so it requires conscious work and time devotion from the part of the professor, thus exerting his role as an autonomy builder.

In the same vein, a professor in Institution 1 suggests a gradual implementation in this way, *"in my teaching practice I try to apply different autonomous learning strategies. However, I do it gradually in four progressive steps: Awareness, Presentation and Modeling, Practice, Transfer and Evaluation" (Professor 4. Institution 1. Survey. Question 3).* However, this teaching practice is not generalized to all teacher education programs, but it is an initiative of a few professors who see the importance of developing students' self-regulation and autonomy. Thus, teacher education programs cannot ignore the responsibility of all professors in supporting students' development as autonomous learners. As stated by Mezirow (1997), "the educator's responsibility is to help learners reach their objectives in such a way that they will function as more autonomous, socially responsible thinkers". (p. 8) The development of self-regulation cannot continue to be an isolated initiative from one professor but needs to have room in the curriculum of teacher education programs.

For example, at institution 2, where there are two classes devoted to autonomous learning, the self-regulated learning model is organic. The professor insists on empowerment and

guidance as two important pillars of his work, *"and I tell them, ´Oh, so you know it is fine, you see, it wasn't necessary for you to ask. ´; in that way, I empower them." (Professor 1. Institution 2. Interview. February 12th, 2018.).* He designs activities to put students at the center of their learning process through learning strategies, planning and monitoring, and teaches them how to self-assess and develop a growth mindset (Dweck, 2006). However, for a novice teacher in the area of self-regulation, models like Pintrich's (2004) and O'Malley and Chamot's (1990) could be also helpful. The former includes cognitive, motivational, sensory, and biological individual processes and it consists of four phases: forethought, planning and activation; monitoring; control; and reaction and reflection. That compound of phases and areas involve a significant number of SRL processes (e.g., prior content knowledge activation, efficacy judgments, self-observations of behavior). In the latter, the authors attempted to classify learning strategies. Language learning strategies are classified into the three main categories: cognitive, meta-cognitive and affective or social strategies. As stated by these authors, the first category involves the use or the process of change of the material to be learned. The second one involves comprehending the learning process and managing it through planning, monitoring and evaluating the learning activities. The last one mainly involves learners in communicative interaction with others.

The development of autonomy in teacher education programs cannot be the exception. At Institution 2, autonomous learning and the development of self-regulation have become an obsession for professors in most classes. At that institution, most of professors abide by Holec's (1981) concept of autonomous learning as 'the ability to take charge of one's learning'. The purpose of the class of autonomous learning and the practices held by professors throughout the program aim at making more empowered learners and people in general. For professor 1 at

institution 2, he is teaching learners to sail in stormy waters since he "gives students the tools to build their own sails and navigate in life", as he puts it. By giving students the tools to evaluate when strategies are not effective and by deciding on changes to make, he is helping students build their autonomy.

Autonomy is about making decisions and being empowered; but also, about recognizing learners as whole beings who go to university to construct their character as well as to learn a craft. As proposed by professor 2, *"in the long run, it (autonomy) contributes to the meaning of life, so, any educational exercise of any institution should have that component." (Professor 2. Institution 2. Interview. February 5th, 2018).* Evidence from participants in the study shows that the teacher-educator's role as an autonomy builder is important for pre-service teachers to construct their repertoire for self-regulatory practices.

LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

In relation to the limitations of the present study, it is possible to say that in institution 1, the students that were surveyed were especially the ones enrolled in the morning shift. Although there is another shift in the evening, it was not possible to know those students' opinions, being their case even more challenging in terms of time-management and self-regulatory practices since those participants work during the day and study in the evening. However, FL seems to be a great opportunity for them to fit in their labor and academic responsibilities.

Another constraint had to do with time for the face-to-face interaction, since in institution 1, class was delivered once a week and there were some external interruptions that may have affected the normal flow of classes when having this diagnostic stage. In that way, it is advisable for the next phase of the study to count on all the necessary class time to carry out the research activities.

The fact of not having a class subject that is directly related to self-regulation in institution 1 is seen as a limitation as well. Based on that assumption, one of the professors expressed that: *"autonomous learning should be a key component of the curriculum" (Professor 5. Institution 1. Survey, Question 1),* thus, the present research concludes that it would be ideal to have a subject related to autonomy in the curriculum at Institution 1. Thus, this fact becomes also a limitation, since a curricular innovation that gave birth to a new program has already started in that institution, and substantial changes regarding classes, time, and credits have already happened. Hence, other BA programs in languages might benefit from including this subject in their curriculum based on the positive impact that it has shown to have, as observed in institution 2.

In the case of Institution 1, where changing the curriculum is no longer possible at least on a short-term basis, the researchers have contemplated the possibility of teaching autonomy explicitly through the English courses of the program. This way, it can be guaranteed that by raising students' awareness of the role of self-regulatory behaviors and autonomous learning for the effectiveness of their studies, they may react positively since they will become teachers and ideally, they would emulate these teaching practices for their students. The researchers have started to do so in the program through an action plan where students set their goals and assess them at the end of each term, thinking about how to improve; all this metacognitive work is done with the help of the teacher educator, whose support is crucial for the success of the process. Such practice has resulted into an accomplishment despite not all the students evidence the same level of commitment.

Continuing with this idea, another suggestion has to do with the importance of the teacher educator as a model. Pre-service teachers are all the time analyzing what their professors do and how they behave in their classes. For that reason, it is necessary for colleges to hire professors that are passionate, that want to sow in their students the seed of transforming the country through education. Moreover, teacher educators should have credentials on pedagogy, expertise in the field (English as a Foreign Language) and curiosity for research.

Another important recommendation is that colleges provide conditions for students and teachers to be autonomous. For example, having a resource center with books, computers, internet connection and activities where people can read, practice languages, etc., at their own pace. In this regard, one professor affirms: *"our faculty doesn't provide the appropriate help to manage a self-access center, does not allow appropriate spaces neither the use of resources such as books, computers, etc., (...) the lack of these resources is a problem". (Professor 1. Institution 1. Survey).* Based on this information, we recommend three possible alternatives; first, to have a space within the institutions where students and teachers could use these resources freely; second, an online resource center that could be nourished by teachers; and third, a young researcher's group (*semillero de investigación*) that could take autonomy in their hands and generate feasible solutions for each institution.

Furthermore, the applicability of a study of this kind in other educational sectors could strengthen the connection between flipped learning and self-regulatory practices. It can be transferred to an EFL context, not only for future teachers, but in elementary, middle, and high school, as well as formal and informal education settings. It may take more time to work on self-regulatory behaviors with young kids, but according to their age, the pedagogical

implementation can be adapted. On top of that, FL is a pedagogical approach that allows for curriculum flexibilization in contexts where there is low attendance, academic spaces with little or no technology, or large classes, etc.

Further research

As mentioned at the beginning of this paper, this report concerns initial findings of a preparatory study aimed at learning about pre-service teachers' perceptions regarding self-regulation. Based on the information collected, further research will be done on the impact that the implementation of the flipped learning approach will have on students enrolled in the Pedagogy & Second Language and English Didactics classes. This approach is proposed, not only as the methodology to be used in those classes, but also as an option to be replicated by future language teachers in their forthcoming teacher performance, due to the fact of teacher educators being models for their students. This conception has crucial importance in the Colombian educational context because when pre-service teachers become in-service teachers, they generally appeal to the patterns performed by their educators.

Furthermore, since the authors of this paper are involved in teacher education programs, the flipped learning approach is seen as an opportunity to be applied in different aspects of the teaching and learning processes of English as a foreign language. It means flipped learning may be used to shift the direct instruction of the language skills for students as users but also for their future students.. Also, FL can highly contribute to training future language teachers, not only as language experts, but also as critical thinkers and subjects that are aware of their own learning process.

In future research studies, it would be interesting to make controlled studies that objectively examine students' performance throughout a semester. In other words, one group of

participants would follow the traditional pedagogical model and the other would use the flipped learning approach to determine gains in self-regulation. Furthermore, since flipped learning is not only about the instructional videos to be used prior to class, but also how to take advantage of class-time to encourage active learning, it is recommended that researchers clearly describe the activities used for both in-class and out-of-class activities as well as the impact both approaches have in students' achievement when learning.

The literature reviewed for this paper revealed the need for explicit instruction on self-regulatory practices and a strong role of the educator as the inspirer of self-regulatory behaviors and a teaching identity. For the authors, flipped learning is a suitable path to develop self-regulation in learners, thus, the following stage of this project will present how the implementation of flipped learning in teacher education can aid the construction of self-regulatory practices in pre-service teachers. However, more research is needed in this front.

CONCLUSIONS

Since the research question guiding this section of the study was: *What are students' perceptions, beliefs and behaviors towards self-regulation in two teacher education programs in Bogota?,* we can assert that the answer was depicted throughout the paper. Before attempting to implement FL in our contexts, we wanted to corroborate our hypotheses about the lack of autonomy evidenced by our students, the beliefs and perceptions of our students regarding self-regulation. We also needed to foresee the necessary accommodations to our courses for FL to work considering that this approach works better when students evidence self-regulatory practices and are motivated towards learning.

This preliminary stage of the inter-institutional project entitled *Flipped Learning as a pedagogical approach to strengthen autonomy in student-teachers in two language teaching*

degrees in Bogota prepared the ground for the implementation of flipped learning in the participating institutions. It also revealed the perceptions of students in both programs regarding self-regulatory behaviors and the roles played by teacher educators in assisting the strengthening of their abilities as autonomous learners.

The main research question for this reported stage of the project inquired about pre-service teachers' perceptions, beliefs, and behaviors towards self-regulated learning in two teacher education programs in Bogotá, Colombia. The analysis of the data collected by different instruments in both institutions showed two major categories: *Self-Regulatory Behaviors and Teacher Educator's role.*

The study corroborates the findings of Cuesta et al., (2017) about students' perceptions and beliefs about their own self-regulation. Even though the number of participants in the present study is small, (21 students), it serves to confirm Cuesta et al.'s study (2017) given the demographic similarities of the population. In the present work, participants were inquired about their self-regulatory practices and perceptions. Thus, even though most of the questions in our instruments aimed at identifying students' self-regulatory practices, the design targeted the profile of a flipped learner.

In regard to the role played by teacher-educators in our teacher education programs, our study gave light to four different roles. For our students, professors and some administrators, there is a holistic role played by the teacher educator. This role includes an inspirational as well as an academic role, and although this may seem logical and even obvious, we did not find literature that exactly matched these terms when referring to teacher educators. Within this holistic role, students identified certain desired characteristics in teacher-educators that they think can inspire them to become better learners and to thrive in their studies, as well as to

construct their own identity as future teachers. These characteristics are: creativity, academic humility, personal approachability, curiosity, empathy, inspiration, critical thinking, open-mindedness, facilitating attitude, and risk-taking ability.

The holistic role of the teacher educator broke down into three sub-categories namely, *teacher educator as a role model, teacher educator as a facilitator of learning, and teacher educator as an autonomy-builder*. Each role substantiated with enough evidence from the participants in the study makes us think of their importance and relevance in teacher education programs in Colombia. Even though these roles might fall into what Cuesta et al. (2017) called teacher-dependency, we have identified an aspirational tone in students' responses rather than a condemning one forcing the teacher to do their work. Thus, we deem the role of educators of high value in the shaping of student-teachers' identities as future teachers.

This study was relevant for us in identifying the self-regulatory practices of our population prior to starting an implementation of flipped learning in order to know the necessary accommodations of the model for the particular contexts. Figure 9 illustrates the connections between the emerging categories of the present study (preliminary stage of the project) and the four pillars of FL, guiding beacons for the practice of FL, so that we can design the implementation of FL including the necessary training on SRL for the approach to work in the contexts under study. This correlation of the pillars and the categories in our study shows the relevance of certain self-regulatory behaviors for FL to work, thus, we aim at incorporating these findings in the upcoming pedagogical intervention.

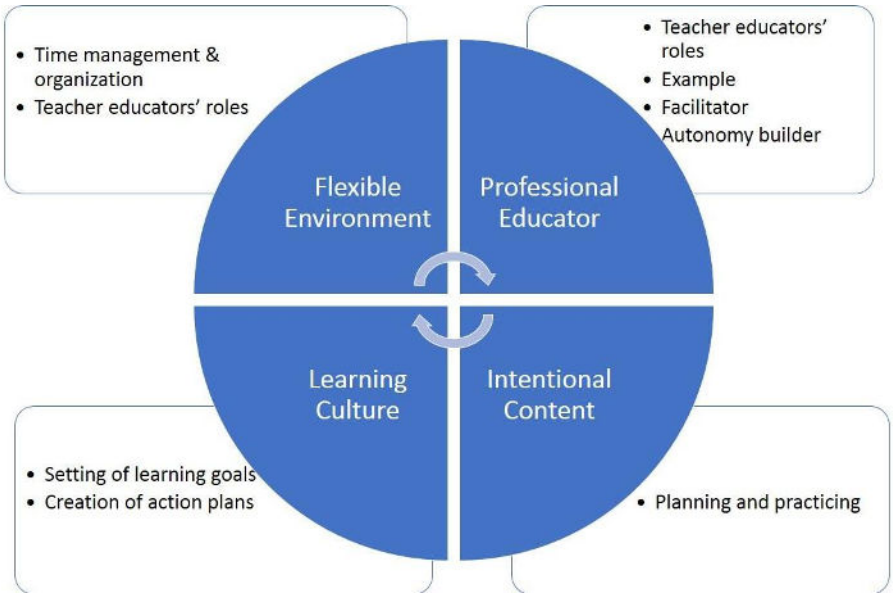

Figure 9. Emerging Categories interrelated with Pillars of Flipped Learning (Own Source)

We identified the need for explicit training on self-regulatory behaviors such as time management, organization, planning, practicing, setting and evaluating learning goals and the creation of action plans. We were also made aware of the necessary and expected roles of the teacher educators' in achieving higher levels of commitment, engagement and self-regulation in students. Teacher educators need to be examples of life and academic growth for students, facilitators of learning and assets in building students' autonomy. Expecting high of students and leaving them on their own are behaviors that should disappear if we expect to have students who will later become trailblazers in education. Luckily, our findings point us to flipped learning as the way to achieve these important outcomes.

Teacher educators as role models inspire and encourage students to strive for success. In that sense, students learn from their professors through our commitment to excellence and through our skills to make them aware of their own academic and professional development.

When students think of the type of teacher they would like to be, they would think of the teacher who supported them in their learning process, who helped them grow as responsible learners, and showed them how to become independent. All in all, teacher educators are sources of experience who may influence their students and leave seeds in a fertile soil: future teachers.

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APPENDICES

Appendix A

Autonomous Learning Survey

The questionnaire below has been created to collect information about your perceptions, behaviors and knowledge in regards to autonomy and autonomous learning. The information collected will allow us to propose future strategies to foster autonomy in our different programs. We guarantee anonymity and confidentiality in the treatment of the information collected with this survey.

A.Demographic Information

1. Sex
2. Institution
3. Neighbourhood
4. Age

B. Independence and Responsibility

Read and respond the following questions according to your most common behaviors. Choose a score between 1 and 5, 1 being completely disagree and 5 being completely agree to each one of the statements below:

Statement	1	2	3	4	5
I search for materials or resources that can help me better understand a topic that is hard for me.					
I like to do activities or tasks about topics that I'm interested in.					
When I get the results from a test or quiz I correct it even if the teacher hasn't asked for it.					
Even if the task is difficult I do my best to hand in it with high quality and on time.					
I hand in my tasks only when I know they are okay and complete.					
I set learning goals					
I enjoy learning inside of class.					
I enjoy learning outside of class.					
I transfer what I learn in class to real life situations.					
I know my learning difficulties.					
I device an action plan to work on my weaknesses.					
I take responsibility for my own learning					
When I have a pending task, I do it even if the teacher doesn't ask me for it.					
I do all my tasks regardless if they have a quantitative value or not (grade).					
I organize my time wisely to be able to do all my tasks.					

C. Learning Strategies

Question	Items
When a topic is difficult for me, I... (check all that apply)	Ask my classmates for help
	Ask for an explanation to my teacher
	Look for another teacher or an expert to explain to me
	Look for information in books
	Read articles or websites connected to the topic
	Look for videos about the topic
	Other
To remember a topic in an easier way, I... (check all that apply):	Pay close attention to the explanations given in class
	Take notes of explanations, presentations and videos showed in class.
	Read the text many times until I memorize it
	Do summaries
	Build concept maps or flow charts about the topic
	Create mind maps about the topic
	Read and highlight all the info that I consider important
	Other
To have a better learning process, I think it is necessary to: (check all that apply)	Sleep and rest
	Eat well

	Come to class
	Organize my time well
	Organize the place where I study
	Only study for tests and quizzes
	Have a personal study schedule
	Do homework
	Review the topic of past classes
	Other
As a student, I...	Know what is difficult for me to do. YES / NO / SOMETIMES
	Know what is easy for me to do. YES / NO / SOMETIMES
	Can adapt the way I work according to my teacher's expectations. YES / NO / SOMETIMES
	Revise my work thoroughly to make sure everything is ok. YES / NO / SOMETIMES

D. Learning

Read and respond the following questions according to your most common behaviors. Choose a score between 1 and 5, 1 being "never" and 5 being "always" to each one of the statements below:

Question	Items	1	2	3	4	5
I learn better when I...	Compare my grades and answers with those of my classmates					
	Access to the content through videos and images					
	Practice reading and writing					
	Listen carefully trying to understand					

	Try to relate what I'm learning with my objectives for the future (being a teacher)					
	Discuss content with others.					

E. Use of technological resources

Question	Items
The electronic devices that I use most frequently are (choose all that apply)	Smartphone
	Tablet
	Laptop
	Desktop
	Music player (Ipod, other)
	Cell phone (regular phone)
The technological tools I use the most are: (Choose three choices max).	Social networks (facebook, instagram, etc.)
	Educational platforms (coursesites, edmodo, schoology, etc)
	Blogs
	Websites
	Videos
	MOOCS
	Wikis
	Software

How much time do you surf the Internet a day?	Half an hour
	One hour
	Two hours
	Three hours or more
The reasons I surf the web are:	Entertainment
	Academic work
	General topics
	To learn about new cultures
	To search information about my personal interests
	To learn about how to deal with daily life
Most of my time I surf this kind of website (max 2)	Social networks
	Games
	Music and videos
	Commercials
	Science/technology
	Current topics
	Sports
	Books online
I use social networks to: (choose 2 options)	Socialize with people I know

	Find new friends
	Share academic information
	Discuss topics of my interest
	Read what other people post about topics of my interest
	Share my personal life
	Watch photos
	Other (find things to inspiration)
I use YouTube to: (choose two options)	Listen to my favorite music
	Search videos for entertainment
	Learn about academic topics
	Learn about other topics of my interest
	Share my own videos
	I follow my favorite YouTubers
What was the last thing you learned to do by means of a YouTube video	

This survey was adapted from Torres and Hernández (2017).

Appendix B

Survey about Professors' Perceptions and Practices in regard to Autonomous Learning (Institution 1)

Objective: Get to know professors' perceptions and practices regarding Autonomous Learning in a BA in languages program.

Instruction: Dear professor, please feel free to answer the following questions in the most honest way. Information will be kept in an anonymous way. Thanks for your help.

Questions:

1. What's your opinion about autonomous learning?
2. Do you consider important to promote autonomous learning among your students? Why?
3. Do you apply any strategies to promote autonomous learning in your classes? If so, which ones?
4. Do you think it is necessary to include specific training on autonomous learning in our program? If so, how and how often?

Appendix C

Focus Group Interview

Institution 1

1. In one of the questions of the survey, we asked you if you surfed the web and some of you said yes. What do you surf the web for? Expand your answer.
2. Do you prefer to surf the web instead of going to the library? Explain you answer.
3. Concerning looking for materials and resources, do you do it? Is it important? What sources do you use?
4. What do you do when you have a problem understanding a topic?
5. Do you design an action plan to overcome your difficulties? Have you ever received any training on how to design an action plan to improve a specific area?
6. How do you transfer what you learn in class to real situations?
7. Do you think you take responsibility of your own learning? Explain your answer.
8. In relation to doing assignments, do you do them regardless if they have a quantitative value?
9. Does the grade give importance to the assignment? Does it influence your motivation?
10. Is the teacher the only one who can provide feedback?
11. Do you organize your time wisely in order to be able to do all your tasks? If so, how?
12. Do you think you do enough to direct your learning?

Institution 2

1. Why do you consider looking for materials important? Has anybody told you to do so? And what kind of material do you look for?
2. Do you remember the context of that course? Do you remember the content?
3. It sounds very inspiring. Does anybody feel differently? Anybody feels that the motivation to learn comes from a different place?
4. But what do you think? I mean, do you feel the necessity to apply what you learn in different classes in others and in your real life?
5. How do you go about creating and action plan and working on it?
6. How do you take responsibility for learning?
7. What do you think about my videos on YouTube and how we use them for class?
8. What do you think is necessary for a student in a flipped classroom to know?
9. I still have a couple more videos to do, any recommendations to make them even better?

Appendix D

Interview to Stakeholders (Institution 2)

1. ¿Por qué se crearon las materias del primer semestre?
2. ¿La articulación del currículo es un objetivo institucional?
3. ¿Cuáles son los criterios de selección de maestros?

Appendix E

Interview to the professor that is teaching "Autonomous Learning"

(Institution 2)

1. ¿Cuáles son los objetivos de la asignatura?
2. ¿Cuáles son los contenidos de la asignatura?
3. ¿Qué ha sido lo más gratificante que le ha dejado enseñar esta asignatura?
4. ¿Cuál ha sido el reto más grande al enseñar esta asignatura?
5. ¿Cómo es el sistema de evaluación?
6. ¿Cómo y con qué frecuencia le da el feedback a sus estudiantes?
7. ¿Cómo se le puede dar continuidad a esta asignatura? Es necesario?

Appendix F

Interview to the professor that created the class "Autonomous Learning" (Institution 2)

1. ¿Por qué quiso crear esta asignatura?
2. ¿Cuáles son los objetivos de la asignatura?
3. ¿Cuáles son los contenidos de la asignatura?
4. ¿Cómo es el sistema de evaluación?
5. ¿Cómo y con qué frecuencia se sugirió el feedback?

Appendix G

Action Plan

English Advanced II

Professor: _____. Name: _____

What are your learning goals for this class?

	GOALS	**FIRST TERM ASSESSMENT**	**SECOND TERM ASSESSMENT**	**THIRD TERM ASSESSMENT**
LISTENING	Date:	Date:	Date:	Date:
READING				
WRITING				
SPEAKING				
GRAMMAR				
VOCABULARY				

Appendix G

Plan de trabajo clase de Theory and Practice of Autonomous Learning

(Esta es una guía solamente y puede ser modificada durante el semestre según sea necesario)

Semana	**Tema**	**Lecturas y actividades requeridas** *(Las lecturas se deben hacer con anterioridad a la clase)*
1	**Introducción**	Jason Silva: El asombro https://www.youtube.com/watch?v=HbaMw8ApRSA Jason Silva: El éxtasis de la curiosidad https://www.youtube.com/watch?v=ZFosapJQii0 Sir Ken Robinson: Las escuelas matan la creatividad https://www.youtube.com/watch?v=nPB-41q97zg
2	**Aprender a escribir**	Corredor, J. (2010), ¿Cómo Carajos Escribo Bien un Texto?
3, 4	**Mindfulness**	Siegel, R. (2011). La Solución Mindfulness, Bilbao: Editorial Desclée de Brouwer, S.A.
5, 6	**Aprendizaje en el siglo XXI**	Trilling, B y Fadel, C. (2009). 21st Century Skills: Learning Life in Our Times, San Francisco, CA: Jossey-Bass. (Chapter 1)
7, 8, 9	**Aprendizaje autónomo**	Crispín, M. (2011) Aprendizaje Autónomo: Orientaciones para la Docencia, México: Universidad Iberoamericana Biblioteca Francisco Xavier Clavijero. (Chapter 1,2, and 3)

10,11,12	**Brain-based teaching and learning**	Sousa, D. (2006). How the Brain Learns. Thousand Oaks, California: Corwin Press. (Chapter 1 and 7)
13, 14, 15	Inteligencia Emocional	Goleman, D. (2004) La Inteligencia Emocional. Buenos Aires: Editorial Kairós. (Chapters 1 and 5)
16	Life Hacking and Lifelong Learning	Staffor, T. Webb, M (2010) Mind Hacks: Tips and Tools for Using your Brain, Cambridge: O'REILLY. (Chapter 9) Stark, K. (2013) Don't Got Back to School: A Handbook for Learning Anything, New York: Greenglass Books. (Chapter 2 and 9)
17	Proyecto Final	