

# Mapping Growth Mindset among English Teachers at Higher Education: A Case Study<sup>1</sup>

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## Abstract

Growth mindset proposed by Dweck (2006) is a suitable resource to aid teachers to grow professionally and resolve pedagogical crises. It represents a reflective tool that enables teachers to take action toward improvement and success. The objective of this study is to determine the mindset adopted by some English teachers within their professional performance, specifically when dealing with pedagogical crises and professional challenges and the type of mindset that they develop. Four English teachers at tertiary education participated in this descriptive case study conducted over four months. Data were collected by means of three instruments: a survey, a journal, and an interview. The results revealed that the sample population tended to take advantage of pedagogical crises and avoid having a fixed mindset toward issues such as: dealing with students, communicating with bosses or coping with unexpected classroom situations. Findings may have a relevant impact on how teachers assume their daily duties and challenges.

## Resumen

La mentalidad de crecimiento propuesta por Dweck (2006) es un recurso apropiado para guiar a los profesores en su crecimiento profesional, y en la resolución de las crisis pedagógicas. Representa una herramienta de reflexión que permite a los profesores emprender acciones tendientes a la mejora y el éxito. Este estudio tiene por objeto determinar el tipo de mentalidad adoptado por algunos profesores de inglés en su labor profesional, en específico cuando tratan con crisis pedagógicas o con retos profesionales y con el tipo de mentalidad que desarrollan. Cuatro profesores de inglés de educación superior participaron en este estudio de caso descriptivo realizado durante cuatro meses. Los datos se recolectaron mediante tres instrumentos: una encuesta, un diario y una entrevista. Los resultados revelaron que la población de la muestra presentaba una tendencia al aprovechamiento de las crisis pedagógicas y evitaba tener una mentalidad fija con respecto a temas como: el trato con los estudiantes, la comunicación con los jefes o el afrontamiento de situaciones inesperadas en las clases. Los hallazgos pueden tener un impacto relevante en la forma en que los docentes asumen sus deberes y desafíos cotidianos.

## Introduction

Growth and fixed mindset is a concept that deals with how people in general handle challenges during their professional life and development. According to Dweck (2016), "people often confuse a growth mindset with being flexible or open-minded or with having a positive outlook. [...] Everyone is actually a mixture of fixed and growth mindset, and that mixture evolves with experience" (n. p.). All professionals face challenging situations at work, in this specific case, English teachers reflected on different situations that had forced them to adopt a growth, a fixed or a hybrid mindset. This is a case study aiming at determining the mindset adopted by some English teachers within their professional performance, specifically their dealing with pedagogical crises and professional challenges and the relationship between the type of mindset developed by the teachers and their actual performance. The following research questions framed the researcher: what is the type of mindset exhibited by a group of EFL teachers? And what is the relation between some EFL teachers' mindset and their actual performance?

## Literature Review

### *Growth mindset*

The term growth mindset has been recently studied in order to determine how people perform and how they change over time in different settings or work contexts. Growth mindset is displayed in people who adjust, adapt or modify their behavior or way of thinking to reach learning. The lived experiences sway people to make decisions that in a long-term shape and reshape their intellectual and personal roles. Ng (2018) assures that "growth-minded individuals perceive task setbacks as a necessary part of the learning process and they "bounce back" by increasing their motivational effort" (p. 2). Growth mindset coexists with fixed mindset, while in the first, there is a constant analysis and assessment of the decisions and outcomes

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obtained in a work setting, in the second, individuals usually operate alike whether the results of their performance in work settings are positive or negative. Hochanadel & Finamore (2015) explain that those who challenge themselves and persevere exhibit a growth mindset and those who have a fixed mindset are attached to initial information which becomes an obstacle to develop their thinking. In general, it is common to find these two types of mindsets and for this research paper the idea is to explain what growth mindset is and how it is displayed by the participants.

There will always be a distinction between a fixed and growth mindset. Individuals make assumptions and as such their own mentalities can be persuaded to change or to remain static. Mercer and Ryan (2010) mention that a person can “believe that some people are intelligent or immoral, and nothing can change these fundamental traits (fixed mindset), others may regard these traits as being more malleable and that humans always have the capacity to change them (growth mindset)” (p. 437). With this basic example, it can be deduced that mindsets are related to personality, background, experiences, and points of view. Despite mindsets can be *limited* to growth and fixed, it does not mean that these two mindsets are exclusively displayed rigorously, as Mercer and Ryan also express that

*it is possible for an individual to have a growth mindset in one particular domain and a fixed mindset in another; for example, an individual could simultaneously believe that artistic ability is a fixed entity, you either have artistic talent or you do not, while they may believe that sporting ability is something that can be developed through concerted effort and practice. (p. 437)*

For the purpose of this research, the focus is teachers’ fixed and growth mindset concerning their academic performance. This means that the idea is to determine how those mindsets are related and exhibited by English teachers in their work and how fixed and growth mindsets develop term after term. Teachers are individuals that as any other people possess particular characteristics that maintain their minds fixed and keep them working and thinking as they usually do or that can make them feel the need to apply changes or to alter in any aspect the way they work.

As mentioned earlier, mindset has to do with personality and its features may vary according to personality traits. Some people can display a growth mindset or fixed mindset depending on the context. In a specific case, teachers should look for constant improvement and for a development of pedagogy and teaching strategies, which somehow necessitates to have a growth mindset. Zilka et al. (2019) mention that “mindset may also help explain the mechanisms underlying the desire of teachers to participate in professional development focusing on the support of student learning, development of teaching strategies, or deepening of professional training” (p. 2). This is why, although some people display a fixed mindset, there are some others, like teachers or trainers, who need to be aware that changes might occur or might need to occur to evolve and to have personal and professional progress.

Professional development has a close relation to growth and fixed mindset. In many educational contexts, there is a need for creative, dynamic, and knowledgeable teachers, but the truth is that those characteristics are cultivated over the years and through experience. For Ayob et al. (2013), a creative teacher combines existing knowledge with new ways of developing different teaching processes, they nourish cognition and obtain useful results; creativity is a response to the needs of the different learning contexts. Making decisions, designing material, dealing with classroom issues, and working day by day affect the teacher’s mindset. Those stimuli impact the behavior, thinking and ways of acting of a teacher, in sum up a teacher is a person in constant change. In words by Zilka et al. (2019) “teacher mindset has many forms of expression. Teachers who believe in their ability to improve will have a higher level of self-efficacy” (p. 3). An interesting issue related to growth and fixed mindset is that the more flexible teachers are in relation to their knowledge, the more expertise and improvement they can get from their work. As Zilka et al. also assert

*A strong positive correlation has been noted between mindset and participation in professional learning opportunities as well (Thadani et al. 2010). Teachers who believed that they could improve, expressed a more positive attitude towards professional development, tended to participate more in teacher training (Gero 2013), and received more training and feedback, thereby improving their performance (Stenzel 2015). (p. 3)*

Although mindset has been characterized into two types: fixed and growth, people do not always limit their thinking to only one of them. Contexts, personality, and factors related to experience make a person to be

more strict or flexible in their way of perceiving situations and people. Zilka et al. (2019) point out that, “a reference to the factors either enhancing or inhibiting the adoption of a particular mindset can scarcely be found in the literature” (p. 3). The previous assertion implies that much of the theory found about fixed and growth mindset is related to fixed or growth mindsets exclusively and independently. In reality, factors such as work environment, relations with colleagues, administrative regulations and more external variables influence people’s mindset, behaviors, and perceptions. Dweck (2016) points out that

*People often confuse a growth mindset with being flexible or open-minded or with having a positive outlook — qualities they believe they’ve simply always had. My colleagues and I call this a false growth mindset. Everyone is actually a mixture of fixed and growth mindsets, and that mixture continually evolves with experience. A “pure” growth mindset doesn’t exist, which we have to acknowledge in order to attain the benefits we seek. (p. 2)*

In regard to fixed and growth mindset, there is a distinction that can be made. It is said that a fixed mindset has to do with the fact of thinking that there is nothing else to be learnt or that is a way of thinking cannot be changed. On the other hand, a growth mindset is open to possibilities, to different points of view and changes. For Dweck (2016),

*Individuals who believe their talents can be developed (through hard work, good strategies, and input from others) have a growth mindset. They tend to achieve more than those with a more fixed mindset (those who believe their talents are innate gifts) (p. 2)*

As the previous author mentioned, learning makes the difference between people with a growth or a fixed mindset. A growth mindset individual focuses on receiving information, analyzing and on making the necessary changes in their professional life. While a fixed mindset individual seems to feel sure about his/her actions and there is no place for changes or more importantly there is no place for learning. As Dweck (2016) illustrates

*When entire companies embrace a growth mindset, their employees report feeling far more empowered and committed; they also receive far greater organizational support for collaboration and innovation. In contrast, people at primarily fixed-mindset companies report more than one thing: cheating and deception among employees, presumably to gain an advantage in the talent race. (p. 2)*

Fixed or growth mindsets and intelligence are correlated. Some people believe themselves as intelligent, some others believe that intelligence is a skill to strengthen. Alike mindset, intelligence can be determined in two different paths. For Dweck (2000), intelligence may be viewed in two ways: entity or fixed mindset and incremental or growth mindset. The former view considers that intelligence remains unchanged, whereas the latter view perceives intelligence as expanding and developing. In this sense, after reviewing the different implications for fixed and growth mindsets, it is worth mentioning that people who exhibit a growth mindset are more likely to achieve professional goals and overcome difficult professional situations.

Mindset is not always the same for every person in all situations. Growth or fixed mindsets can be displayed according to motivations or to the contexts in which, for the case of this study, a teacher is involved. Similarly, moving between fixed and growth mindsets can happen due to several intrinsic or extrinsic factors and its performance is related to personal analyses, according to Dweck (2009).

*Although abilities are always a product of nature and nurture, a great deal of exciting work is emerging in support of the growth mindset. New work in psychology and neuroscience is demonstrating the tremendous plasticity of the brain—its capacity to change and even reorganize itself when people put serious labor into developing a set of skills. Other groundbreaking work (for example, by Anders Ericsson) is showing that in virtually every field—sports, science, or the arts—only one thing seems to distinguish the people we later call geniuses from their other talented peers, this one thing is called practice. (p. 1)*

Fixed and growth mindset is an interesting topic to analyze because on many occasions the decisions made concerning class planning, activities or resources are directly connected to a teacher's point of view of what is happening around him/her.

### *Pedagogical crisis*

According to the Macmillan Dictionary (n.d.), a crisis [def. 2] is “a dangerous situation in someone’s personal or professional life when something could fail”. Pedagogical crises may emerge due to an ample range of

factors. In this sense, Dolgova et al. (2020) shed light on some external and internal factors that may contribute to the appearance of pedagogical crises, namely

*work organization factor: exceeded working hours, low pay; stressful nature of work; work-related problems; – poor environment within the teaching staff; single-gender staff, conflicts among the staff and with management personnel, stressful environment causing either emotional explosions or emotional withdrawals; communication factor: the lack of communication skills and skills of handling difficult situations with children, their parents or educational administration; inability to control personal emotional states.* (pp. 25-26)

This set of factors that may trigger a pedagogical crisis is also supported by Lukianova's (2019) ideas. She asserts that "educational needs purport acquisition of new knowledge, define professional and personal growth, enable socialisation, self-realisation, and also form a way of life" (p.156). In her view, among teachers' educational needs may result in relevant mind shifts leading to the transformation of emotions, motivation, even willingness and improvement or detriment of their professional performance. What the previous author emphasizes is that negative situations lead to reflection and development, for example in teachers, a pedagogical issue may cause courses of action oriented either to growth mindset or fixed mindset, which means, to work on changing reality or keeping the same course of action without reflecting on the results.

## Method

### *Participants*

This is a case study aiming at determining the mindset adopted by some English teachers in their professional performance, specifically their dealing with pedagogical crises and professional challenges and the relationship between the type of mindset developed by the teachers and their actual performance. It was conducted with four EFL teachers and all of them accepted to be part of this research by signing a consent form (see Appendix 1).

### *Data collection instruments*

In this study, the data collection instruments were a survey, a journal, and an interview. Each instrument was designed by the researchers, and subsequently reviewed for language, and clarity by expert peers, who provided useful insights in order to refine the instruments prior to utilizing them. After having the feedback, the instruments were revised to be applied to the actual participants. All the data collection instruments were delivered in Spanish in order to avoid misunderstandings in the comprehension of the information and the overall time scope of the research was from July, 2020 to December, 2020.

### Survey

The survey was created to gather data concerning how teachers dealt with problems and crises at work, whether they were aware of having experienced pedagogical crises or not, and their perceptions on potential trigger facts for pedagogical crises (See Appendix 2). The first instrument included a definition of pedagogical crisis as events and situations that negatively impacted teachers' professional performance and prompted them to transform their usual practices and approaches. The survey consisted of 22 questions and was divided into three sections. The first section was aimed to explore the teachers' reflections on their teaching, thus, they answered two multi-select questions and two multiple choice questions. In the second section the participants mentioned the factors that could lead them towards pedagogical crises and answered ten Likert scale questions. The last section was developed to determine how teachers dealt with pedagogical crises; consequently, they answered seven Likert scale questions and one multiple choice question. The survey was designed in Google Forms and the participants received the link via email for them to be able to answer it when they considered possible. The survey was open for two weeks to give the participants enough time to answer.

### Journal

The journal was designed as a means to gain more knowledge about some issues displayed in the survey such as: dealing with a pedagogical crisis, influential factors for personal and professional growth, self-reflection, and self-assessment. Thus, this instrument was conceived as a more reflective tool in order to make participants express themselves about how they had faced previous pedagogical crises. According to Hayman et al. (2012), "the main purpose of journaling is to document and reflect on experiences as a way

of thinking, understanding and learning” (p. 28). In this case, teacher-participants reflected on their way to solve their pedagogical crises and determined whether they identified themselves as growth mindset or fixed mindset professionals (See Appendix 3). They were given around three weeks (20 days) to complete this task at their own pace. There was not any limit regarding the response length as they were expected to provide detailed information. The journal provided very relevant data for the researcher to clarify the responses given by the participants in the survey, as Chenail (2011) asserts researchers can also use methods such as journals, the process of writing can help researchers identify unclear or unrecognized thoughts, feelings, and impressions which might have led to bias in the study if unchecked. The journal contributed to analyze deeper the participants’ mindset according to their experience and current situations.

### Interview

This instrument concluded the data collection phase and provided more insights concerning the teachers-participants’ perceptions of their mindset toward pedagogical crises and professional challenges. Furthermore, the questions were focused towards analyzing in more detail the mindset that teachers had in their academic performance: growth, fixed or hybrid. This interview had five questions and it was originally designed by the researchers. This instrument helped the researchers to determine in detail how the participants applied changes to their pedagogy and how they reacted and reflected about their teaching. In the survey and in the journal the participants mentioned the situations they faced, in the interview they developed how they dealt with challenging pedagogical situations and pedagogical crises.

In this case, a structured interview was conducted (See Appendix 4). They were provided with a set of four open questions and one choice question. Within a period of two weeks starting from the receipt of an email with the questions, teacher-participants decided where and when to record their answers to the questions provided. In this sense, the participants were asked to audio record their answers to the questions related to facing changes derived from the use of technology within the classes, the influence of students, colleagues or institutional policies on their own pedagogical decisions and teaching practices, and the impact of mindset (fixed, growth or hybrid) on solving pedagogical crises. The participants did not feel pressured to participate in a face-to-face interview. They were on their own instead and felt free to expand their ideas and insights in order to provide as many details as feasible. The interviews’ length ranges from 4.51 minutes to 12.52 minutes. Afterwards, they were transcribed and incorporated into the data analysis matrix.

The interview allowed the researchers to collect descriptions of situations and events in which teachers-participants displayed a mindset. Thus, the abstract concepts of pedagogical crisis and mindset were finally concretized in experiences they went through at work. The survey and the journal aimed at making them aware of the notion of mindset, and then specifically reflect and grow aware of how their decisions and actions are influenced by a type of mindset through actual examples on their own.

### *Analysis procedures*

Coding was implemented to categorize and analyze data. In this sense, the data collected were registered in an *Excel* format which served as the analysis matrix. Data classification and codification set the path to establish some categories, and subsequently shed light on how teacher-participants confronted pedagogical crises and responded to professional challenges.

### Discussion

As a result of the data analysis, some categories and subcategories arose in response to the inquiry set in the present research. Categories and subcategories are displayed in the table below.

Research questions	Category	Subcategory
What is the type of mindset exhibited by a group of EFL teachers?	First category. The mindset adopted allowed to face pedagogical crises	Pedagogical crisis as a trigger for growth mindset
What is the relation between some EFL teachers’ mindset and their actual performance?	Second category. Adopting a type of mindset to face pedagogical crises	Self-assessment leading to growth and commitment
		Ongoing process of change and adjustment

Table 1: Emerging categories and subcategories

As follows, further data concerning each category and subcategory will be shown in order to have a better picture of the findings and their implications.

*First category. The mindset adopted allowed to face pedagogical crises*

At first glance, it can be stated that teachers do not have a specific mindset while performing their academic assignments. Their mindset adapts according to the situations and to the contexts in which they are immersed. In this sense, the following paragraphs are intended to answer the research questions concerning the type of mindset exhibited by a group of EFL teachers, and the relation between some EFL teachers' mindset and their actual performance.

The following paragraphs portray the categories deduced from the triangulation of the three instruments in relation to growth and fixed mindset in a group of four English teachers at a private university in Colombia.

#### Subcategory 1. Pedagogical crisis as a trigger for growth mindset.

As the research study dealt with the type of mindset teachers adopted before pedagogical crisis, they understood pedagogical crises as temporal negative teaching situations that they faced and that they solved successfully. The four teacher-participants answered the survey; three mentioned having experienced pedagogical crises. According to their answers, the main source generating a pedagogical crisis was the classroom atmosphere (three teachers), second was the relationship with students (two teachers) and in the third place, the work environment, and the administrative regulations (two teachers). Only one teacher referred to the relationship with colleagues, the implementation of ICT tools for teaching, and the fear of the unknown as pedagogical crisis triggers.

Within the framework of the present research, the participants also explained what they considered doing after going through a crisis. Teachers responded to five Likert scale questions. Consequently, it was perceived that three teacher-participants never attributed the responsibility for the crisis to external factors such as students or the working atmosphere; they sometimes ignored the crisis and continued working. Furthermore, three teacher-participants used to reflect on the causes of the pedagogical crisis. Four participants expressed that they usually asked for advice from a colleague and trying to determine the advantages and disadvantages of going through a pedagogical crisis was the least chosen. Concerning the fact of assessing the professional performance based on others' feedback, the teacher-participants slightly favored being supported and evaluated by their boss than by their students. Despite the fact that they would accept the boss' suggestions and recommendations, they tended to ground their professional growth on permanent self-reflection and self-assessment. Other research studies suggest that such behavior is typical of people with a growth mindset. They enjoy challenges and would select activities that could help them improve. Zeng et al. (2009) asserted that when teachers fail in facing difficulties, they frequently analyze the aspects that did not go well and think of the further steps to make it better next time.

The following journal entry illustrates teachers' perception of pedagogical crises.

*Daily, as teachers, we live situations that make us adjust our teaching style and provide feedback to our pedagogical labor. Most of the time, adjustments are part of the improvement of our pedagogical processes. Despite there are many students in the same course level, each group is different as it is our case in this university. On the other hand, sometimes we are forced to follow administrative guidelines even if we are not in agreement with them because we do not believe that those regulations are going to make us better teachers, but unfortunately we have to obey. (Teacher D, Journal, 14-10-2020)*

For Teacher D, there was a struggle among, what this teacher wants to teach, the administrative requirements, and the diversity in students. This struggle was more evident in the fact that teachers must make pedagogical decisions to improve their classes, but at the same time, they have to fulfill the administration commands. According to Teacher D, the orders given by the administration did not lead to improvement in teaching, instead caused confusion.

Similarly, in the interview there were teachers that mentioned other aspects related to origins and causes of pedagogical crises. For example, Teacher A asserted that students and the class environment could influence the teachers' decisions.

*The students impact the adjustments done by the teachers. Students need to be autonomous, committed, and disciplined. (Teacher A, Interview, 20-11-2020)*

Students and their ways to approach classes were important for Teacher A. For this teacher, students were the most important variable to keep classes as they are or to change and adapt them. Teacher A clarified that students were not committed, nor disciplined, and more importantly they were not autonomous. From this point of view, students are dependent, passive, and disorganized, which means that this behavior impacts the teaching style of the teacher and thus, the activities and ways to administer the classes.

On the other hand, administrative guidelines can initiate a pedagogical crisis. Teacher A mentioned a very important aspect in teaching, the freedom to choose activities, topics, or teaching methods. For this teacher, self-reflection was part of any teacher and it allowed them to change what needed to be changed, nevertheless this participant did not have the liberty to decide which activities to carry out and how to do them. The lack of free choice was felt to be the cause of pedagogical crises, as the following response shows:

*Self-reflection concerning the content that we teach along the semesters. Sometimes, there is no freedom to develop projects or other topics. (Teacher A, Interview, 20-11-2020)*

Teacher-participants were aware of the pedagogical crisis and its causes. In this sense, each one determined a course of action based on the triggering causes. Thus, pedagogical crises were not solved or overcome in a single manner; however, the teachers could adopt a different mindset: growth, fixed or hybrid. In this case, the four teacher-participants concluded that they usually adopted a hybrid mindset. In this regard, Teacher A stated that

*Reflection has not been permanent during her professional performance. (Teacher A, Interview, 20-11-2020)*

In contrast, Teacher C, as illustrated in the quote below, pondered the power of action as a manner to overcome pedagogical crisis, which definitely rendered an alternative perspective concerning how mindset impacts on attitudes and decisions:

*Permanent action rather than paralyzing and getting stuck promotes adjustment-making, corrections, and growth. (Teacher C, Interview, 03-12-2020)*

Pedagogical crises are an opportunity to adapt and adjust. The participants of this research study revealed that they had been exposed to institutional parameters, stress because of the classes, to the relations with colleagues that produced pedagogical crises. Although crises were taken as having a negative immediate impact on teachers, they overcame their feelings and demonstrated to themselves that from big problems, change can emerge. These teachers adapted their teaching styles, adjusted their materials choice, and they grew professionally and personally.

As a manner to answer the research question concerning the mindset adopted by teachers while facing a pedagogical crisis, teacher-participants tended to exhibit growth or fixed mindset based on the triggering circumstance. The analysis of some of their answers showed that they were able to differentiate situations in which change and self-improvement were most commonly used. However, they also acknowledged that most labor situations were determined by factors out of their control, such as institutional policies or students' learning background. Thus, mindset tends to fluctuate, and it may be concluded that four teacher-participants developed a hybrid mindset, which included some features and attitudes related to either growth or fixed mindset.

In the data, teachers mentioned that sometimes their mindset could be fixed or growth; their mindset relied on the situations that they were living. Teachers were autonomous inside their classes and they decided what they wanted to change or adjust, but when it was related to institutional or administrative requirements, the participants had to accept what was assigned and to try to deal with what they thought was correct to do and to what the institutions required be done.

*Second category. Adopting a type of mindset to face pedagogical crises*

As a way to face pedagogical crises and attempt to provide a solution to the triggering factors, teachers may adopt a sort of mindset that can be fixed or growth or a combination of both. Confronting pedagogical crises involves an analysis of the aspects which may negatively influence the teachers' performance in scenarios such as the classes, interaction with students and also the fulfillment of administrative tasks. As a result of the analysis they usually conducted concerning the pedagogical crises, they tended to determine

a course of action that may have been suitable so as to overcome the pedagogical crisis itself and be able to avail themselves with professional experience to face similar future circumstances.

#### Subcategory 1. Self-assessment leading to growth and commitment.

Self-assessment constitutes a pivotal factor when referring to professional growth and commitment. It highly determines the course of action selected so as to take advantage of pedagogical crises and nurture a growth mindset. DeLuca (2019) argues that "a growth mindset involves believing that ability, intelligence, and talent can be developed through effort, persistence, and teaching" (p. 159). Data collected from the survey provided insights in this regard. When confronting a pedagogical crisis, all of the teachers reflected on the causes and asked for advice from a colleague. Furthermore, the participants considered the advantages and disadvantages of a pedagogical crisis, and they usually adopted a self-evaluating attitude concerning their own capacities. In this sense, they agreed on self-assessment as a vital step to make changes and improve their professional performance. This idea was supported by three teachers out of four who were used to improving their teaching practices and criteria based on constant self-assessment and reflection. Likewise, three teachers out of four considered negative aspects not to be permanent and to foster ongoing improvement.

Previous data were corroborated by the information provided in the journals. Teacher C referred to growth mindset as a tool which allows teachers to self-evaluate and grow. In addition, this teacher mentioned that becoming involved in self-evaluating his own professional performance gave rise to his recognizing his own mistakes and committing himself to avoid the repetition of errors associated with previous decisions. Correspondingly, Teacher D expressed that growing and becoming more professional over time was a long-term process characterized by ups and downs:

*In my case the personal and professional experiences have helped me to grow as a person and as a teacher and they have also helped to change aspects of my fixed mindset that I usually consider I display when I face some processes for the first time. (Teacher D, Journal, 14-10-2020)*

Furthermore, Teacher B pointed out that responsible self-assessment resulted in decision-making processes leading to changes, growth, and commitment. Thus, it is the individual who ultimately makes the decision to change and prepare for future challenges. Consequently, Teacher B asserts that

*I learnt to handle myself with the digital resources... I did not know much of them... we have to live with pedagogical crises... how do I renew my methodology... that helps us to open ourselves to other ways to teach and learn. (Teacher B, Interview, 27-11-2020)*

About the advantages of assuming pedagogical crises as learning scenarios for teachers, Ashford et al. (2020) stated that disruptive, stressful experiences are often opportunities for growth. For the participants of this research, crises were the media to reflect about the aspects that were needed to change and also served as experiences to learn for the future. As an example of the previous statement, Teacher B considered that

*I feel that it is myself who decides whether changing or not, this is beyond students, colleagues or administration. It is me who decides to be prepared for what the future might bring. The circumstances took me directly to decide the change that I wanted and that my students needed. (Teacher B, Interview, 27-11-2020)*

According to this study, another positive aspect concerning pedagogical crises deals with wisely taking advantage of hurdles and difficulties at work. Teacher C expressed that chaos (crises) is always solved, and it was necessary to undergo crises in order to make changes, adapt oneself, and evolve. In this sense, Teacher D remarked that holding a positive mindset was required to be capable of reflecting on one's own performance within the classes or concerning various academic and administrative tasks.

As this category shows, teachers saw positive outcomes in their development. They changed their points of view and ways of thinking according to the situations that they experienced. Moreover, they perceived that changing their mindset or not was a personal matter. In fact, Felman (1992) pondered crisis as a key element of teaching. In his view, "[...] teaching in itself, teaching as such, takes place precisely only through a crisis: if teaching does not hit upon some sort of crisis, if it does not encounter either the vulnerability or the explosiveness of a (explicit or implicit) critical and unpredictable dimension, it has perhaps not truly taught" (p. 53). Thus, teachers may become better professionals provided that they learn to consider



pedagogical crises as scenarios for conducting responsible self-assessment so as to cultivate growth mindset and commitment.

Teacher-participants favored reflection as a key step to become better professionals. Their answers also revealed that they resorted to other colleagues or even their boss to figure out ways to solve the triggering factors for a specific pedagogical crisis. Growth mindset is more perceivable when drastic changes must be done. Teachers are used to working according to their teaching styles or what their experience tells them that is more convenient. The years that they have been working are the material to make choices in relation to classes and students.

### Subcategory 2. Ongoing process of change and adjustment.

In the mapping process for determining fixed and growth mindset in a group of English teachers, the participants have exhibited some features that are worth mentioning. These teachers adapt, change or adjust their teaching methodology and their own selves to meet what they believe is administratively and educationally acceptable. While working, they have realized that the way they are and work must be changed, all of this under the perception that those changes will improve their roles as teachers. In the survey, the four teacher-participants mentioned that they regularly reflected and assessed their labor in order to improve their teaching practices. Similarly, they (four teachers-participants) usually made changes according to how they perceived their abilities and limitations. Despite the fact that they counted on others to overcome pedagogical crises, the way to confront them usually arose from self-reflection rather than from others' opinions.

*My way of thinking allows me to find moments for me to reflect and grow, I have learnt to accept and understand that mistakes are part of the process and I am aware that I must avoid making the same mistakes over and over, that way I can embrace all of the improvement opportunities that emerge and at the same time, I can be responsible for the consequences that my teaching can have. (Teacher A, Journal, 25-09-2020)*

The previous data are supported by the other instruments in which teachers reflect about the incorporation of changes looking for improvement. For example, in the journal Teacher D indicated that the adjustments let them include activities to enhance students learning and that at the same time, made them aware that the pedagogical knowledge increases by exploring other alternatives for teaching:

*[The changes and adjustments done in my pedagogical labor] have had an [impact] because they have allowed me to include some strategies that benefit my students' learning. (Teacher A, Journal, 20-11-2020)*

In this regard, Land et al. (2005) and Boyd (2014) asserted that under the growth mindset perspective learning could require discomfort and challenging circumstances in order to take place. For the participants, negative issues or difficulties were opportunities to keep working and solve problems. For some of them, crises were a way to go forward and move out from their comfort zones. Furthermore, it is interesting to analyze that these teachers learned every time before any situation that became problematic or challenging. In this case, participants faced unknown and demanding situations requiring them to go a step forward, innovate, and learn to cope wisely with new administrative guidelines and online teaching scenarios. Thus, unexpected events led them to make decisions concerning their professional growth and pedagogical practices. Teacher C declared in the interview the value of crises:

*It allowed me to comprehend that every problem has a solution. Sometimes, there is chaos, but it is necessary to be in chaos to apply changes, adapt and evolve. (Teacher C, Interview, 03-12-2020)*

For these teachers, self-encouragement was the way to support themselves when there was no one to give them strength. They did not just have to learn and adapt their pedagogical style in crisis times, they also motivated themselves to make their work easier and more dynamic. They were very optimistic despite the fact that sometimes the circumstances were not very good. Even a chat with colleagues could influence the way they thought, as illustrated here:

*If the situation is hard, it will finish in any moment. No matter how much it rains, let's move, anything bad can happen. I consider myself a positive optimist. Everything happens for a reason. I could talk with a teacher of the ILE [languages institute] and I must say that she was a good influence for me and my mindset. (Teacher B, Interview, 27-11-2020)*

For most teachers, crises bring with them opportunities to keep growing. A growth mindset is revealed when people learn from situations that are not positive. Teachers, such as Teacher B, wrote in the journal that the work done had been examined and improved through the experimentation and the analysis of the events that happened daily:

[The negative aspects] have changed my professional and personal labor. I feel more committed in my job, I must acknowledge that by means of different pedagogical resources I have improved my pedagogical strategies. (Teacher B, Journal, 26-09-2020)

As they mentioned, problems were temporary and they helped them to grow professionally and to find solutions to what had happened. Evolution is a characteristic of these teachers; they saw themselves as facilitators and as professionals that would never stop learning. Exhibiting a growth mindset is a process, these participants learned from what they lived and through analysis they could find their own professional path to solve unexpected situations.

Based on the previous analysis, it is observed that the teacher-participants displayed a positive attitude toward pedagogical crises as they were able to foresee the derived benefits in terms of building learning communities with their colleagues, gaining experience in dealing with some recurrent issues in the classroom, and adopting a pragmatic posture toward institutional policies or mandates. Consequently, attitudes related to change, involvement, self-analysis, self-assessment, and colleague support correlate to growth mindset, conversely; stagnation, inability to make changes or propose alternative courses of action to solve a pedagogical crisis account for fixed mindset. Thus, it is evident that teachers' actual performance and decisions are profoundly pervaded by the sort of mindset they adopt.

### Conclusions

This study focused on determining the mindset adopted by some English teachers within their professional performance. As a result, it provided the description of how a group of English teachers of tertiary education coped with pedagogical crises and their own identification as fixed mindset teachers, growth mindset teachers or hybrid mindset teachers. Thus, conclusions specifically concern the two main variables of the present study: pedagogical crises and growth mindset. Regarding pedagogical crises, teachers tended to assume a reflective approach. As a result, they were capable of self-evaluating their performance and determining their strengths and weaknesses. They did not stay static, in contrast, they attempted to set a course of action in order to effectively tackle the issue. Secondly, we could distinguish some influential triggering factors for pedagogical crises, such as administrative regulations and the relationship with students. Being aware of the nature of the pedagogical crisis allowed teachers to adopt a particular approach toward resolving it. As for growth mindset, we had the opportunity to observe two outstanding outcomes. On one hand, participants explicitly established some requirements for being considered as a growth mindset teacher. In their view, growth mindset involves self-reflection on the pedagogical practice, self-assessment oriented to change, adjustment, and constant improvement, and error acceptance. On the other hand, all of the participants saw themselves as hybrid mindset teachers. On this basis, they exposed some features associated with a hybrid mindset: that self-reflection on the pedagogical practice tends not to be constant, reluctance to change and unexpected teaching scenarios, uncertainty and stress, mood, among others.

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## Appendix 1

### Informed Consent



#### Formato de consentimiento

Yo, \_\_\_\_\_, expreso mi consentimiento informado para que el grupo de investigación DRIE (Doing Research to Improve Education), utilice la información que he proporcionado en mi encuesta, journal y entrevista en relación con la investigación de mentalidad de crecimiento y mentalidad fija (growth and fixed mindset) en docentes adscritos al Instituto de Lenguas Extranjeras de la Universidad Santo Tomás sede Villavicencio

Igualmente he sido informado(a) que mi nombre real, como participante, no será utilizado y que si lo requiero podré acceder a los datos recolectados cuando lo crea necesario.

Cordialmente,

\_\_\_\_\_

Nombres y apellidos

## Appendix 2

### Survey

The research group DRIE is conducting research aiming to determine the way in which teachers resolve their pedagogical crises, and the present survey is the first instrument to be applied. Pedagogical crises refer to events and situations that negatively impacted teachers' professional performance and prompted them to transform their usual practices and approaches.

1. From your professional assignments, you are used:
  - a. To assess your achievements and limitations
  - b. To assess your achievements and limitations to consider further changes
  - c. To ignore what happens when there are negative aspects
  - d. To be focused only on positive aspects
  - e. To consider that the negative aspects are not permanent and that they promote improvement
  - f. Other: \_\_\_\_\_
2. During your role as a teacher, you are:
  - a. Assessed in relation to your achievements and limitations without considering any changes
  - b. Assessed in relation to your achievements and limitations to consider changes
  - c. Judged by negative aspects only
  - d. Judged by positive aspects only
  - e. Considered as a teacher that is in constant improvement in relation to the negative aspects
  - f. Other: \_\_\_\_\_
3. Do you have any theoretical foundation about the concept of pedagogy?
  - a. Yes
  - b. No
4. Have you ever experienced a pedagogical crisis?
  - a. Yes
  - b. No
5. Rank the following items bearing in mind its possibility to generate a pedagogical crisis, select 1 as it does not affect me and 5 as it totally affects me:
 

a. Fear of unknown situations	1	2	3	4	5
b. Lack of professional experience	1	2	3	4	5
c. Work environment	1	2	3	4	5
d. Classroom environment	1	2	3	4	5
e. The relationship among colleagues	1	2	3	4	5

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| f. The relationship with students              | 1 | 2 | 3 | 4 | 5 |
| g. Implementation of technology                | 1 | 2 | 3 | 4 | 5 |
| h. Lack of knowledge about emergent pedagogies | 1 | 2 | 3 | 4 | 5 |
| i. Administrative regulations                  | 1 | 2 | 3 | 4 | 5 |
| j. Institutional regulations                   | 1 | 2 | 3 | 4 | 5 |

6. If you have experienced a pedagogical crisis, what has been your reaction? Select 1 as always, 2 Sometimes and 3 never.

- |   |   |   |   |
|---|---|---|---|
| a. To ignore it and keep going  | 1 | 2 | 3 |
| b. To reflect on the reason of its origin and to make changes   | 1 | 2 | 3 |
| c. To ask for advice and feedback from a colleague  | 1 | 2 | 3 |
| d. To blame the source of the crisis to external issues (the students, the work environment, the resources, etc.) | 1 | 2 | 3 |
| e. To determine the advantages and disadvantages that the crisis brings to my professional field                  | 1 | 2 | 3 |

7. In your work as a teacher, have you ever asked your students to assess and provide feedback about your performance? Select 1 as always, 2 Sometimes and 3 never.

1	2	3
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8. In your work as a teacher, have you ever requested support and help from your boss to assess and improve your performance? Select 1 as always, 2 Sometimes and 3 never.

1	2	3
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9. In your work as a teacher, you have:

- Followed strictly your own teaching style, criteria and procedures without thinking about other points of view.
- Changed your professional performance according to the principles and criteria of a specific institution.
- Modified your professional performance according to suggestions and points of view from colleagues.
- Improved your teaching, criteria and procedures based on self-assessment and constant reflection.

## Appendix 3

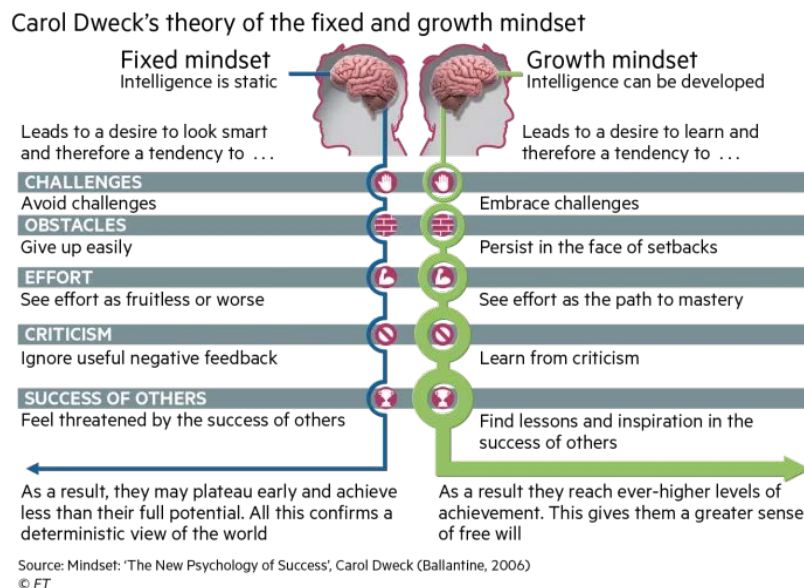
## Journal

Project: Mapping growth mindset among English teachers at higher education. A case study

Dear colleague,

The research group DRIE (Doing Research to Improve Education) of the Institute of Foreign Languages at Universidad Santo Tomás in Villavicencio appreciates your participation in the research project "Mapping growth mindset among English teachers at higher education. A case study" that seeks to investigate the way in which teachers solve their pedagogical crises. Your narrative, clear and detailed response to the following questions is requested below.

1. From your professional performance, have you experienced situations that have modified your pedagogical practice? (This includes teaching, administrative assignments, research), provide examples.
2. Do you consider that the changes and adjustments done to your pedagogical performance have modified your personal and professional growth? Develop your answer.
3. Are you used to self-reflect and self-assess your professional performance?
4. Please, describe a pedagogical crisis that you experienced, explain aspects such as the origin, your reaction, ways to cope with it, what you learnt from the crisis, your support network and more details that you consider relevant.
5. In the case of not having any pedagogical crisis, why do you think that it has not happened?
6. According to all of the previous answers, look at the information contained in the following image and select the mindset that you identify yourself the most. Please explain your answer.



## Appendix 4

### Interview

The research group DRIE (Doing Research to Improve Education) of the Institute of Foreign Languages at Universidad Santo Tomás in Villavicencio appreciates your participation in the research project "Mapping growth mindset among English teachers at higher education. A case study" that seeks to investigate the way in which teachers solve their pedagogical crises. Your narrative, clear and detailed response to the following questions is requested below.

1. From the emergent teaching mediated by digital devices, have you modified any aspect of your professional performance? Could you mention an example? What has been your self-reflection and self-assessment?
2. Among situations like students, colleagues and administration, which of them has affected directly in your decision making in your professional performance? Why?
3. Illustrate a pedagogical crisis or any other situation related to your work that has caused changes in your life. When did it happen? What were the circumstances that triggered it? What did you do? Did you have support from someone? Who was it? What did you learn? How did that crisis lead to make changes, to progress or caused a setback?
4. Did the previous situation determine your mindset? Specifically, in what?
5. In relation to mindset and according to your work duties, which of the following images describe better your mentality? Why? How does the image relate to your mindset characteristics?

- a.  GROWTH MI NDSET
- b.  FI XED MI NDSET
- c.  HYBRI D MI NDSET