

Universidad Nacional de Asunción

Facultad de Filosofía

Instituto Superior de Lenguas

Licenciatura en Lengua Inglesa

Teacher Efficacy and its Influence on a Teacher's Willingness to Differentiate Instruction

La Influencia de la Eficacia del Profesor en su Predisposición para Aplicar Instrucción

Diferenciada

A dissertation submitted in fulfillment of the requirement to obtain the degree of Bachelor of

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Betsabeth Derene

Fátima Romina Gómez Verdina

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Fátima Romina Gómez Verdina

Comisión de Evaluadores

Elena Nuñez, M.A. Carolina Ortíz Ruffinelli, M.A. Lic. Maria Rosa Ortiz Paciello

Tutoras: Valentina Canese Caballero, PhD / Lic. Romina Juana Bento de Saucedo

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## **Abstract**

Based on the article “Differentiated Instruction, Professional Development and Teacher Efficacy” by Felicia A. Dixon, Ph.D., Nina Yssel, Ph.D., and Travis Hardin, MA from Ball State University, this paper conducts a study in two private bilingual schools from Asunción, Paraguay to explore the reason behind the use - or lack of use - of Differentiated Instruction in the elementary classroom. The tools used to reach the results were: a set of questions related to differentiated instruction and Teacher Efficacy Scale (TES, Woolfolk & Hoy, 1990) consisting of 20 items with six points of response - from strongly agree to strongly disagree. Results show that the individual’s sense of self-efficacy is not a principal factor affecting the willingness to implement differentiated instructions. Other aspects such as lack of time, curriculum length, professional development among others are more influential when it comes to applying this method of instruction in the classroom.

**Keywords:** teacher efficacy, self-efficacy, differentiation, mixed ability, differentiated instruction, primary education

## **Dedication**

In the hopes that this work contributes with an educator's self-assessment, we dedicate this research paper to our fellow ISL classmates, teachers and co-workers; we know we are in a journey of continuous improvement.

To our families and friends, for inspiring us with their love and support. For guiding us and giving us a helping hand when we did not know we needed one.

To God, for guiding us and giving us the strength to continue even when we felt like quitting.

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## Chapter 1

### 1. Introduction

In an ever-changing society, where education must be viewed as an essential component for improvement and development, the methods used to provide education should also be in constant change. The role of teachers and students has evolved and they are no longer thought to be in a provider - receiver relationship. Nowadays, teachers have the task to guide, mentor, and monitor education. Likewise, students are not perceived as “empty vessels”, but as individuals with unique characteristics, whose learning is based on their own personal qualities. Among the different methods that address this idea of learning, the concept of differentiated instruction stands out. According to Carol Ann Tomlinson, this approach seeks to “provide different avenues to acquiring content; to processing or making sense of ideas, and to develop products so each student can learn effectively” (1).

In the Paraguayan educational context, differentiated instruction is still a relatively new concept. Nonetheless, it is already - in theory - applied in different institutions, and teachers are acquiring more information on the topic. Despite this, it is believed that in many cases teachers do not differentiate because their willingness to apply the theory is related to their sense of self-efficacy (Dixon et al). This self-efficacy can be defined as the “judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated” (Tschannen-Moran and Woolfolk Hoy 783).

It might be possible that teachers who believe their practices lack efficacy, decide not to differentiate because of those beliefs. This could be considered an educational problem, given the importance of differentiated instruction. In order to understand the implications of the relation

between teacher self-efficacy and the application of differentiated instruction, this mixed method research project intends to replicate a study conducted in a school district in the United States. The original researchers: Felicia A. Dixon, Ph.D., Nina Yssel, Ph.D., and Travis Hardin, MA from Ball State University, provide information about their research in the article “Differentiated Instruction, Professional Development and Teacher Efficacy”. This article has been the cornerstone to develop the mixed method in the Paraguayan educational context. For that matter, the researchers adapted the instruments, participants and school levels to the environment in which the study took place.

### **1.1 Statement of problem**

Teachers often find themselves addressing the average level student, but in a classroom, besides from the average level, there are students at both ends of the normal curve. Teachers will most certainly find struggling students who are slow paced or under the average level; likewise, the teacher will find stronger students, those who are above average, and all of them are often taught in the same classroom by the same teacher. For this reason, a mixed-ability classroom has a need for differentiated instruction, considering that what works for some students, might not work for others. (Dixon et al 1-2). The current Paraguayan education seeks to address all learners, to prepare them for life after educational institutions; yet there is no mention of how one must attain these. The teachers are expected to follow certain methodological criteria with the average student in mind, (Ministerio De Educación Y Ciencias) However, teachers often struggle to find the tools to address this diversity in the classroom, and tend to go back to traditional practices when it comes to meeting the needs of the students. There might be a variety of reasons for teachers to do this, including a teacher's sense of self-efficacy or how an educator feels about him or herself which may play a role when teachers decide to apply, or not,

differentiated instruction and other educational practices. This study seeks to find if a teacher's sense of self-efficacy plays a determinant role when teachers decide to apply - or not - differentiated instruction in the classroom, considering that self-efficacy affects how a person perceives him or herself, and consequently, the decisions they make. Differentiating in a classroom is a decision a teacher makes, if they do not feel capable, they might not apply this method. For this reason, the researchers seek to understand teachers' opinions and feelings on this topic.

### **1.2 Purpose of the Study**

The purpose of this study is to explore if the sense of self-efficacy plays a role in the application of differentiated instruction. Likewise, it seeks to find the different aspects that influence the use of this method in the everyday classroom. The objectives of this research project are to identify whether a teacher's sense of self-efficacy is a relevant factor at the time of deciding whether to differentiate or not, as well as finding other aspects, besides from sense of self-efficacy, that play a role when teachers decide to put differentiated instruction into practice. Finally, through this study, we seek to create awareness amongst educators, coordinators, school systems and community in order to improve their practices in the future.

### **1.3 Research Questions**

Considering the above, the main question for this research study is: Does a teacher's sense of self-efficacy influence his or her willingness to differentiate instruction in a mixed-ability classroom? Subsequent questions that will help answer the main questions are: How does a teacher's years of expertise influence their sense of self-efficacy? How does a teacher's professional development on differentiated instruction influence their sense of self-efficacy? What are some challenges teachers encounter when trying to apply differentiated instruction in a

mixed-ability classroom? What are some activities and tasks teachers use to differentiate instruction and how often do they use them?

### **1.4 Significance**

Education is one of the main components of society, and its value cannot be undermined. Nonetheless, in the Paraguayan educational setting, many tools are unknown by members of the community, and this lessens the importance of education and its impact. Part of these tools are methods that consider the fact that each student is an individual, with his or her own characteristics. One of those tools is differentiated instruction. An approach and philosophy still unknown by many educators in Paraguay, differentiated instruction provides different avenues to learning and allows teachers to plan in accordance to individual differences (Tomlinson 1). Through this mixed method research project, many educators will be able to understand and reflect about the impact differentiated instruction might have on their students and on themselves.

Equally important to learning about a methodology that focuses on individual differences, is the desire to actually acquire that knowledge, and the willingness to apply it in the classroom. All these matters are related to self-efficacy. The way a teacher feels about his or her own professional performance is not often addressed, but this study puts an emphasis on that aspect, and raises questions that lead to introspective thoughts about teaching. Consequently, teachers may find in themselves the desire to seek professional development, either by their own means, or by suggesting employers to provide it for them.

Finally, this study also benefits the researchers, since it provided them with new knowledge and insightful information about both differentiated instruction and teacher efficacy. Because both researchers are in the field of education, they can also go through the process of

introspection, and reflect about their own performances to become part of the educational change that Paraguay needs.

### **1.5 Limitations, delimitations and ethical concerns**

This research presents different limitations: due to time constraints and this being a mixed method research project adaptation, the researchers will not be able to observe the participants in their classes. Delimitations are also presented due to time constraint: the researchers are not able to observe or interview a larger variety of educational levels (kindergarten and high school are excluded, focusing solely on the elementary level). Since this research project is adapted to our Paraguayan context, less participants had to be chosen in comparison to the original case study. Some of the teachers, despite working at schools that claim to differentiate instruction, may still not be familiar with the methods and the philosophy, and/or may not apply it.

The ethical issues encountered in this research are concerned with getting informed consent from the school, supervisors and most importantly teacher participants that will be answering the questionnaires and scales. The researchers will ensure confidentiality and anonymity; since the sole purpose of the study is to identify the factors that influence the use of differentiated instruction. No personal information of the participants will be published whatsoever. The study guarantees that unwilling participants will not be asked to answer the questionnaires. Participants will not be forced to partake in the study in any form.

### **1.6 Preview of following chapters**

This research project is organized in the following chapters: Literature Review, Methods, Results and Conclusions. In Chapter 2, Literature Review, the researchers establish all the information, sources and terminologies related to the selected topics of differentiated instruction and teacher efficacy. Additionally, a framework for conducting this research project is provided.

In Chapter 3, the researchers give a detailed explanation of the methods, instruments and samples selected for this study. The following section, Chapter 4, provides with the results acquired through carefully selected instruments. All the data collected is analyzed and discussed in this chapter, providing the reader with a detailed explanation of each; as well as the intention to answer the research question. Finally, Chapter 5 poses the reflections and conclusions the researchers reached after careful analysis. Further studies and recommendations for the institutions are also available in this chapter.

## Chapter 2

### 2. Review of Literature

#### 2.1. Differentiated Instruction.

*“If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.”*

*-Jon Dewey*

Education and pedagogy are in a state of constant change . Because societies modify their lifestyles and needs, pedagogy and education have to adapt in order to serve their purpose (Dixon et al 1). One of the fundamental components of education is the teacher. The concept of teaching has evolved throughout the years and an educator today has different responsibilities from what he or she had during other periods of time. But it is not only the responsibilities of a teacher that have changed, it is also the way he or she is perceived by other members of society. In many educational environments, the teacher is no longer seen as a figure who transfers knowledge, but as a guide who helps students construct their knowledge, and become autonomous and self-sufficient. Likewise, the way students are perceived by teachers has also changed. No longer are they seen as mere recipients of information, with equal characteristics and needs. Nowadays, learners are recognized as diverse human beings: not one student is exactly the same as the others, and this can be applied to the way they learn, feel, and understand the world around them. Based on this reality, many methods have been developed in order to fulfill all students’ needs, despite their differences when it comes to learning. One of the many methods that take into account diversity among students is differentiated instruction.

There are a variety of definitions that come to mind when Differentiated Instruction is mentioned. The basis for defining this type of instruction is understanding that, in a differentiated classroom, similarities among students are acknowledged and built upon, and differences become essential elements in the teaching - learning process. In addition, “a differentiated classroom provides different avenues to acquiring content, to processing or making sense of ideas, and to developing products so that each student can learn effectively” (Tomlinson 1). But, after having experienced instruction that has not been adapted to students’ needs over many years, some misconceptions can arise when defining this method. It is important to understand that differentiated instruction is not individualized instruction, for it recognizes that the teacher sometimes needs to work with the whole class, with small groups, or one to one (Tomlinson 2). These characteristics might lead to the misconception that differentiated instruction is chaotic, but teachers who apply this method, and are secure and comfortable with classroom management, feel that they “exert more leadership in their classrooms” therefore, allowing for purposeful student movement and talking (Tomlinson 2). Finally, it is important to understand that, in order to differentiate instruction, ‘tailoring’ content to students’ individual needs and characteristics, while not necessarily ineffective, is not enough. As Tomlinson explains, ‘being easier’ on students, or giving them a chance to answer complex questions are not adequate challenges, and consequently, do not help them in the long run (3).

After clarifying the misinterpretations that the concept of differentiated instruction may pose, Tomlinson explains the different characteristics of this method. In order to comprehend the nature of differentiated instruction, it is important to know that it is proactive; more qualitative than quantitative; rooted in assessment; provides multiple approaches to content, process, and product; it is student centered; a blend of whole-class, group, and individual instruction; and

organic (3-5). First, the proactive dimension of differentiated instruction means that the teacher will plan a variety of activities that might serve a range of students, and allow them to grasp the knowledge. Following proactivity, it is essential to understand that differentiated instruction is qualitative, meaning that it is the quality of the tasks, and not the amount of them, that count as an effective tool for learning, in other words, “simply adjusting the quantity of an assignment will generally be less effective than adjusting the nature of the assignment to match student needs as well” (Tomlinson 4).

Differentiated instruction is also rooted in assessment. An ongoing assessment reassures that learning is occurring. Differentiated instruction suggests a type of evaluation different from the one that schools normally present to students. It is not standardized and it does not only occur at the end of a lesson. In this method, assessment happens through all the different stages in the classroom process, from the beginning, until the end of the lesson. By performing an ongoing assessment, teachers are able to plan future lessons based on their observations about students’ needs. Finally, the end of term assessment takes many forms, with the main goal to find a way for the student to best share what they have learned throughout the course (Tomlinson 4).

The core of differentiated instruction resides on its multiple approaches towards teaching and learning. Content, process, and product are viewed through different eyes, in accordance with the unique characteristics and what guides the students: readiness, interest, and learning profile (Tomlinson 45). When a teacher differentiates taking into account, he or she allows for academic growth. A student’s readiness will inevitably vary throughout the course, so the teacher must “make appropriate readiness adjustments to enable consistent academic growth for each learner” (Tomlinson and McTighe 19). Furthermore, in order to use readiness to differentiate content, process, and product, a teacher must seek to push students beyond their particular

“comfort zones” in order to achieve a higher level of competency on different skills and ideas (Tomlinson 51). When differentiating taking student’s interest into account, the teacher must know what engages his or her learners, and then build the lesson around the topics and materials that students find interesting (Tomlinson 52). Finally, taking the student’s learning profile into account is essential. Once a teacher realizes that each learner is different, and understands their different needs according to this profile, differentiation will occur almost naturally, leading to successful learning. The profile is based on four aspects: the student’s learning style, intelligence preference, gender, and culture (Tomlinson 60). This shows the complexity that undertakes the application of differentiated instruction in the classroom, but the common ground among the different approaches is that they are all “crafted to encourage substantial growth in all students” (Tomlinson 5).

Very often teachers tend to go to their own learning roots and turn their classes into a teacher centered one, when it should be student centered. Differentiated instruction puts an emphasis on that pedagogical characteristic, and makes it part of its methodology. Tomlinson assures that in a differentiated classroom, students should be active in the making and evaluation of decisions (5). As Vygotsky sought to explain, the construction of knowledge through social interaction allows for a better understanding, and grasping of the content (McLeod). Furthermore, a student-centered class develops independence and cooperation among learners, which prepares them for life.

In an environment where learning occurs cooperatively, an “organic” instruction will develop naturally. By organic, it means that all parts are connected and flow in harmony. Learning occurs from both sides: students learn through guidance from the teachers, and teachers constantly learn about their students and their own process of learning. Thanks to being

constantly aware of this characteristic, teachers know when changes are necessary, and this leads to differentiation being a “way of life in the classroom” (Tomlinson 7).

### **2.1.1. Historical Background**

Reading about the characteristics that make differentiated instruction unique among similar methodologies, leads to questioning about its origins, and if it has been thought about before. A similar idea was presented in the 1970’s, when individualized instruction was suggested. This milestone was proof that educators began to understand that students have different learning profiles, and teachers should meet those differences through their methods. However, there was a flaw in this approach: teachers tried to do something different for each learner. Because of this, individualized instruction did not stick and teachers went back to old methods (Tomlinson 2).

According to other authors, traces of differentiated instruction can be found back in the 17th. century; a number of students, with ages and abilities different from one another, were all taught by the same teacher in the same classroom (Gundlach). For instance, Roberts and Inman exemplify the same strategy by citing an extract from a book from 1917 called *Understood Betsy*. In that book, the 9 year old girl talks about how she went from a school organized by grades, to a one-room school. She felt confused about having to read literature for 7th graders, but doing arithmetic for 2nd graders. The teacher then explained to her that tasks were given according to her capacity, and not necessarily according to her age. This was done so students could learn as much as possible. In this case, differentiation becomes very important to enhance students’ strengths and keep working on the learning process (5, 6). Nonetheless, throughout the following years, the majority of schools divided students according to age, which resulted in “a wide range of learning differences in each content area in a classroom” (Roberts and Inman 6).

Although the previous examples show that differentiating instruction is not a new concept regarding teaching methodologies, for a while it was not considered as an option for instruction. However, in the United States, after the implementation of the No Child Left Behind act in 2001 and the Individuals with Disabilities Education Improvement Act in 2004, teachers began to deal with the challenge of having a variety of students in their classroom (Stanford and Reeves 3).

In Paraguay, the law for inclusive education began to be considered by the year 2000. It is based on the guidelines proposed at the World Conference in Salamanca (1994), which considers that all children should have equal learning opportunities, regardless of their sociocultural characteristics and their different skills and abilities. In this framework, inclusion is understood as the process of identifying and responding to the diversity of the students' needs. This is done by incorporating modifications in content, approaches, structures and strategies. The approach to inclusive education begins in Paraguay in the field of special education for children with different capabilities. It emerged as a pedagogical experience in 2000, promoted by the Ministry of Education (with support from UNESCO) (Ministerio de Educación y Ciencias). Although the idea to differentiate instruction is already part of the country's educational law, it does not put an emphasis on mixed-ability classrooms, but focuses on students with learning disabilities and different capacities.

### **2.1.2 Carol Anne Tomlinson**

Teachers in the United States began to face a new challenge: teaching mixed-abilities classrooms. In 1999, Carol Ann Tomlinson decided to focus on differentiated instruction applied in all classrooms - and not just for gifted learners as it was done before (Stanford and Reeves 3). Tomlinson wrote a number of books related to the topic of differentiated instruction. She has 21 years of experience as a public school educator, working with children and adolescents.

Furthermore, Tomlinson administered different programs for struggling and advanced learners. She also teaches undergraduate, master's and doctoral students about curriculum and differentiated instruction (ASCD Author - Carol Ann Tomlinson). The term mixed-ability classrooms came into the picture after Tomlinson pointed out that all classes have a wide range of students' capacities. Through her work she encourages teachers to adapt to these mixed-abilities and be able to differentiate as much as necessary.

### **2.1.3. Relevance**

The main goals of education are that students acquire the necessary tools to become successful members of society, and grow in all their human aspects: cognitive, personal, and psychological. In order for this to happen, education must be accessible for everyone. Teachers must assume the responsibility to teach all students, despite their differences in learning profile, readiness, or learning preferences. Teachers should look at the differences among students, learn their needs, and educate them in accordance to those needs (Norlund 2). This is not always a reality, since most educators teach to 'the middle'. The main negative consequence of this is that learners' needs, especially those with certain disabilities, are not met. In addition, the necessities of learners with special needs do not always - or almost never - coincide with a one-size-fits-all instruction; these events might lead to school drop-out, and even unemployment (Rock 3). Because all students need the same opportunity to learn, and overcome difficulties regarding their learning, differentiated instruction is relevant to the educational system of the 21st century. Applying differentiated instruction implies that the teacher will, many times, make decisions that modify certain parts of the curriculum in order to meet the learners' needs. Focusing on core concepts, and understanding the objectives and outcomes of the lessons is essential in order to

create differentiation in a way that all learners grasp the same knowledge, at their own pace, and in their own ways (Norlund 2-3).

## **2.2. Differentiated Instruction in the classroom.**

Applying differentiated instruction in the classroom conveys a lot of different factors that must be considered. Knowing that “learning takes place most effectively in classrooms where knowledge is clearly and powerfully organized, students are highly active in the learning process, assessments are rich and varied, and students feel a sense of safety and connection” (Tomlinson 8) is the lead to develop a variety of methods and strategies in order to promote an environment where the needs of the learners are met as effectively and thoroughly as possible.

In contrast to what is done in a traditional classroom, differentiated instruction bases the teaching methods on students’ learning needs, joining it with the curriculum. This means that teachers provide the learners with “tailored” tools so they can feel comfortable with their learning (Heacox 2). Teachers also provide students with a variety of instructional formats: whole class, small group, partners, and individual work. Grouping is done in order to attend learners’ needs, and the ones with the same needs are put together. Similarly, the same needs are taken into account when providing instruction, since the pace of it will vary for some learners, if that is what they need (Heacox 2). In addition, instructional strategies also vary and go from lectures, to manipulatives, role plays, simulations, or readings. (Heacox 3). The schools must also be adequate to the different changes a differentiated instruction requires. When the whole school building is “fluid” students are able to utilize all premises as an extension for their classroom. Likewise, teachers are able to encourage student movement throughout the school, in accordance with specific learning needs and curriculum considerations (Norlund 5).

Giving students the opportunity to choose their own activities based on their interest allows for the development of intrinsic motivation (Berntsen 13), which leads to a better understanding of the topic. For this reason, this strategy is also applied in differentiated instruction. Furthermore, students are also able to complete tasks and activities based on their learner preferences, as well as on their needs (Norlund 4).

Regarding assessment, differentiated instruction also varies in comparison to a traditional classroom. As previously mentioned, assessment is an ongoing process, so during a lesson, teachers first make sure to know the students' previous knowledge of the topic. Likewise, teachers also check students' learning throughout instructional sequences. Another important aspect has to do with using demanding higher-level thinking when teaching a lesson, as well as critical and creative thinking when providing enrichment works and tasks (Norlund 3).

### **2.3. Role of the Student**

When it comes to differentiate instruction, the most important aspect that should be taken into account is the students and their needs. The environment in which the learners acquire knowledge must be safe, challenging, and supportive for each student. It also should 'invite' them to learn (Sousa and Tomlinson 9). In order to create this environment, teachers must understand that students learn differently, and at their own pace. Howard Gardner and his theory of multiple intelligences back up the idea that different means of presentation should be inherent to the instruction provided to learners (Gardner 351).

Asides from the cognitive differences, the emotional aspect also plays an important role when teaching. Motivation to learn is essential for students. When motivation is part of their learning process, the students feel safe, and willing to keep learning. Differentiated instruction helps with this process by providing students with rewarding opportunities, where they feel safe

and seek to continue acquiring new knowledge, for they see it as an interesting addition to their lives, and not as a burden, or something that they need to know just to pass a test (Sousa and Tomlinson 14). In addition, social components are also added. Vygotsky emphasized on the importance of constructing knowledge through socializing (Daniels 5). Constructive social interactions do not only generate positive emotions, but they also collaborate with the development of executive functions, and therefore enhance learning and retention. Teachers that differentiate instruction have to make sure that a constructive environment is part of their lessons (Sousa and Tomlinson 14).

It has already been stated that the needs of the learners come first when deciding to differentiate, but these needs vary according to the characteristics of the students, and whether they are identified as ‘advanced learners’ or ‘struggling learners’. Whichever the case is, all students want to succeed, and have the right to do so (Sousa and Tomlinson 21). Overlooking the needs of students considered gifted or advanced is a common mistake teachers make (Norlund 59). This may lead to students becoming mentally lazy, thinking grades are more important than ideas, and being praised is more important than taking intellectual risks; they might also fail to develop a sense of self-efficacy and even study and coping skills (Tomlinson 11, 12), hence the importance of differentiation. When a teacher understands these risks, and differentiates in accordance to advanced students' needs, the outcomes vary and the learners can fully exploit their capacities.

Students who struggle are normally the ones who receive most of the focus in a classroom, and although it is necessary, the teachers should know how to differentiate for these students in order for the instruction to be helpful, and not damage them emotionally. The learning struggles that students might go through have different sources, and the teacher must be

able to identify them, these can go from learning disabilities, to personal troubles, and even a failure in instruction (Tomlinson 12). Despite the reason, teachers should be able to find positive aspects in the struggling learners, emphasize their strengths, pay attention to relevance, help students to grasp the ‘big ideas’ and key concepts, use as many avenues to learning as possible, work for learning in context and show the students that the teacher believes in them (Tomlinson 14).

#### **2.4. Role of the Teacher**

The teacher who differentiates instruction plays many roles in the classroom. They become multitaskers because they need to manage and monitor many activities simultaneously (Tomlinson 2). Furthermore, they also are mentors, who need to give students different responsibilities, so they can become autonomous, but also develop the capacity to handle problems and solve them (Tomlinson 16). In addition to the variety of roles that teachers should play in a differentiated classroom, it is important to understand that teachers in the 21st century are surrounded by many expectations. Teachers should be able to provide information to students, but also be prepared to enable a mixed-ability group of students to acquire and grasp knowledge that may go from simple to very complex (Darling and Hammond 1).

What differentiation suggests the teacher should do may be seen as activities that sometimes can catch some learners’ attention, while bore, confuse, or irritate others, but that should not be the case. A differentiated instruction proposes that teachers think about a variety of activities, so they can reach most learners, if not all of them, without reaching a point where frustration - both for teachers and students - may arise (Tomlinson 17). Furthermore, teachers need to understand students as a whole, realizing that it is not only cognitive skills that need to

be developed, but that emotional and social skills are an inherent part of learning (Darling and Hammond 1).

In order for teachers to be effective in providing the right tools to differentiate, professional development is a crucial and ongoing component in teaching. Having pedagogical knowledge allows the teacher to feel comfortable with his or her classroom management skills (Tomlinson 2), but it comprises much more than just being able to manage the class. Teachers are, as their students, in a state of constant learning.

## **2.5. Efficacy**

In order to differentiate, it has been stated that teachers must take into account, among other characteristics, each student's uniqueness. Likewise, it is important to understand that teachers are human beings; each human being is unique and has feelings. Whether they are positive or negative, feelings have a big impact on the way a person behaves; not only in personal relationships, but also on how they perform in the workplace. If a person does not feel happy with his or herself, this might impact the perception he or she has about their practices and performance in the workplace, and might affect their efficacy. This efficacy might be affected by the sense of self-confidence and even by the levels of self-esteem he or she might have. In order to be effective in a task, a person's sense of self-efficacy plays an important role.

### **2.5.1. Self-Efficacy**

Robert Bandura proposed the term self-efficacy, which can be understood as “a person's beliefs about their capabilities to produce effects.” According to his theory, a person who perceives his or herself with a high level of self-efficacy can enhance their accomplishment and overcome different challenges. Likewise, a person who believes in his or her own abilities is more likely to reach his or her goals; contrary to people who doubt their abilities and tend to

avoid difficult tasks, because they see those tasks as threats (Bandura 1978, 2). A person's perceived self-efficacy is another important concept, it can be understood as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (Snyder and Lopez 2).

Whereas self-efficacy has to do with a person's own judgement about his or her capacity to complete a task, perceived self-efficacy offers a more specific perspective: it relates with the different actions a person performs to reach a goal that might affect their life. Consequently, a person with a high level of perceived self-efficacy can set his or herself different goals, and have high expectations about their decisions because they believe they can accomplish them.

Once a person develops a high sense of self-efficacy, he or she may have the conviction that they can successfully behave in a way that is required to produce an outcome (Bandura 1978, 3). In addition, a person can change their behavior in accordance to the results, in case of an undesired outcome, as well as showing resilience and growth because they know their capabilities and feel confident about their actions. Likewise, "efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences" (Bandura 1978, 4); they do not give up, but continue trying despite the adversities that they might encounter. A high sense of perceived self-efficacy and self-efficacy expectations are essential to any person who seeks to succeed, and they should be part of a teacher's personality. An educator confident about his or her capabilities, willing to try new methods, materials, and pedagogies can increase their students' interest, and consequently improve their education.

### 2.5.2. Self-Efficacy and the Teacher

As to every aspect of life, Bandura's theory of self-efficacy can be closely related to education and the confidence educators have in their capacity. Applied to education, teacher efficacy can be understood as the judgement a teacher has about their capabilities to "bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Dixon et al p5). Consequently, efficacy affects the effort a teacher invests in putting their pedagogical knowledge into practice. Likewise, it also affects the goals they set, and what they aspire to accomplish (Tschannen - Moran and Hoy 1).

The "Handbook of Positive Psychology" explains that self-efficacy is something more than "self-esteem" or "... a personality trait", it is the "believe that one has the skill to do [something] under certain conditions". This goes deeper than the sheer belief of what one will do, but furthers into the belief of what one can do (Snyder and Lopez 278). In this regard, educators who are positively and confidently sure that they can do something, will take risks and perform an action that might lead to a successful learning experience. Furthermore, they will exhibit greater enthusiasm and commitment towards teaching (Tschannen - Moran and Hoy 1).

Mamie Morrow expands on Bandura's theory in her TEDx Talk "Why Self Efficacy Matters". According to Morrow, "your belief in your ability to do something outweighs what anyone else told you about what you could or could not do". A person's self-confidence plays a key role on how they approach certain goals, tasks, and challenges. Morrow also proposes that self-efficacy can be described as "one's essential belief in one's ability to succeed or fail in specific endeavors". Concepts such as resilience and personal beliefs are closely related to the sense of self-efficacy one might have in life. An educator who believes in their ability is more

likely to try new challenges, explore new methodology, and apply new ideas in the classroom without the fear of failure, but with the excitement of learning (TEDx Talks).

Self-efficacy in education can be intimidating, but it can also be very liberating. In her TEDx Talk, Morrow discusses Bandura's four sources of self-efficacy, and how they can be applicable to teachers. She emphasizes that institutions who put these sources into practice, are fostering the motivation and willingness in teachers to try new things. It is a road to success and learning.

According to Bandura, there are 4 sources of self-efficacy:

- Experiencing success, but not one that comes easily, which might lead to expect quick results and feel discouraged by failure. Bandura explains that success might be achieved by overcoming obstacles, which develops a “resilient sense of efficacy.” When it comes to teachers, this can be developed by building success upon success through breaking tasks into achievable parts; this promotes fueling and motivation to keep going, and increases a teacher's sense of self-efficacy.
- Seeing others succeed is a great motivation factor. Seeing peers reach goals and overcome obstacles that lead to successful outcomes is an important source of self-efficacy. Teaching is a job better done with the support of other members of the community; for this reason it is especially important to see others like one's self achieving success. This promotes the feeling “if you can do it, I can do it too.” Schools might foster this feeling through seminars, workshops, and peer observation, by doing so they might promote feelings of positive self-efficacy among their teachers.

- Receiving specific encouragement is another source of self-efficacy. Bandura claims that “people who are persuaded verbally that they possess the capabilities to master given activities are likely to mobilize greater effort and sustain it than if they harbor self-doubts and dwell on personal deficiencies when problems arise” (Bandura 1994). When a person knows his or her efforts are being acknowledged, this pushes them to try hard to succeed, likewise, it promotes the development of certain skills and a sense of self-efficacy.
- The final source of self-efficacy is managing negative emotions, because people rely on their emotional states to judge their own capabilities. Uncontrolled emotions might be the source of anxiety, and being able to manage this feeling, as well as understanding that anxiety is not an indicator of failure, is an important step to adapt to challenges and set goals. Furthermore, having strong emotional reactions towards obstacles is not a negative aspect, what is essential is the way a person perceives and interprets those reactions: “People who have a high sense of efficacy are likely to view their state of affective arousal as an energizing facilitator of performance, whereas those who are beset by self- doubts regard their arousal as a debilitator” (Bandura 1994).

Taking into account what Bandura states are sources of self-efficacy, as well as Morrow’s TEDx talks’ observations; one can say that self-efficacy matters because it leads to positive decision making and positive changes. Educators with a strong sense of self efficacy will develop deeper interests in the activities, goals and objectives they set for their students. Challenging tasks and problem solving will not be viewed as discouraging elements when an educator has a strong sense of self efficacy. Furthermore, they will be able to recover quickly from setbacks and

disappointments. Even if self-efficacy is not something one achieves overnight, it is certain that “self-efficacy develops overtime and through experiences” (Snyder and Lopez 279) , which is why it is important for institutions to foster this feeling of success, encouragement and safe spaces to manage negative emotions.

### **2.5.3. Self-efficacy and Differentiated Instruction**

Differentiated instruction requires effort, hard work, and even trial and error from teachers. As mentioned in the previous sections, this approach to education offers a variety of learning opportunities for students, but in order to reach all students’ needs, a teacher must have confidence in him or herself, and should be resilient, since many times the efforts might take an unsuccessful path.

Considering that a lot of factors might affect a teacher’s decision to put differentiated into practice, and understanding that a positive sense of perceived self-efficacy enhances human capacity, it can be said that they are both related. A teacher who believes in their capabilities, who is willing to experiment and go further in order to provide the best opportunities, and who learns from his or her mistakes is an educator with a high sense of self-efficacy.

In a study from 2014, Dixon et al explain that “coping with teaching issues and being able to overcome insecurities are important qualities to all educators” p.6, therefore, in order to feel confident enough to do adjustments in their planning according to content, process, product, and learning environment, a teacher must believe on his or her capabilities. An educator who lacks a sense of self-efficacy might believe that they do not have time to adjust, or even think about all the ways a lesson may fail; the effort required to develop a differentiated lesson might be too overwhelming for them (Dixon et al. 5). Although they do understand the different needs

of their students, and even the theory that backs up differentiated instruction, their lack of self-efficacy does not allow them to put the methods into practice.

Finally, Ramli and Yussof write about how a teacher's sense of self-efficacy is also one of the main factors that drives their motivation to be part of professional development related to differentiated instruction (3). All things considered, it can be stated that teachers who show self-efficacy are able to take risks and work towards improving their practices. Furthermore, they can understand that their effort is essential to help students and emphasize their uniqueness, therefore, apply methodologies such as differentiated instruction, not being afraid of failure, but learning from mistakes and developing, throughout time, the best way to put their pedagogy into practice.

Considering all the issues presented, this study seeks to understand how much influence does teacher efficacy have on the decision to apply differentiated instruction in a mixed ability classroom. This, considering the educational reality of two Paraguayan bilingual schools that claim to differentiate instruction.

## **Chapter 3**

### **3. Methods**

The following chapter explains the methods used to answer the research question in this study. This research is adapted from the following case study: “Differentiated Instruction, Professional Development, and Teacher Efficacy”, by Felicia A. Dixon, and colleagues. The researchers developed the project to fit the Paraguayan educational context, and focused on teacher efficacy related to the application of differentiated instruction in the classroom.

#### **3.1 Type of Study**

A mixed method research approach will be used to answer the research question. In this type of study, researchers use both qualitative and quantitative methods to collect, analyze, and report findings (Creswell 457). This research approach was chosen because it allows to “understand complex phenomena qualitatively as well as to explain the phenomena through numbers and charts” (Creswell 455). By using methods from both qualitative and quantitative studies the researchers seek to find thorough information to answer the research question as well as the subsequent questions related to the problem.

The researchers collected data using three different questionnaires. First, teachers were asked to answer a set of questions from a questionnaire, with qualitative components that focused on differentiated instruction. as well as two quantitative scales, with questions related to personal efficacy and teacher’s sense of self-efficacy. Finally, qualitative interviews were also conducted with selected teachers, this was done to complement and further explain their answers to the questionnaires.

### **3.2. Setting and participants**

For this mixed methods research project, participants were selected through purposeful sampling; this means, the researcher selects participants by examining instruments and selects the population that will be able to provide information essential for the study (Lodico 163). All the educators in the selected population work at schools that claim to differentiate instruction, therefore, they should be able to relate to the instruments.

This research project seeks to determine if an educator's sense of self-efficacy is a factor that influences the implementation of differentiated instruction in two institutions. Both institutions are private bilingual schools in Asunción and were chosen because they claim to differentiate instruction in all elementary levels. Additionally, they also affirm to provide their staff members with professional development focused on the topic of Differentiated Instruction.

There were a total of 22 teachers who completed the questionnaires and scales. These educators were chosen based on the following characteristics: teaching level (Kindergarten to 6th grade) and the fact that they all provide ESL (English as a Second Language) instruction. The researchers chose 4 educators to interview based on their answers, experience and willingness to participate. In the qualitative interviews, the teachers were asked questions based on the differentiated instruction questionnaires previously provided; by doing this, the answers obtained were more detailed.

### **3.3. Data collection**

In order to answer the research question: Does a teacher's sense of self-efficacy influence his or her willingness to differentiate instruction in a mixed-ability classroom? , a mixed method design, consisting of a qualitative questionnaire, and quantitative scales, were provided by the

researchers. These questionnaires and scales were based on the ones provided by Dixon et al, the authors of the original case study on which this project is based. First, an adapted version of the following questionnaire was used for the purpose of collecting answers regarding differentiated instruction:

a. Set of 13 questions used to describe Differentiated Instruction in each of the educators' classroom provided by the author of the original study, Felicia Dixon. Dixon's et al. case study included questions based on demographic information such as gender and ethnicity of the educator selected; the researchers adapted the questions to the Paraguayan educational context, eliminating specifics such as the ones mentioned (see Appendix). Some of the questions were:

i. Would you describe your student population as consisting of mixed abilities?

Please circle all that apply: · Gifted or high ability; · Average or grade level; · Below average; · Identified for special education services.

ii. How many years have you taught?

iii. Are there special characteristics that describe your students? If so, please describe these characteristics.

iv. What do you do to reach each separate ability group?

v. Do you use specific techniques to differentiate your instruction? For example, do you tier your lessons? Do you give different tasks on a specific concept covered based on the level of understanding students have? What are these different tasks?

Likewise, in order to collect quantitative data, the long version form of the following scales was handed out to all 22 members of the population selected for this research. These scales were provided along with the questionnaire, so all answers were completed

simultaneously. The scales provided quantitative data regarding teacher efficacy and self-efficacy:

- b. Teacher Efficacy Scale (TES, Woolfolk & Hoy, 1990) consists of 20 items with six points of response - from strongly agree to strongly disagree (see Appendix).
- c. Teacher Self-Efficacy Scale (TSES, Tshannen-Moran & Hoy, 2001) consists of 24 items with a response format of nine choices ranging from “None at all” to “A great deal” for each item (see Appendix).

Printed copies of the questionnaire and scales were handed out to 22 elementary school teachers from two bilingual schools in Asunción. The researchers handed out the instruments to the educators and gave them an allotted time of one work week to complete them. The teachers completed both scales and the questionnaire during the last week of November 2019. This date was chosen due to its proximity to the end of the school year. This event provides a more realistic perspective of educators’ attitude towards their educational approach inside their classes.

### **3.4. Procedures**

In order to analyze the qualitative data obtained from the questionnaires and interviews, coding procedures were used. This process began with A Priori codes, which consist of a set of codes determined before the analysis and collection of data (Saldaña 49). This set was obtained from the theory presented in the literature review, as well as the researchers’ own experience as educators. Throughout the analysis, new codes emerged and were added to the set that was previously created.

The data analysis was done following two cycles of coding procedures. The first cycle consisted on the application of Descriptive Codes, this is, a way of summarizing in a word or phrase the main topic of a section in the qualitative data (Saldaña 70). In addition, In Vivo codes

were also used during this first cycle. By applying this method, the actual language and expressions used in both the questionnaires and interviews were used as codes (Saldaña 74) which helped emphasize the importance of the educators' experiences.

During the second cycle of coding, patterns were developed by analyzing the data and the different codes. This was done in order to develop themes that would help explain the results and answer the questions raised in this research. The development of those themes was done by considering similar answers and grouping them under categories. With the aid of a statistician, different descriptive and inferential, univariate and multivariate statistical procedures were used to validate the results and variables.

### **3.5 Data Analysis**

For the qualitative data obtained from questionnaires and interviews, the process of coding was used. Before analyzing the instruments, the researchers developed 8 a priori codes. After reading the answers from questionnaires and interview transcriptions, the amount grew into 27 descriptive and in vivo codes. When conducting the second cycle of this process, patterns among the different codes led to different themes, under which each code was grouped. These themes were then organized according to the supporting questions in aid to answer the main research question. The three main themes that emerged from the coding analysis were: Tasks and Activities, Challenges, and Frequency. Each of these main themes were divided into specific categories within them.

For quantitative data, once the instruments and questionnaires were collected, the researchers uploaded the data to an online Google Form and Microsoft Excel spreadsheet in order to analyze the results. While adding the information provided by the participants to the Google Form, the researchers noticed that only one of the scales was sufficient to answer the

research question, hence, only two of the three intended instruments were analyzed: differentiated instruction questionnaire and Teacher Efficacy Scale (TES, Woolfolk & Hoy, 1990). The analysis of the data provided by the participants was done with the aid of a statistician. The following tools were also used to analyze and organize data:

- Microsoft Excel (bar graphs and charts)
- Mindmup (a free online mind mapping app)
- OTranscribe (a free online transcription tool)

## Chapter 4

### 4. Findings

#### 4.1. Teacher Characteristics

The following tables and graphics represent absolute and percentage frequency distributions of the non-scaled questions. In the table, each column represents the number of people who have the given characteristic in the corresponding row. Meanwhile, the percentage is described and represented in the bar graphs.

For the first question, the researchers asked each educator which grade level they teach. From a total of 22 participants, 13 of them (59%) answered 1st to 3rd grade, while 9 of them (49%) selected 4th to 6th grade.

Table 1

Question 1 - What grade level do you teach?

<b>Question 1</b>	<b>Count</b>
1st - 3rd grade	13
4th - 6th grade	9
<b>Total</b>	<b>22</b>

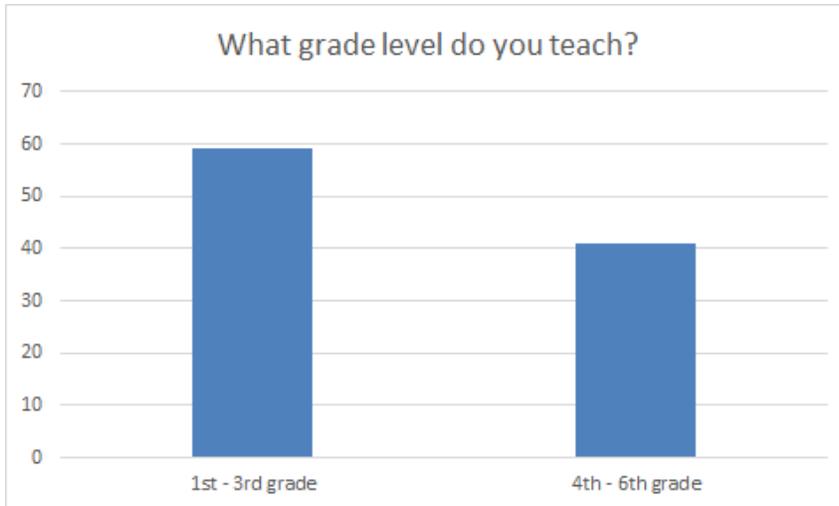


Fig. 1 Bar graphs for question 1 - “What grade level do you teach?” presented in percentages.

For the second questions, participants were asked about the years of teaching experience they have. The answers were divided into three options, which were answered as follows: 8 participants (36%) pointed out they have taught for 1 to 5 years; 5 participants (23%) answered they have 6 to 10 years of experience; finally, 9 participants (41%) have been teaching for more than 10 years.

Table 2:

Question 2 - How many years have you taught?

<b>Question 2</b>	<b>Count</b>
1 - 5 years	8
6 - 10 years	5
More than 10 years	9
<b>Total</b>	<b>22</b>

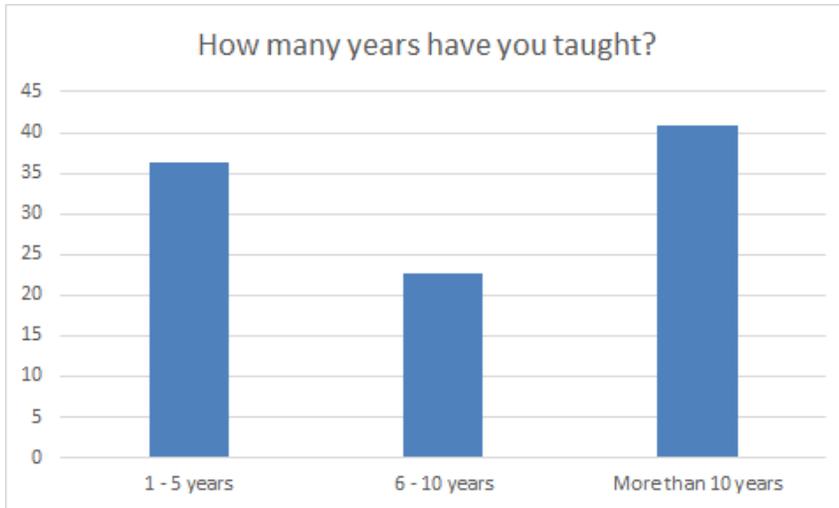


Fig. 2 Bar graphs for question 2 - “How many years have you taught?” presented in percentages.

In the third question, the topic of mixed-ability was introduced. This was done by asking the participants whether they have mixed-ability students in their classroom or not. Out of 22 participants, 8 (36%) claimed not to have mixed-ability students in their classroom. On the other hand, 14 (64%) participants answered yes to this question. Therefore, the majority of educators selected for this study face the challenge of mixed-ability students in their classes.

Table 3:

Question 3 - Do you have mixed-ability students in your classroom?

<b>Question 3</b>	<b>Count</b>
No	8
Yes	14
<b>Total</b>	<b>22</b>

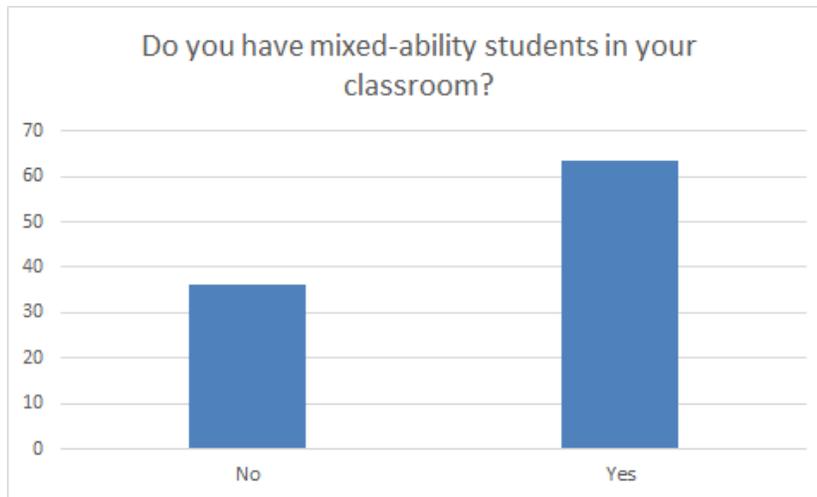


Fig. 3 Bar graphs for question 3 - “Do you have mixed-ability students in your classroom?” presented in percentages.

For question number four, participants were asked to choose the options that best described their student population’s abilities. Educators had to select all the options that applied: average or grade level, below average, gifted or high ability. Out of 22 teachers, 3 of them (14%) have both average and below average students in their classrooms; 8 teachers have only grade level students; the majority of teachers, which consist of 10 out of the population (45%) have students of all levels: average, gifted, and below average; finally, only 1 teacher (5%) have a class with both average and gifted students. Again, this shows that the majority of the teachers have mixed-ability students in their classroom.

Table 4:

Question 4 - Would you describe your student population as consisting of mixed abilities?

Question 4	Count
Average or grade level, Below average	3
Average or grade level	8
Gifted or high ability, Average or grade level, Below average	10
Gifted or high ability, Average or grade level	1
<b>Total</b>	<b>22</b>

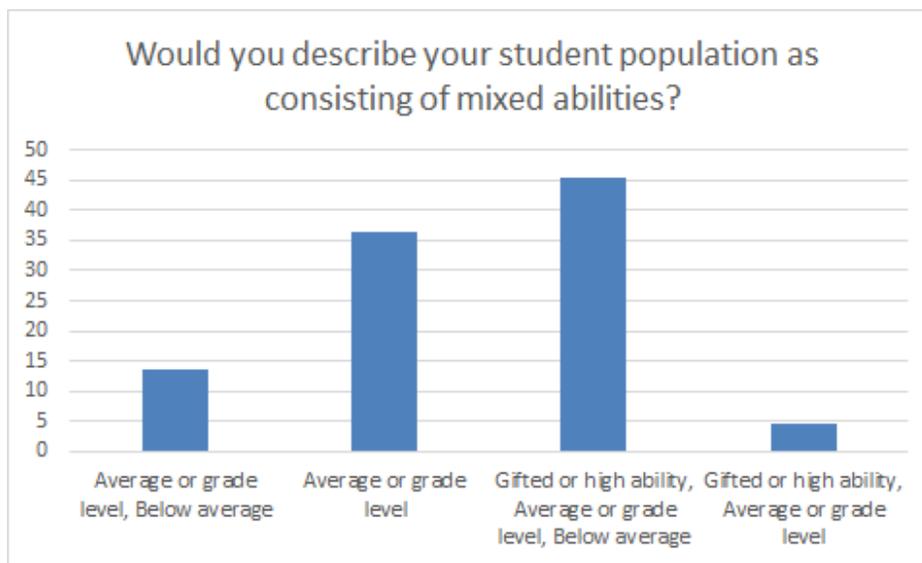


Fig. 4 Bar graphs for question 4 - “Would you describe your student population as consisting of mixed abilities?” presented in percentages.

In question number five, the topic of differentiated instruction was introduced. Participants were asked if they have had professional development of the topic. Only 3 teachers answered no, making up 14% of the population. In the last five years, 14 teachers (64%) claimed to have had professional development on differentiated instruction. Finally, 5 teachers (23%)

have had professional development on the topic during the year the questionnaire was completed (2019). Therefore, it is safe to say that the majority of educators have a notion of what differentiated instruction is.

Table 5:

Question 5 - Have you had any professional development to address differentiated instruction?

<b>Question 5</b>	<b>Count</b>
No	3
Yes, in the last five years	14
Yes, this year	5
<b>Total general</b>	<b>22</b>

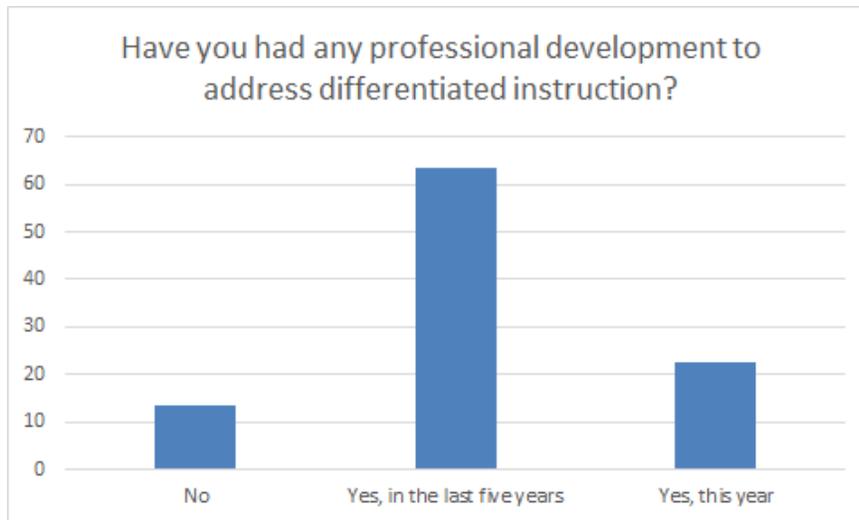


Fig. 5 Bar graphs for question 5 - “Have you had any professional development to address differentiated instruction?” presented in percentages.

Question number six is related to the answer participants gave in the previous question. They were asked about the number of hours they have had on professional development on

differentiated instruction. Although only 19 participants said they had professional development, 21 answered this question. Out of this total, 4 (19%) claimed to have had 1 to 2 hours of professional development; 11 teachers have had 3 to 5 hours, consisting of 52% of the answers. Only 2 teachers (10%) have had 5 to 10 hours, and 4 teachers (19%) have attended professional development for more than 10 hours. This shows that a majority of teachers have knowledge on differentiated instruction, but based on the number of hours they have had professional development, this knowledge might be on an introductory level to the topic.

Table 6:

Question 6 - If you answered yes, how many professional development sessions have you attended concerning differentiation in mixed ability classrooms?

<b>Question 6</b>	<b>Count</b>
1 - 2 hours	4
3 - 5 hours	11
5 - 10 hours	2
More than 10 hours	4
Total	21

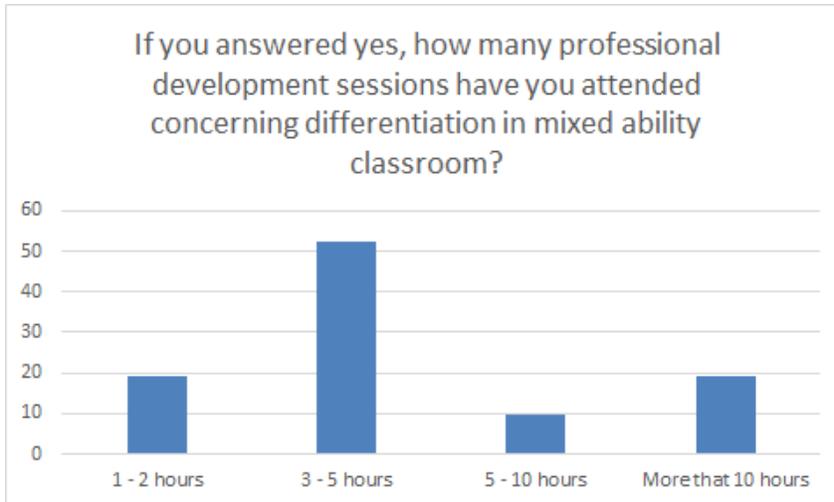


Fig. 6 Bar graphs for question 6 - “If you answered yes, how many professional development sessions have you attended concerning differentiation in mixed ability classrooms?” presented in percentages.

For question seven, participants were asked whether they apply differentiated instruction in the classroom or not. Out of 22 teachers, 18 (82%) answered yes, they differentiate instruction. On the other hand, only 4 teachers said they do not differentiate instruction, consisting of 18% of the population. These results show that most teachers have the ability to apply differentiated instruction in their classes.

Table 7:

Question 7 - Do you differentiate instruction in your classroom?

Question 7	Count
No	4
Yes	18
<b>Total</b>	<b>22</b>

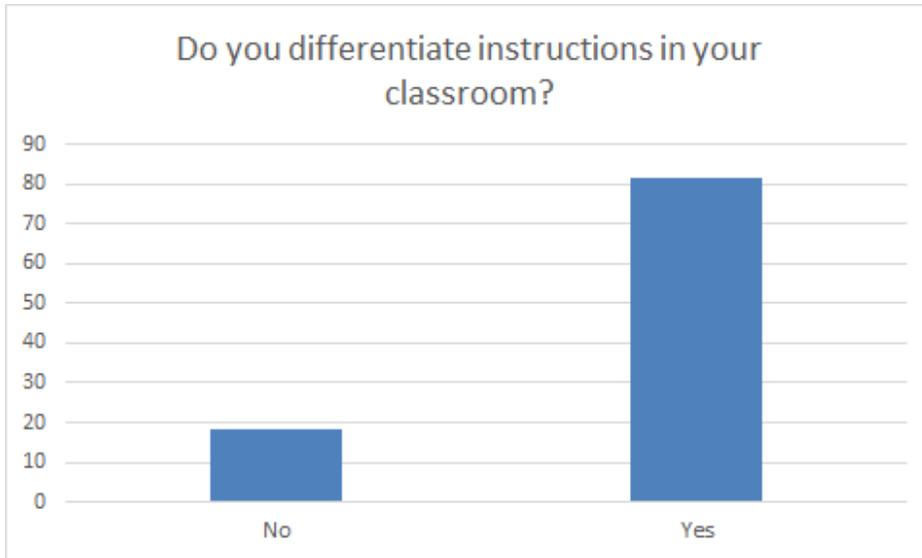


Fig. 7 Bar graphs for question 7 - “Do you differentiate instruction in your classroom?” presented in percentages.

For the last question, participants were asked whether they find challenges in applying differentiated instruction in their classrooms. Out of 22 teachers, a vast majority said yes: 20 of them (91%) claimed to encounter challenges or difficulties with differentiating; only 2 teachers (9%) answered no.

Table 8:

Question 8 - Do you encounter challenges/difficulties when you differentiate instructions in your classroom?

<b>Question 8</b>	<b>Count</b>
No	2
Yes	20
<b>Total</b>	<b>22</b>

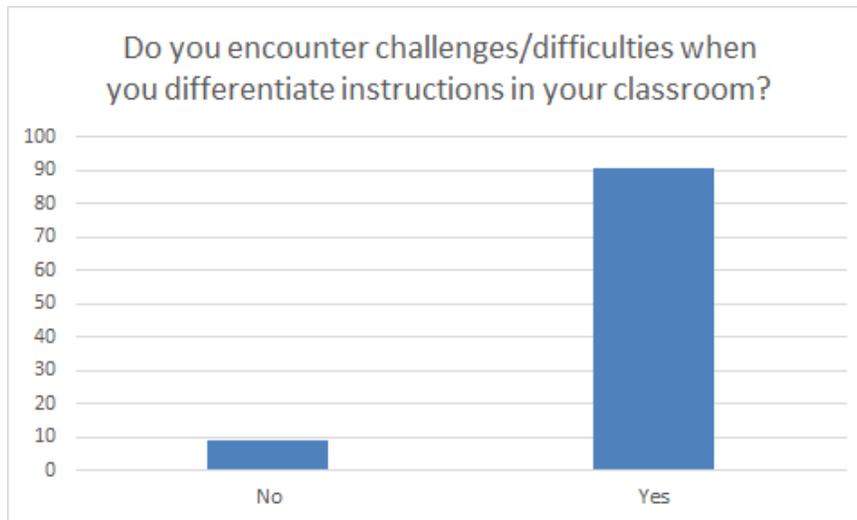


Fig. 8 Bar graphs for question 8 - “Do you encounter challenges/difficulties when you differentiate instructions in your classroom?” presented in percentages.

#### 4.2. Code description

The purpose of this study was to explore if the sense of self-efficacy plays a determinant role in the application of differentiated instruction. Moreover, it also sought to find the different aspects that influence the use of this method in the everyday classroom. For that reason, the main question that guided this research was: Does a teacher's sense of self-efficacy influence his or her willingness to differentiate instruction in a mixed-ability classroom?

Further questions that guided this research were:

- How does a teacher’s years of expertise influence their sense of self-efficacy?
- How does a teacher’s professional development on differentiated instruction influence their sense of self-efficacy?
- What are some activities and tasks teachers use to differentiate instruction and how often do they use them?

- What are some challenges teachers encounter when trying to apply differentiated instruction in a mixed-ability classroom?

In the following section, all findings and results from the questionnaires, scales, and interviews are presented. These findings come after thorough analysis of the data and the results are discussed in order to answer the main research question, as well as the subsequent questions mentioned above.

#### 4.2.1. Tasks and Activities

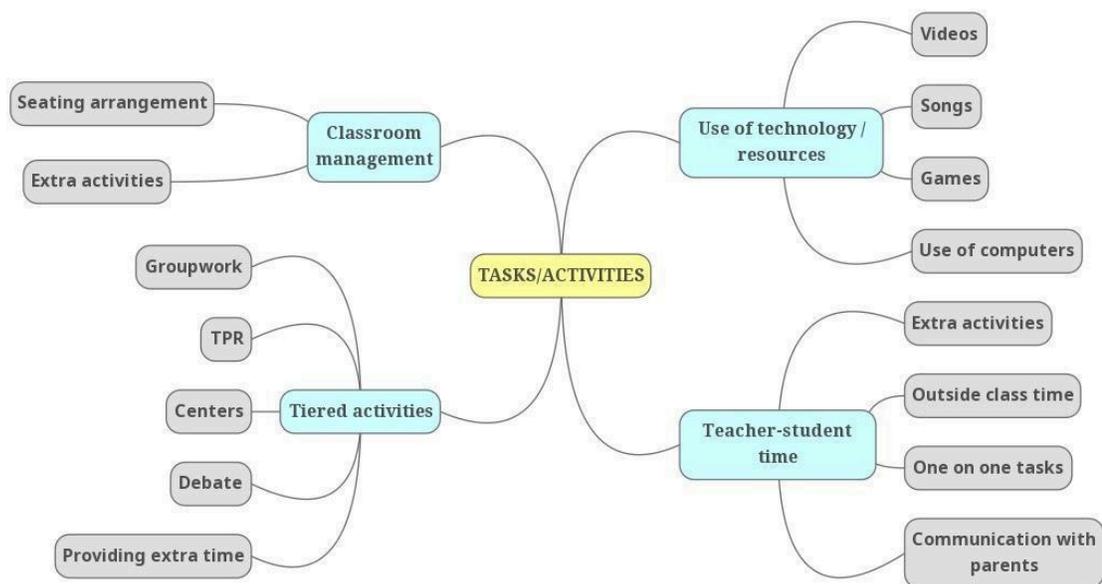


Fig. 9 Map chart showing the tasks and activities mentioned by participants.

One of the major categories found within the codes are the activities and tasks educators use to differentiate instruction. These actions and exercises show how committed they are to applying the methodology in their classroom. By explaining what they do, or do not do while teaching, educators give a clearer image of how they perceive differentiation and the way they approach it.

#### **4.2.1.1 Use of Technology and Resources**

The codes that unfolded under this theme showed that many teachers found technology useful when applying differentiation. The use of computers and showing videos to support the understanding of the lesson are the activities that teachers use the most. It was also noted that educators use different games to enhance learning. In an interview a teacher noted that “the institution provides us with the books and online resources”, which she finds incredibly useful. Another educator mentioned “... learning centers vary the level of difficulty for different tasks...some involve games or more concrete activities.”

#### **4.2.1.2 Teacher - Student Time**

Within this category, an activity that stood out was one-on-one student-teacher time. Educators rely on this method to strengthen students’ confidence and abilities, as well as understanding of the lesson. Educators commented how certain activities they apply “are with guidance of the teacher or teacher aide.” The second most mentioned activity in this category was outside class time. For instance, this participant mentions “I do a lot of group work, TPR, games, outside class time.”

#### **4.2.1.3 Classroom Management**

Although classroom management is not a differentiated instruction technique, the researchers noted that in some cases it helped the educators when trying to apply the method in their classroom. According to some educators, seating arrangement is a helpful tool when conducting leveled activities. “I switch the seating arrangements,” a teacher mentioned when asked about the techniques they use to differentiate.

#### 4.2.1.4 Tiered Lessons

Amongst the various techniques and tools differentiated instruction has to offer, tiered lessons are the most commonly used amidst educators from the selected sample for this research. These tiered lessons consist of leveled activities such as TPR, debate, group work and working in centers. Another technique mentioned by the educators is to provide the students with extra time if they need it. “I do specific skilled group work, specific target tasks. We work with concrete abstract materials to address specific concepts, skills and learning styles,” an educator mentions. One participant states “for reading I use lexiles and leveled readers to assign reading assignments. For math, the books we use have leveled practice worksheets for students below level, at grade level and at higher level.”

#### 4.2.2. Challenges

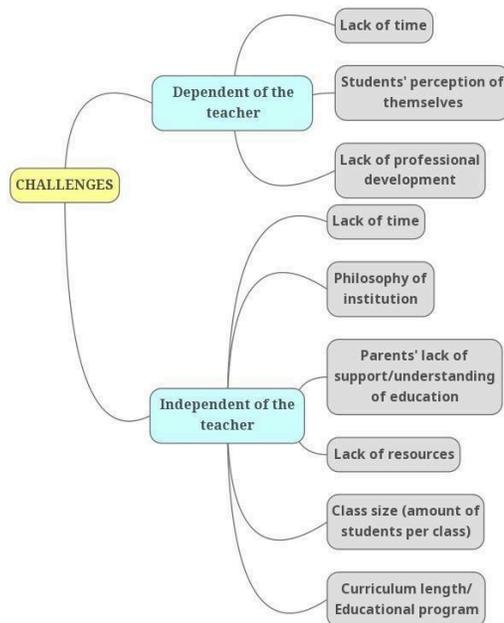


Fig. 10 Map chart showing the challenges mentioned by participants.

The second major category found when coding refers to the challenges educators encounter when trying to apply differentiated instruction. The challenges mentioned were repeated constantly throughout the questionnaires and interviews. When dividing the challenges into specific categories, it was noted that some of what was mentioned were aspects that the teacher can solve, in contrast, there were others where the solutions are “out of their reach”. The researchers then divided the challenges as: Dependent of the Teacher and Independent of the Teacher.

#### **4.2.2.1 Challenges Dependent of the Teacher**

Within this descriptive code, two out of three items were mentioned recurrently: lack of time and professional development. The teachers explained that the heavy workload combined with a superficial knowledge of differentiated instruction is the most challenging part when applying this methodology in the classroom. An educator claimed “It is difficult because I did not have specific training on it, so I do not know what to do.” Another one stated that “It takes a lot of time to plan with differentiated instruction.”

#### **4.2.2.2 Challenges Independent of the Teacher**

In contrast with the aforementioned challenges, the ones often repeated by educators in this section were: lack of time, curriculum length, class size and parent’s support and understanding. Lack of time is mentioned in both descriptive codes since teachers are expected to cover a lengthy curriculum. This lengthy curriculum, in turn, is not compatible with differentiated instruction according to an educator: “It should be part of the curriculum and the institution's way of teaching. And we only get just one program for the whole year. We do not get different scenarios, like what to do if a student has this need, or if a student does not understand

something, what should we do then? So it's not like we are trained from the beginning of the year to deal with certain differences between students.” Another teacher said “Differentiating takes a lot of time, paperwork, and our curriculum is very strong and strict.”

Furthermore, some teachers state that having a large number of students per class makes differentiation a difficult task to include in their daily life. For example, this teacher stated the following “The number of students per classroom is very challenging... I can't assist them personally all at the same time”. An unpredicted challenge mentioned by some teachers is the lack of parental support and their understanding of education. Some made claims such as “The most frustrating aspect is - parents who overprotect their children or do not accept their children's reality.” And, “A frustrating aspect is the lack of comprehension from the family. Parents do not understand how the learning process is.”

The different answers provided by the teachers show the many challenges they encounter when trying to apply differentiated instruction in their mixed-ability classes. Some of these challenges are independent from the teachers' roles, and others go hand in hand with their performance. This shows that the sense of self-efficacy is not the only factor that influences how an educator feels about applying new methodologies in their classroom, which leads to the following section: the frequency in which differentiated instruction is applied by the teachers from this study.

#### **4.2.3. Frequency**

The frequency in which a method is applied in a classroom helps students get familiarized with the method and the teachers to become more efficient in its practice. The following figure shows how often teachers from the population apply differentiated instruction in

their classes, which provides an insight on how efficient educators might be on the application of the method.

The third main category found within the codes is the frequency with which the teachers apply differentiated instruction in their classroom. Out of the 22 participants, ten said they differentiate daily; one differentiated once a week; seven differentiate less than once per week; two of them never differentiate; and two did not answer.

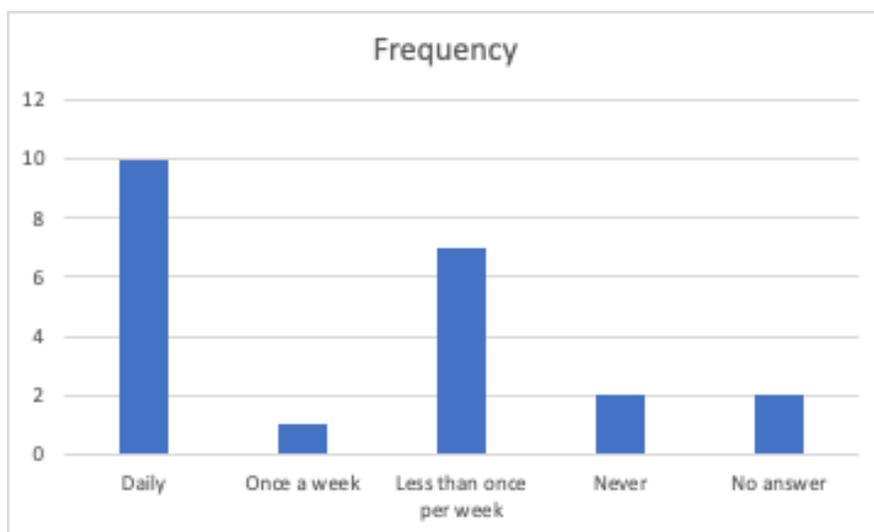


Fig. 11 Bar graph showing the frequency in which teachers differentiate instruction in their classroom, in percentages.

### 4.3 Descriptive Results / Personal Efficacy Scale (PES) and Teacher Efficacy Scale (TES)

The following bar graphs provide information regarding the sense of self-efficacy of the participants. First, the information was divided into two different scales: Sense of Personal Efficacy (PES) and Teacher Efficacy (TES), each scale with its own set of questions. Second, the overall sense of self-efficacy was determined by the researchers in order to provide an average

level of Sense of Self-Efficacy within the participants. Third, with the aid of a statistician, the results and variables were validated.

### 4.3.1 Personal Efficacy Scale

For the first section of the scale, a minimum score of 0 and a maximum score of 5 was assigned to each question, giving a maximum total of 60 points for the Personal Efficacy Scale. The researchers divided the sense of personal self-efficacy into low (0 - 35% score), medium (35 to 55 % score) and high (55 to 100 %) sense of personal efficacy. As the chart presents, 21 out of 22 (95%) educators have a high sense of personal efficacy, and only one has a sense of personal efficacy in the medium range.

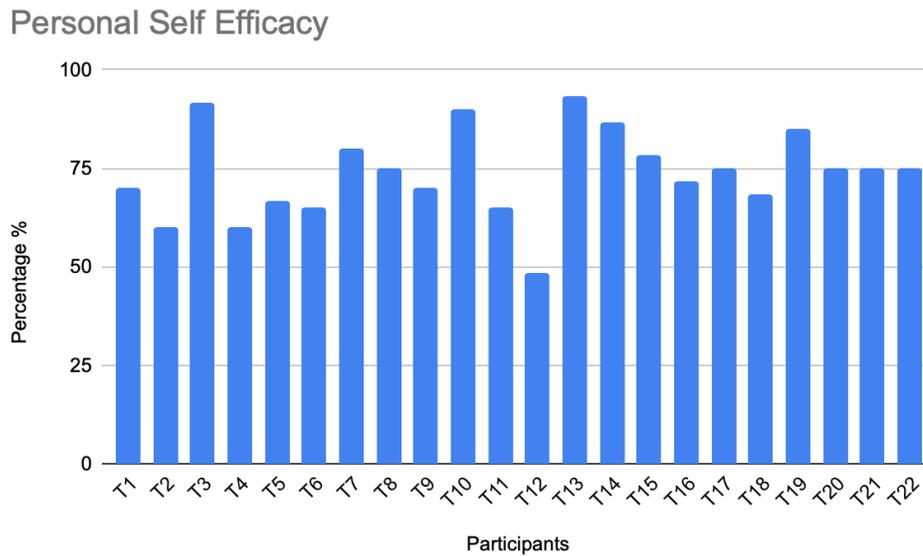


Fig. 12 Bar graph showing the level of personal self efficacy of each participant, in percentages.

### 4.3.2 Teacher Efficacy Scale

For the second section of the scale, a minimum score of 0 and a maximum score of 5 was assigned to each question, giving a maximum total of 40 points for the Teacher Efficacy Scale. The researchers divided the sense of teacher self-efficacy into low (0 - 35% score), medium (35 to 55 % score) and high (55 to 100 %) sense of teacher efficacy. In contrast with the previous chart; this one shows fewer participants in the medium to high spectrum of the scale. Out of the 22 educators who participated; seven (31.8%) have a low sense of teacher efficacy, 12 have a medium sense of teacher efficacy and 3 have a high sense of teacher efficacy.

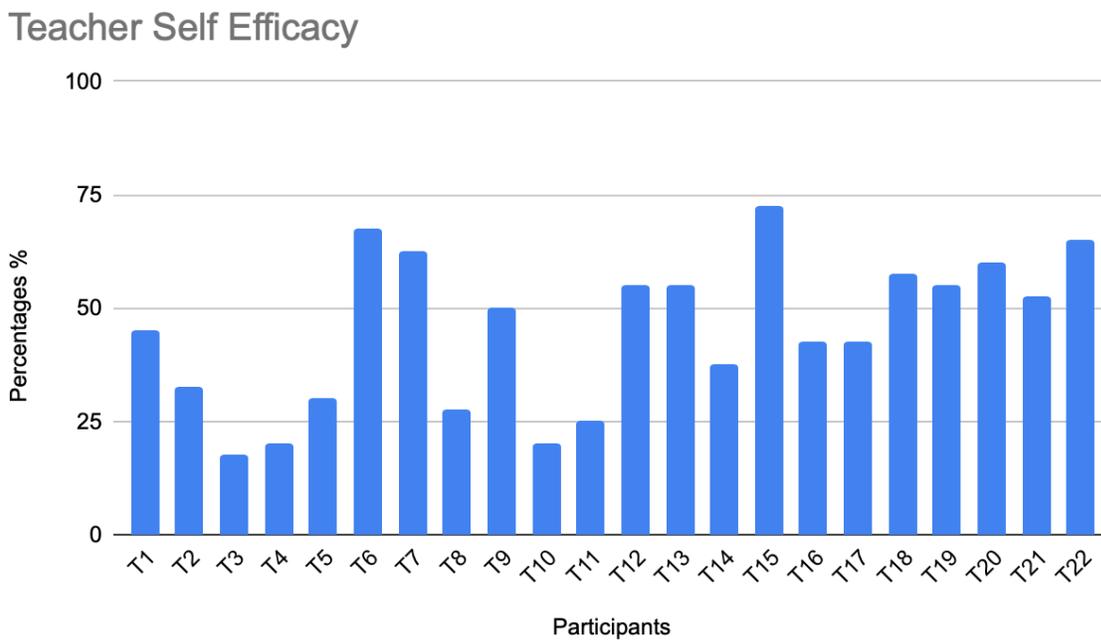


Fig. 13 Bar graph showing the level of teacher self efficacy of each participant, in percentages.

### 4.3.3 Overall Sense of Self Efficacy

As a result, the researchers combined scores from both scales in order to determine an overall Sense of Self Efficacy. The chart shows that out of 22 participants; none have a low sense of self-efficacy, 13 have a medium sense of self efficacy and 9 have a high sense of self efficacy.

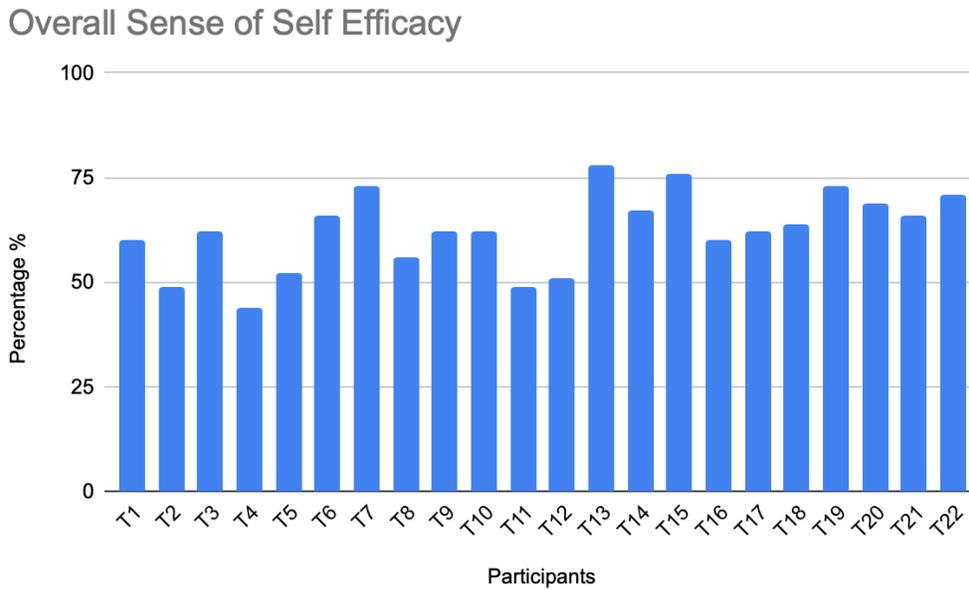


Fig. 14 Bar graph showing the level of sense of self efficacy of each participant, in percentages.

### 4.4 Discussion

This research project explores the reason behind applying differentiated instruction in a mixed-ability classroom; it emphasizes on the educators’ sense of self-efficacy, suggesting that teachers who do not feel confident enough, might not apply the method in their everyday classroom. Furthermore, it also seeks to find different tasks and activities that teachers consider part of a differentiated instruction, as well as the main challenges that they encounter when applying the method. This section discusses data from the findings in order to draw conclusions.

The analysis of the different questionnaires, scales, and interviews provided data and allowed for interpretation that helped answer all research questions raised at the beginning of the project.

*RQ1: Does a teacher's sense of self-efficacy influence his or her willingness to differentiate instruction in a mixed-ability classroom?*

Differentiated instruction is a method of education that seeks to consider all students' needs (Tomlinson 2005). For this to happen, the role of the teacher is fundamental, since they develop the planning and provide the environment for differentiation to happen (Tomlinson 7). Because the whole process of teaching requires effort and time, believing in oneself should be an intrinsic characteristic of a teacher, as well as having a high sense of self-efficacy, which allows a person to try new things, and take risks. (Tschannen – Moran and Hoy 1; Mamie Morrow TEDx Talk).

In the original case study, Dixon et al believed that a teacher's sense of self-efficacy might influence a teacher's decision to differentiate instruction, stating that an educator with a high sense of self-efficacy is more likely to apply the method (6). By taking into account this statement, the researchers raised the question of whether self-efficacy is related to an educator's willingness to differentiate. After analyzing both qualitative and quantitative data, it was noted that a sense of self-efficacy does not play a decisive role in the decision to apply the method. Despite self-efficacy - both personal and professional - not being the main obstacle when applying differentiation, the instruments showed that teachers encounter a number of challenges when applying the method. These will be discussed when answering further research questions.

*RQ2: Does a teacher's years of expertise influence their sense of self-efficacy?*

Feeling confident at performing an action many times has to do with the experience a person has. By asking this question, the researchers expected to find a relation between the amount of years an educator has been teaching, and whether it is related to how efficient they believe they are.

According to the data analysis, more than half of the participants have been teaching for over 5 years; out of the total, 41% have been teaching for more than 10 years, and only 36% have been educators for 5 years or less. By looking at these numbers, it is evident that the majority of the population are experienced teachers, therefore, have been implementing a number of methodologies throughout a long time. It is also possible to infer that these methodologies might, or might not have been successful. Mastering experiences is the most effective way to create a strong sense of self-efficacy (Bandura 1994, 2), and this premise leads to the belief that the most experienced the teacher, most likely they have a high level of self-efficacy.

Looking at the data analyzed, the results related to the level of self-efficacy showed that the majority of teachers feel highly efficacious in their personal life, but not so much as teachers. Most of the participants showed medium to low levels of self-efficacy when it comes to their performance as educators. Moreover, only 13% (which amounts to 3 participants out of 22) perceived themselves as highly efficacious in their job.

When comparing both results: years of expertise and sense of self efficacy, it is noted that the former does not influence the latest. Although a greater number of the population consists of experienced teachers, the scales showed that they do not feel a high sense of self-efficacy, despite those years of expertise. All in all, it is important to understand that the sense self-efficacy

depends a lot on the context (Goddard et al 482), and when years of expertise might not be the main reason for a teacher to feel efficient, other factors can influence the way teachers feel about themselves.

*RQ3: How does a teacher's professional development on differentiated instruction influence their sense of self-efficacy?*

Teachers should be constant learners, and professional development is the best tool they have to acquire new knowledge, solve existing problems, and improve their practices. This is not any different when it comes to differentiated instruction, which is a methodology that requires training as well as practice. In “How to Differentiate Instruction in Mixed-Ability classrooms” Tomlinson emphasizes on the importance of having pedagogical knowledge in order to manage a classroom, as well as to understanding every student's needs (2). Furthermore, professional development opportunities influence teachers in a positive way (Goddard et al 484) and this might lead to high levels of self-efficacy.

The data analysis showed that a vast majority of teachers have had professional development on the topic of differentiated instruction during the last five years, and/or during the year the questionnaire was completed. The interviews showed that in some cases, these opportunities for development were not provided by the institutions, but were the teachers the ones who looked for courses, workshops, or seminars on the topic. Because self-efficacy beliefs determine how people motivate themselves and behave (Bandura 1994, 2), it might be inferred that, by looking for opportunities for growth, there must be a high sense of self-efficacy.

As previously stated, the majority of teachers from the population do not have a high sense of self-efficacy regarding their teaching practices. Comparing this to the amount of

professional development that predominated among the results, it can be concluded that professional development on differentiated instruction and self-efficacy are not necessarily dependent on one another.

*RQ4: What are some activities and tasks teachers use to differentiate instruction and how often do they use them?*

In order for differentiated instruction to happen in a classroom, there must be a series of tasks and activities that teachers should adapt or develop. Likewise, other aspects, such as the classroom environment, also depend on the teacher and play an important role in differentiating instruction. The population from this research project was asked about the different tasks and activities they use in the classroom in order to apply differentiated instruction. It is important to address some of the tasks that the theory on differentiated instruction suggests, this will set some guidelines when comparing them to the activities teachers mentioned.

In *How to Differentiate Instruction in Mixed-Ability classrooms*, Tomlinson writes in different chapters about the activities teachers can do to apply this method in their classes. Moreover, the author also explains what educational aspects need to be taken into account in order to create a differentiated lesson:

“In a differentiated classroom, the teacher proactively plans and carries out varied approaches to content, process, and product in anticipation of and response to student differences in readiness, interest, and learning needs” (7).

According to the responses gotten from the population, most of the educators rely on group work and centers in order to differentiate in their classroom (see figure 9). Although this

type of activities do allow for a differentiated instruction, they depend on a carefully planned lesson in order to meet the objective of reaching all students. One of the ways to accomplish this objective is by organizing those groups and/or centers according to students' interests (Tomlinson 54). Teachers from the population did not specify the criteria they use to divide students in group works or to create centers, this might lead to the belief that, although teachers do try to apply differentiation techniques in the classroom, they still lack enough knowledge to do it in a meaningful way, hence the need for professional development. Notwithstanding, their will to try different methods poses a valuable quality in teachers, and suggests that educators seek to improve their practices.

There are other tasks also mentioned, besides from group work and centers. Teachers try to create tiered lessons because they realize how important it is to reach all students and their different abilities. As quoted in Dixon et al "To offer the same curriculum and instruction to all students is to deny that individual differences exist or matter in the enterprise of learning" (VanTassel-Baska 1997, p. 11). Using techniques such as TPR, or including activities such as debates allow for a better understanding from a greater number of students, because these allow them to use their different capacities, whereas giving a teacher centered lesson might not work in an effective way, since it is a technique that does not celebrate the diversity among students and their learning styles.

Technology is an ally in teaching, and using it as a learning tool demonstrates educators try to provide instruction for a group of mixed-abilities students. In their answers, many teachers stated that they use videos to support their explanations during class time; likewise, some also mentioned different games, songs, and the use of computers for other tasks. These activities take into account the diverse number of ways students learn, going from auditory, to visual and even

kinesthetic, technology allows for differentiation to occur in the classroom, and given the fact that many teachers mentioned this tool, it can be said that despite lacking a high level of teacher efficacy (see Figure 13) most teachers put an effort into applying differentiated instruction in the classroom.

Questionnaires and interviews give a clear image of how teachers approach differentiated instruction in the classroom. They also show how often teachers commit to the application of this method. Figure 11 gives a visual representation of the frequency in which educators decide to use differentiated instruction. Although the majority stated that they differentiate daily, a great number of teachers also said they differentiate only once a week or not at all. By looking at the chart that depicts the hours of professional development (see Figure 6), as well as the one where participants claim to find the method challenging (see Figure 8) and taking into consideration that the sense of self-efficacy does not necessarily play a significant role into the decision of differentiating, it can be said that other challenges are the reason teachers do not apply this method in the classes.

The last research question seeks to provide an insight into those challenges and give a better understanding on why teachers sometimes prefer to continue giving a teacher centered instruction, instead of switching to a differentiated one.

*RQ5: What are some challenges teachers encounter when trying to apply differentiated instruction in a mixed-ability classroom?*

In a classroom, one can find students with different abilities, learning styles, and backgrounds; this poses many challenges for educators. It has already been stated that differentiated instruction provides different roads to learning, but putting it into practice might

add to the challenges that are inherently part of being a teacher. The main obstacle the researchers believed they would find was the teachers' sense of self-efficacy, considering that self-efficacy is a person's "beliefs about their capabilities to produce effects" (Bandura 1994, 2) hence it influences the way a person performs an action.

After data analysis, evidence showed that self-efficacy does not play an essential role, but there are many other challenges that influence the decision to apply differentiated instruction. As Figure 10 depicts many challenges depend on the teacher to overcome, but others are out of their hands, since they occur by external causes. These challenges were put into those categories by the researchers. Among the challenges that depend on teachers to overcome, they mentioned lack of time, lack of professional development, and students' perceptions of themselves. These can easily be changed if the teacher feels more confident about his/her practices, and seeks to grow professionally, attending professional development on the subject, and researching about how to improve the way they teach. Likewise, the way a student feels about him/herself might change in a positive way if teachers put an effort into motivating them. These challenges show that the application of differentiated instruction goes beyond the mere sense of self-efficacy, and has a lot to do with the obstacles teachers experience in their practices.

Just like some aspects depend on the teacher, there are many challenges that occur because of external causes. Lack of time falls under both categories because, while teachers can plan accordingly and make time to fulfill as many objectives as possible, many times it is just not possible because of the long curriculum. Schools' expectations could be unrealistic, and this affects how teachers plan for a class. Another important aspect that educators cannot control is the amount of students in the class. In her theory, Tomlinson encourages to divide students into groups, and give them responsibility for their learning (35, 38) but educators claim that having a

lot of students in one classroom makes this task difficult, they try to put those methods into practice but many times it is just not possible.

Involving parents in their child's education is important, but according to many teachers this also poses a challenge when trying to apply differentiated instruction in the classroom. Some of the educators claimed that the fact that many parents do not understand the way education and teaching work influences how they approach differentiated instruction. Understanding that "successful partnering between teacher and parents is based on proactive communication" (Tomlinson 44) will help teachers overcome this challenge; this opportunity to communicate should be provided by the institutions. They should also provide the resources necessary for differentiation, but according to the data collected, a number of teachers claim to lack those resources, and therefore, find it challenging to apply successful differentiation in their classes. Norlund states that "teachers must utilize all available resources to support learning activities" (5) but if there are no resources available, this task becomes almost impossible. Institutions are a stepping stone in the application of helpful methods in the classroom, their support can make the challenges more bearable, and would give teachers the confidence they need to apply differentiated instruction.

By considering all challenges presented by the teachers, it is noted that it is not just the sense of self-efficacy, but other factors that make educators think twice before applying differentiation in their classes.

## **Chapter 5**

### **5. Conclusion**

Education is one of the main components of society, and because societies are constantly changing, the way we teach should also adapt. Nowadays, the educational system's perception of students is different from past decades; in today's classrooms students are seen as individuals, with unique characteristics and different learning styles. Throughout the years, pedagogy has been evolving and new methods have been raised. One of the methods that sees students and individuals, and avoids the use of "one size fits all" strategies is differentiated instruction. Proposed by Carol Anne Tomlinson, differentiated instruction is applied in many classrooms around the world. In Paraguay, few schools, such as the ones chosen for this study, claim to differentiate instruction in their mixed-ability classes.

A variety of aspects play a role when a teacher decides to apply a method such as differentiated instruction in their class; in some cases, this decision might have to do with the way a teacher feels about him or herself. The purpose of this study was to explore if the sense of self-efficacy plays a determinant role in the application of differentiated instruction, as well as to find other aspects that influence the use of this method in the classroom. In addition, the objectives of this research project were to identify whether a teacher's sense of self-efficacy is a relevant factor at the time of deciding whether to differentiate or not, as well as finding other aspects, besides from sense of self-efficacy, that play a role when teachers decide to put differentiated instruction into practice.

The first purpose and objective for this study were related to self-efficacy and its influence on teachers to implement differentiated instruction. Considering the analysis conducted, the answers were different from what the researchers originally expected. Although it

was possible to explore how teachers feel about the application of differentiated instruction and a sense of self-efficacy, the researchers found that it does not play the main role when teachers decide to apply the method in the classroom. According to the questionnaires and interviews, teachers encounter a variety of obstacles which, in many cases, do not have a relation to the way they feel about themselves. The analysis of the variables from the scale in relation to the question “Do you differentiate instructions in your classroom?” showed that there is not meaningful association between these variables and the fact of using or not differentiated instruction in the classroom. Therefore, teachers from the population try to apply differentiated instruction, regardless of their sense of self-efficacy.

Regarding the second objective of this study, teachers were asked about the challenges they encounter when seeking to apply different methodologies in the classroom; in this case, differentiated instruction. A variety of challenges arose, including lack of support of the institution and parents, to lack of materials, or enough professional development on the topic. One challenge that was constantly mentioned had to do with the number of students in a classroom. Teachers struggle when it comes to finding different avenues to learning if they have a lot of students to attend. Notwithstanding, a great majority claimed to try to apply differentiated instruction at least once a week, if not more often. This shows that, despite being on the right track, there is still a long way to go before the schools selected for this research project can successfully apply differentiated instruction.

To conclude, this study provided evidence that showed that self-efficacy is not the determinant reason for English teachers, from two bilingual schools in Asuncion, to decide whether to apply differentiated instruction or not. The data showed that the majority of the population have low to medium sense of self-efficacy regarding their performance as teachers.

Despite this, they mentioned other aspects that pose as challenges for them, and through qualitative analysis, supported by the analysis of the quantitative data, it is concluded that the challenges - such as lack of time, the number of students, and lack of materials and professional development - are the main reasons for teachers not to differentiate, or for not doing it as often as possible.

### **5.1. Implications**

Applying a method that varies from what teachers regularly do, or have done for years, is inherently complicated. Although differentiated instruction poses challenges for many educators, it is important for them to hear about it, learn how to apply it, and try to make it part of their everyday lessons. This study shed light on the fact that many teachers find the mentioned methodology challenging, and encounter obstacles when putting it into practice. Nonetheless, the majority of them still try to find time during class and apply differentiated instruction at least once a week, if not more. This means they understand the importance of trying to reach all students, regardless of their learning style.

Through the questionnaire answers and the interviews, the teachers showed their concern about students and the way they are taught. The few teachers who had not heard of differentiated instruction before, were willing to learn more about it in order to be able to use it as a classroom method, which leads to the realization that all teachers seek to provide their students with the best tools for learning. Schools should take this desire into account and give teachers the opportunity to improve their practices through professional development and better teaching environments and resources.

Having a strong sense of self-efficacy can be accomplished, among other things, through experience, but also by feeling supported and understood. The scales showed that the population

of teachers from the study feel efficacious in their personal lives, but not so much in their jobs. Although this could be done in further studies, one of the reasons these educators lack a strong sense of self-efficacy could be related to the different challenges they encounter. These challenges tend to become stronger when they are related to a new methodology, or a different approach in the class, which should be taken into consideration by schools in order to give teachers the support and confidence they need and by doing so, students can benefit with learning experiences that might fit better for their own learning styles.

## **5.2. Recommendations**

The schools chosen for the study were selected for their claim to differentiate instruction in their classes, but the results showed that the concept of differentiated instruction is not clear for many teachers. This was noted especially when answering about what they do to differentiate, not enough strategies were being applied in order to accomplish differentiated instruction's main objective: reaching all students. This can be changed by the institutions: providing teachers with more practical information and workshops would help them put the theory that differentiated instruction suggests into practice; having them write lesson plans on the topic and actually applying the method in the workshops could be a successful way to help educators know what to do in a real-life scenario. Furthermore, teachers should also be given enough time to feel confident about their methods; institutions can provide teachers with the necessary tools to apply differentiation successfully.

Another important aspect that should be considered by schools is allowing their teachers to observe each other, and learn from each other's experience. This is suggested because according to self-efficacy theory "vicarious experience and modeling serve as effective ways to develop personal teacher efficacy" (Goddard 7) a trait that, according to the scales, many

teachers lack. This could also be achieved by creating a space and time for teachers to exchange ideas, experiences and challenges to foster a sense of community and improve their teacher sense of self-efficacy.

In addition, it is also important to educate families on the topic. Many teachers claimed that parents' lack of understanding of teaching methods are not helpful when trying to apply new techniques that differentiated instruction requires. Learning about the topic as a community should be one of the schools' priorities, making families part of the change is essential in order to have them as helpers and provide students with the best opportunities by helping them learn without feeling frustrated.

Finally, further study is suggested to understand why many teachers do not have a strong sense of self-efficacy about their performance as educators. The scales showed that the majority of teachers have low to medium sense of self-efficacy, and this should be worrisome, considering the importance of that trait for professional growth.

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## Appendixes

### Appendix A - Questionnaire

#### Questionnaire 1

Please, circle the appropriate information.

1. What subject matter do you teach (as many as apply)

- All elementary
- Math
- Science
- Language Arts
- Social Studies
- Art
- Music
- Physical Education
- Foreign Language
- Other (specify)

2. What grade level(s) do you teach?

3. How many years have you taught?

4. Would you describe your student population as consisting of mixed abilities?

Please circle all that apply:

- a. Gifted or high ability
- b. Average or grade level
- c. Below average
- d. Identified for special education services

5. Are there special characteristics that describe your students? If so, please describe these characteristics.
6. What do you do to reach each separate ability group?
7. Have you had professional development to address differentiating instruction?
  - a. Yes, this year
  - b. Yes, in the last five years
  - c. Yes, in teacher preparation
  - d. No
8. How many professional development sessions have you attended concerning differentiation in mixed ability classrooms?
  - a. 1-2 hours
  - b. 3-5 hours
  - c. 5-10 hours
  - d. more than 10 hours
9. Do you use specific techniques to differentiate your instruction? For example, do you tier your lessons? Do you give different tasks on a specific concept covered based on the level of understanding students have? What are these different tasks?
10. How often do you design different tasks for different abilities in your class?

- a. Daily, for each subject I teach
- b. Daily, for more than one subject, but not all
- c. Daily, for one subject
- d. Occasionally, less than once per week
- e. Never

11. How do you cope effectively with inclusion in your classroom?

12. What is the most frustrating aspect of trying to meet the needs of all of your students?

13. Do you use technology to help you differentiate instruction? If so, how?

## Appendix B – TES Scale

### Teacher Efficacy Scale (TES, Woolfolk & Hoy, 1990)

A number of statements about organizations, people and teaching are represented below. The purpose is to gather information regarding the actual attitudes of educators concerning these statements. There are no correct or incorrect answers. We are interested in your frank opinions. Your responses will remain confidential.

**KEY: 1 = strongly agree, 2 = moderately agree, 3 = agree slightly more than disagree, 4 = disagree more slightly than agree, 5 = moderately disagree, 6 = strongly disagree.**

- |   |             |
|---|-------------|
| 1. When a student does better than usual, many times it is because I exert a little extra effort.   | 1 2 3 4 5 6 |
| 2. The hours in my class have little influence on students compared to the influence of their home environment                            | 1 2 3 4 5 6 |
| 3. The amount a student can learn is primarily related to family  | 1 2 3 4 5 6 |
| 4. If students aren't disciplined at home, they aren't likely to accept any discipline.   | 1 2 3 4 5 6 |
| 5. I have enough training to deal with almost any learning problem.   | 1 2 3 4 5 6 |
| 6. When a student is having difficulty with an assignment, I am usually able to adjust it to his/her level.                               | 1 2 3 4 5 6 |
| 7. When a student gets a better grade than he/she usually gets, it is usually because I found better ways of teaching that student.       | 1 2 3 4 5 6 |
| 8. When I really try, I can get through to most difficult students.   | 1 2 3 4 5 6 |
| 9. A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement. | 1 2 3 4 5 6 |
| 10. Teachers are not a very powerful influence on student achievement when all factors are considered.                                    | 1 2 3 4 5 6 |
| 11. When the grades of my students improve, it is usually because I found more effective teaching approaches.                             | 1 2 3 4 5 6 |
| 12. If a student masters a new concept quickly, this might be because I knew the necessary steps in teaching that concept.                | 1 2 3 4 5 6 |

13. If parents would do more for their children, I could do more. 1 2 3 4 5 6
14. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson. 1 2 3 4 5 6
15. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly. 1 2 3 4 5 6
16. Even a teacher with good teaching abilities may not reach many students. 1 2 3 4 5 6
17. If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty. 1 2 3 4 5 6
18. If I really try hard, I can get through to even the most difficult or unmotivated students. 1 2 3 4 5 6
19. When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his/her home environment. 1 2 3 4 5 6
20. My teacher training program and/or experience has given me the necessary skills to be an effective teacher. 1 2 3 4 5 6

### **Appendix C – Letter for institutions**

#### **A quien corresponda**

Vice - Directora

Nivel Inicial, 1° y 2° ciclos

Colegio ----

Presente:

De mi mayor consideración,

Me dirijo a Usted en carácter de estudiante del cuarto curso de la Licenciatura en Lengua Inglesa del Instituto Superior de Lenguas de la Universidad de Asunción con el objeto de solicitarle permiso para poder realizar un estudio de caso con los docentes del Colegio Internacional. Dicho estudio lo realizaría con el fin de recolectar datos necesarios para mi tesina de grado, desarrollada con el objetivo de obtener el título de Licenciada en Lengua Inglesa.

El estudio de caso que busco desarrollar tiene como tema: *“How teacher efficacy and professional development influence a teacher’s willingness to implement Differentiated Instruction in a mixed-ability classroom”*. La población para dicho estudio consistiría en todos los docentes del área de inglés de 1° y 2° ciclos. Los pasos a seguir serían los siguientes:

1. Presentación de 2 cuestionarios a cada uno de los docentes.
2. Observaciones – de no más de 20 minutos – a cada uno de los docentes que completó los cuestionarios.

Sin otro particular, agradeciendo la colaboración y esperando una respuesta favorable, me despido atentamente.

