THE CURRENT STATE OF SPECIALIZED PUBLIC BILINGUAL SCHOOLS
IN PUERTO RICO: TEACHER AND ADMINISTRATOR PERSPECTIVES

by

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A Dissertation
Submitted to the Faculty of Education
University of Puerto Rico, Rio Piedras
In Partial Fulfillment of the Requirements
For Doctor of Education in Curriculum & Instruction
May 2020
THE CURRENT STATE OF SPECIALIZED PUBLIC BILINGUAL SCHOOLS
IN PUERTO RICO: TEACHER AND ADMINISTRATOR PERSPECTIVES

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DEDICATION

I lived in terms of extreme rule following where everything was either black or white. Una serie de lecciones de vida me enseñaron que la vida no tenía que ser así. I believed I had a formula to follow and the rules were already established. I chose to deviate from those rules, and it was not without consequences. Me a adueñé de la vida y esta disertación es una parada en esta jornada. This achievement was always one of my life’s goals which con toda mi alma dedico a mis hijos, Ava, Jack Taylor y Olivia. Son mis bendiciones y lo mejor que puedo ofrecer a este mundo. I am honored daily by the three people in this world who call me "mommy". Hace falta mencionar que Olivia merece esto tanto como yo, ya que fue ella que soportó todo que este proceso conlleva. I hope they will know that life does not have to be black and white but whatever color they decide it to be. Ustedes son los dueños de tus vidas.

“Y llegó el día en que permanecer en el capullo era más doloroso que arriesgarse a florecer.”
~Anaïs Nin

And to my Dad, Jack Taylor Sutphin, a thousand years would not be enough time to thank you as much as you deserve. All of my achievements are because you were there as #1 fan, my friend and my Dad. I would not have been able to achieve the life I dreamed of, without your unconditional love & support.
ACKNOWLEDGEMENTS

In loving memory of an extraordinary Professor, researcher & mentor, Annette López de Méndez, Ed.D. Blessed are those people who are put on our path right when we need them. Dr. Kevin S. Carroll, I could not have navigated this journey without you. From the beginning you have been to me the epitome of an educator. You facilitate without taking over, you guided without belittling, and you believed it could be done. I will be forever grateful for the support and encouragement you have given me. Dr. Annette López de Méndez, you inspired me to explore the world of investigation without fear and develop an appreciation for all the facets education provides. Dr. Aníbal Muñoz Claudio, you are my role model of how to confront life’s challenges; with love, tenacity and commitment. Dr. Elenita Irizarry Ramos, thank you for accepting to be a part of this process. You enrich and give life to all that you touch. Thank you all for your teachings, your time and most of all the mark you have left on my life.

A special thanks to the former PRDE specialized schools’ unit interim director, Professor Jimmy Cabán, for the opportunity to conduct this study. And to the ALIANZA study research team; Kevin S. Carroll, PhD and Aníbal Muñoz Claudio, EdD, Ariana González Mezo, Delializ Rivera Nevarez, Fiorelys Mendoza Morales, Johanna Vivoni Suárez, Karilyn Ramos Delgado, Larissa López Hallman, Maritza Mateo Rivera, Michael Baez Arroyo, Zuleyka Guadalupe Matos, Paola Vázquez Pacheco. I would also like to thank Professor Ana Celis Jiménez Vega & my colleagues at UHS. To my intern teachers, past & present, I am proud to call you my colleagues. And finally, to the amazing treasures I call my students both past and present, thank you for sharing this journey with me, you rock!
ABSTRACT

Puerto Rico’s geographic, political and social characteristics have sculpted an unparalleled linguistic exchange for professional, educational, and personal pursuits resulting in a vested interest in promoting bilingualism. Despite efforts towards this goal, students’ performance does not reflect the thirteen years of English instruction received in public schools. However, within the public school system, a subset of bilingual specialized public schools have shown great promise and success in creating bilingual students and thus the purpose of this study is to document how teachers and administrators characterize their bilingual schools. This study presents school grounds and classroom observations, self-study evaluations and teacher interviews. Findings are organized into the three most salient themes: curriculum, instructional autonomy, and professional development. Each of the participating schools exhibited strong bilingual linguistic landscapes as well as transglossia language ideologies which were practiced both in and out of the classroom. Surprisingly, ambiguous communication between the schools and the Puerto Rico’s Department of Education was found to provide diverse implementation of the curriculum in the classroom with a greater focus on student’s immediate needs. However, both teachers and administrators expressed a need for professional development offerings tailored to bilingual educators.
RESUMEN

Las características geográficas, políticas y sociales de Puerto Rico han provocado que exista un intercambio lingüístico, lo cual ha resultado en un interés en promover el bilingüismo. A pesar de los esfuerzos hacia esta meta, el aprovechamiento académico de los estudiantes no refleja los trece años de instrucción en inglés que recibieron en las escuelas públicas. Sin embargo, dentro del sistema educativo, existe un subconjunto de escuelas especializadas bilingües que han demostrado que los estudiantes logran ser bilingües y, por ende, el propósito de este estudio es documentar como los maestros y administradores caracterizan estas escuelas bilingües a través de observaciones de las escuelas y los salones de clases, las evaluaciones de auto estudio y las entrevistas con los maestros para entender con más profundidad las características actuales. Los hallazgos se organizan en los tres temas destacados: currículo, libertad de cátedra, y desarrollo profesional. Cada una de las escuelas presentó ideologías del idioma transglósico los cuales fueron observadas dentro y fuera del salón de clases. Sorprendentemente, la comunicación ambigua entre las escuelas y el Departamento de Educación de Puerto Rico promovió un espacio para la implementación del currículo diverso en el salón. Sin embargo, maestros y administradores expresaron la necesidad de desarrollo profesional para los educadores bilingües.
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Historically, bilingualism has been a goal for Puerto Rican students, however an effective solution for teaching Spanish and English is still being sought after (López Laguerre, 1989). Bilingual education in specialized bilingual public schools has been proven as an effective means for developing students' language proficiency. Nevertheless, despite English language instruction from kindergarten to 12th grade, trends over the past 25 years have not boded well for successful English language acquisition among traditional public school students. Current research has shown that more than half of Puerto Rican students at the intermediate and secondary levels were classified as pre-basic or basic in their English language proficiency skills (Disdier & Cruz, 2019). According to the Department of Education of Puerto Rico (DEPR, 2019), on the latest island wide standardized assessment Medición y Evaluación para la Transformación Educativa (META-PR) [Measurement and Evaluation for Educational Transformation] in 2018-2019, 61% of students were classified as basic or pre-basic in English. Conversely, when the findings of META-PR were separated by specialized and traditional public schools, an average of 65% of students at the elementary, intermediate and secondary levels scored proficient on the same evaluation. The focus of this study is on the specialized bilingual public school teacher and administrator perceptions and practices that lead to student academic achievement in English.

**Statement of the Problem**

Bilingual education has been proven as an effective means for developing student’s English proficiency (Baker, 2011; Creese & Blackledge, 2010; García,
2009; Martínez Rodríguez, 2014). However, a primary concern has emerged as it has been documented even after thirteen years of English instruction in public schools from kindergarten to 12th grade, many students enter higher education institutions unable to communicate in English at a basic level (Pousada, 2000). According to the findings and Tendencies report (College Board, 2019) which publishes the findings of the university admission standardized test Prueba de Admisión Universitaria (PAA) [College Entrance Exam], in 2017, the average score on the English portion of the assessment was 439 out of 800. Scores within the range of 450 to 549 are considered to demonstrate basic proficiency. Therefore, the majority of student scores on the PAA in 2017 were below average in their English language proficiency. "Lamentablemente, a nivel de escuela intermedia y superior no hay buen balance, es decir, hay una brecha grande entre las escuelas con altos niveles de desempeño (principalmente las especializadas) y el resto" [Unfortunately, a good balance does not exist at the intermediate and high school level, that is to say that there is a large gap between high performing schools (principally the specialized schools) and the rest.] (AbrePR, 2018, p. 4). In Puerto Rico, the students in twelve specialized bilingual public schools demonstrate a high percentage of English proficiency. According to the Índice de Desempeño Escolar [School Achievement Index], only 31% of students across the island were classified as proficient at the intermediate and secondary level. While 68% of the students in specialized schools across the island were classified as proficient. The gap between student achievement in public schools and specialized schools increases as students move from elementary to intermediate and secondary levels.
Language proficiency, as classified by the Department of Education of Puerto Rico (DEPR), is divided into four categories: Pre-Basic, Basic, Proficient and Advanced. Each category has a numerical range from which a student’s score on the previous DEPR academic achievement standardized exam, *Pruebas Puertorriqueñas de Aprovechamiento Académico* (PAAA) [Puerto Rican Exam of Academic Achievement], now known as "*Medición y Evaluación para la Transformación Educativa*" (META-PR) [Measurement and Evaluation for Educational Transformation] leads to one of the four classifications. On the 2017-2018 META-PR, students in 3rd through 8th and 11th grades had nearly complete student participation with 98% of student participating around the island. The findings revealed that 57% of students were rated with English skills at the pre-basic and basic levels (Disdier & Cruz, 2019). In San Juan, only 32% scored proficient, reflecting 68% either basic or pre-basic (Nagnoi, n.d.). Thus, there is a claim that a change is needed in the service delivery model of low performing schools:

Sin un cambio en el modelo de prestación de servicios, no hay forma de atender a corto plazo las escuelas que tienen bajos niveles de desempeño escolar, que son sin duda, niveles alarmantes y cuyo desempeño debe de ser atendido [Without a change in the service rendering model, there is no way to aid the schools that have low levels of student achievement, that without a doubt, are alarming levels whose achievement should be dealt with] (AbrePR, 2018, p. 4).

The particular characteristics of specialized bilingual schools as told by the teachers and administrators that contribute to student success remain unclear
and undocumented therefore, warranting investigation. The contribution of this study will be to describe the characteristics of specialized bilingual schools of Puerto Rico as perceived by teachers and administrators in order to document the current state of bilingual education with potential generalizability to other schools with similar contexts.

Circular migration between the United States and Puerto Rico initiated perpetual interaction between the two countries and the users of English and Spanish. The common practice of leaving Puerto Rico to go the United States mainland and then returning has been such a normal occurrence that Puerto Ricans refer to it as "jumping the puddle". As a result, Puerto Rico has developed a unique linguistic landscape that began even prior to its change of sovereignty (Pousada, 1999). U.S. sovereignty brought with it the English language and its introduction as part of public education from kindergarten to post-secondary education across the island.

However, despite extensive exposure to English, the U.S. Census reported that an estimated 84.6% of the population claims to speak English less than very well (U.S. Census Bureau, 2017) leaving an estimated 22% of the Puerto Rican population considering themselves proficient. According to statistics provided by Maxwell (2012), Ostolaza (2001), Pérez (2011), Pousada (2000), Resnick (1993), Soto Santiago (2009), the US Bureau Census (2000), and US Bureau Census (2017), there have been great attempts to foster high English language proficiency particularly in K-12 public education, nevertheless the trend for the past 25 years has not provided evidence of successful English language acquisition among traditional public school students.
Proficiency in English is necessary for students not only to be successful in academic environments, but according to Seubert, Hoogenboom, Knijn, de Vries, and van Warden (2018), English is a tool for professional success as the lingua franca of the world it is the common ground when communicating globally. Unfortunately, the trends of English proficiency on the island are not representative of the years of instruction received throughout student’s schooling. According to Martínez Rodríguez (2014), Pousada (2000), and Soto Santiago (2009), the lack of proficiency in English will ultimately affect both public and private universities in Puerto Rico and the future professionals they are teaching. This was evidenced in the study Desarrollo de las Competencias Lingüísticas del Estudiantado de la UPR, Río Piedras [Development of Linguistic Competency in the UPR Rio Piedras Student Body] where undergraduate students were found to have made little progress after their first two years of English courses at the university (Arzán, 1999, as cited in Pousada, 1999). One of the contributing factors to this lack of improvement was attributed to the negative experiences and errors brought from elementary and secondary schooling.

The need for English proficiency has been recognized in numerous government sanctioned educational initiatives, policies and public sentiment. The program for Specialized Bilingual Schools was created by the DEPR as an alternative to traditional school programs that would develop students’ proficiency in Spanish, English and/or another foreign language. After evaluation of these bilingual school programs, findings revealed that specialized bilingual schools are successful in achieving English proficiency among their
students and therefore, represent a promising solution for increasing students’ English proficiency (Martínez Rodríguez, 2014).

"Education has a fundamental role in maintaining the fabric of our society" and "provides the basic tools by which individuals might lead economically productive lives to the benefit of us all." (Plyer v. Doe, 1982). As a topic more relevant every day, research needs to be conducted in the area of specialized bilingual schools. Critics of bilingual education argue that there has been relatively little in-depth examination of the contextual factors: (a) the quality of education in the minority language, (b) the effects of bilingual education on intergroup relations between students, (c) how bilingual education programs define the relationship between language and power, and (d) how that relationship may affect both language majority and language minority students in bilingual education classrooms (López, McEneaney, & Nieswandt, 2015; Valdés, 2005, as cited in Hadi-Tabassum, 2006).

Specialized bilingual schools prepare students for the multilingual world to which they belong which is why a clearer understanding of the characteristics of bilingual specialized schools in Puerto Rico is necessary. In the spring of 2018, a partnership was formed called Alianza entre la Unidad de Escuelas Especializadas (UnEE) y el programa de Enseñanza de Inglés como Segundo Idioma (TESL) de la Universidad de Puerto Rico para Evaluar las Escuelas Bilingües y de Idiomas del Departamento de Educación de Puerto Rico [Alliance between the Specialized Schools Unit and the Teaching of English as a Second Language at the University of Puerto Rico to Evaluate the Department of Education of Puerto Rico’s Bilingual and Language Schools] (herein referred to
as the ALIANZA study). The findings of this study were to be used to optimize students’ educational services in bilingual schools and assess program effectiveness. The target population for the study were DEPR’s eighteen specialized language and bilingual schools across the island. Of those eighteen, three were language schools meaning they were not English-Spanish bilingual schools but taught another language such as French or Chinese. The remaining fifteen were bilingual schools that served populations from kindergarten to twelfth grade in various configurations. In 2018, one of the bilingual schools was closed leaving fourteen remaining schools that participated in the study. The research team was comprised of 13 individuals, 10 of which were doctoral students in Curriculum and Instruction specializing in teaching English as a second language and one master’s degree student. The principal investigators were Dr. Kevin Carroll and Dr. Aníbal Muñoz Claudio who oversaw the investigation as well as conducted observations and interviews. I was a member of the research team that collected the data that will be used for this investigation.

**Purpose of the Study**

Data from the ALIANZA study collected in the spring semester of 2018 will be used in this study for the purpose of exploring and understanding the current characteristics of nine specialized bilingual schools in Puerto Rico as reported by teachers and administrators. According to the Department of Education of Puerto Rico: "Las escuelas especializadas atienden los talentos, habilidades e intereses de los estudiantes para ofrecer alternativas innovadoras de enseñanza y fortalecer los procesos administrativos, fiscales y *docentes*" [The
specialized schools focus on the talents, abilities and interest of students that offer an innovative teaching alternative and strengthen administrative, budget and teaching processes] (Unidad de Escuelas Especializadas, 2014). The specialized bilingual schools in this study include only those recognized by the Department of Education of Puerto Rico that are English-Spanish bilingual schools. This study does not include the three language schools that form part of the bilingual and language specialized schools’ unit.

After a preliminary analysis of the larger study's data, I proposed to use the data from the study to provide a specific analysis of nine participating schools that have at least two teacher interviews, two classroom observations and a completed self-study evaluation. Ostolaza (2001) recognized the need to study those places where Puerto Ricans are able to speak the English language and since students from specialized bilingual schools demonstrate high proficiency in English, these schools are the most appropriate sites for investigation. The study explored how teachers and administrators described their teaching contexts as shared through: (a) teacher interviews, (b) administrator interviews, (c) self-study document and (d) classroom and school observations. Each of these areas represent an integral component of an effective bilingual program and should be studied independently as well as in conjunction to the whole. Descriptive research was chosen for this study because the objective is to explore and understand how specialized bilingual schools effectively promote student bilingualism according to the teachers and administrators (Tsang, 1997). The objective of this study was to understand the
perceptions that affect practice and policy so that they may be utilized by other educational institutions to promote higher student achievement.

**Background of Bilingual Education in the United States & Effects on Puerto Rico**

The United States has the largest immigrant population of any other country in the world (Durand, 2017; Portes, 2006; Radford, 2019). In 2017, 13.6% of the population were foreign born (Radford, 2019). Consequently, the linguistic background of the U.S. population is highly diverse as the people come from countries where English is not the primary language. Title VI of the Civil Rights Act of 1964 gave bilingual education federal support against discrimination based on race, color or ethnic origin. Even though Title VI does not specifically mention language dominance, it recognizes the link between language and national origin whereby language falls within the realm of discrimination based on national origin. The Bilingual Education Act of 1968 gave non-English speaking children importance within the school system. It encouraged schools to create programs designed to aid students in becoming English proficient. Prior to this law, children who spoke languages other than English were placed in classrooms where they did not understand the instruction nor were they being assisted in order to eventually understand all English instruction. The Bilingual Education Act became a part of the federal funded programs which provide local and state school districts funds for bilingual programs as well as raised attention among the general public for bilingual education as a proposed avenue for educating non-English speaking students (Stein, 1983). Additionally, it made schools responsible for regulating
standards, preparation of assessments, and documentation to the public of students' academic progress in both English and grade level materials.

Federal laws from the United States have had a direct impact on public Puerto Rican education in two ways. First, United States citizenship was granted to all Puerto Ricans according to the Jones Shafroth Act of 1917 (Pousada, 2011). One of the objectives of the Jones Act, as it is commonly referred to, was that it would require Puerto Ricans to learn English in order to partake in the rights and privileges they were bestowed as new US citizens. Secondly, Puerto Rico's change in status from territory to Commonwealth of the United States led to the establishment of English and Spanish as co-official languages. While contact between the mainland United States and Puerto Rico was frequent even before Puerto Rico became a territory, American citizenship facilitated Puerto Rican migration to the United States, particularly in times of high unemployment when migrating became a highly feasible option for the purpose of looking for better opportunities. As an island, Puerto Ricans are highly affected by fluctuations in the local economy. These fluctuations are a leading reason for islanders to be forced to find employment abroad (Rivera Negrón, 2017). The recognition that English-Spanish bilingualism has many advantages has led those with the economic means to promote bilingualism in their families and to pursue opportunities for developing their children's linguistic abilities. The gap between traditional public schools and private school student proficiencies is one reason that English proficiency among Puerto Ricans has become a symbol of socioeconomic status. Those families who can afford a private education for their children are typically the most economically
advantaged. Therefore, English proficiency has become associated with the elite who have the resources to invest and improve their linguistic abilities.

Secondly, the Department of Education in Puerto Rico was provided federal education funds with the purpose of improving the education system but also subjecting the school system to federal laws and regulations (Maldonado, 2000). Interestingly, the Bilingual Education Act of 1968 does not specify the amount or type of assistance to be provided to English language learners and therefore has been left to the interpretation and best discretion of the Secretary of Education. "Major shifts in educational language policies in Puerto Rico reflect changes in the U.S. federal language policy" (Schmidt, 2014, p. 47). The connection between the delegated Secretary of Education and the language policy implemented in the public school system have resulted in dramatic fluctuations each time political officials changed. These changes made a lasting impression on English instruction in the Puerto Rican Department of Education's public school system.

**The Development of Puerto Rico’s Linguistic History**

The Foraker Act in 1900, marked the end of military governing in Puerto Rico and the beginning of civil administration with the caveat that both governor and commissioner of education be U.S. elected officials (Enciclopedia de Puerto Rico, 2017). With consideration for both languages, on May 1, 1900, Education Secretary Martin Brumbaugh, "estableció como política lingüística la conservación del español y la adquisición de inglés" [established as policy the linguistic conservation of Spanish and the acquisition of English] which established and validated the importance of both languages on the island (López
Laguerre, 1989). Two years later the Official Languages Act confirmed his declaration and granted equal status to both Spanish and English as co-official languages of Puerto Rico. This marks the beginning of the language tug-of-war that would ensue and flourish until the present date.

"Language is the most important exteriorization or manifestation of the self, of the human personality" (Gaarder, 1967, p. 51). "American insistence that the island Americanize its language and institutions prior to receiving citizenship and self-government contributed to the Puerto Rican determination to defend their Hispanic heritage" (Fors, 1975, p. 257). Nineteen years after Puerto Rico was claimed as a U.S. territory, United States citizenship was granted to all Puerto Ricans according to the *Jones Shafroth Act of 1917* (Pousada, 2011). One of the objectives of the Jones Act, as it is commonly referred to, was that it would require Puerto Ricans to learn English in order to partake in the rights and privileges they were bestowed as new US citizens. There were strategic reasons behind this decision. "American educational tradition had long stressed the idea that education was necessary for good citizenship..." (Fors, 1975, p. 254). English was viewed as a bridge that would connect the American culture to the Puerto Rican population. According to Pousada (2011), the Spanish vernacular was considered by U.S. government officials unnecessary. It was their understanding that English would lead the Puerto Rican people to an understanding of democracy and the ways of a civilized people. Up until this point, the Acts were largely legislative and did not directly impact the populace until educational policy became the focus. The most direct and impactful method for introducing English would be through the
language of instruction. Within the DEPR the goal for students was to achieve functional bilingualism (López Laguerre, 1989). However, Pousada (2000) notes that typically private education institutions have been successful at obtaining this goal. "For generations, the school has been seen as the site of these social conditionings" (Farrell, 2010, p. 108). Schooling, particularly instruction, would be the setting for social change.

**Research Questions**

1. How do teachers and administrators of DEPR’s specialized bilingual schools describe their teaching contexts?

2. How do teachers and administrators of DEPR’s bilingual schools characterize their relationship with DEPR?
   - (a) in relation to professional development?
   - (b) in relation to curriculum?
   - (c) in relation to materials & resources?

**Definition of Terms**

School characteristics:
will tentatively refer to and be limited to those variables that can be affected by policy or practice such as specific initiatives and not those variables that cannot be affected by policy and practice such as student demographics.

Language proficiency:
as classified by the Department of Education of Puerto Rico, is divided into four categories: pre-Basic, Basic, Proficient and Advanced. Each category has a numerical range from which a student’s score on the META-PR standardized
assessment leads to one of the four classifications. For the purpose of this study when referring to students' language proficiency this definition will be used.

Bilingualism:

is such a complex term that there is not one widely accepted definition (Grosjean, 2010; Pousada, 2000; Skutnabb-Kangas, 1981). At one extreme, bilingualism has been referred to native-like usage in both languages (Bloomfield, 1935). At the other extreme, bilingualism as defined by Weinreich in 1953, is as a person who uses two languages even to a minimal degree (Baker, 2011; Haugen, 1953; MacNamara, 1969; Oestricher, 1974). Bilingualism as used in this study, refers to people who use English and Spanish in their academic contexts in one of the four language domains of speaking, listening (also known as oracy) and, reading and writing, also known as literacy (García, 2009).

Bilingual Education:

according to the amendments to the Bilingual Education Act of 1974, a:

Bilingual education program [is] one that provides instruction in English and in the native language of the student to allow the student to progress effectively through the educational system. English as a second language (ESL) programs alone were considered insufficient (Stewner-Manzanares, 1988, p. 3).

"Bilingual education has been subject to many interpretations regarding both its definition and implementation" (Clark, 1981, p. 26). A lack of an agreed upon definition has led to referring to students in bilingual education who are already speakers of two languages and other times it refers to students who speak a
majority language and learn a minority language or students who speak a minority language and learn the majority language (García, 2009). Bilingual education programs may be either additive in that the goal is to add a second or third language while simultaneously maintaining the students’ home language(s). Whereas in subtractive bilingual education the focus is on transitioning the student to speak the dominant language of the society and little to no emphasis is put on maintaining the students’ home language(s). For the purpose of this study a bilingual education program will refer to those programs considered by the Department of Education of Puerto Rico’s specialized bilingual language schools.

Specialized bilingual schools:

are one component of "La Unidad de Escuelas Especializadas" [Specialized School Unit] whose schools are defined as "las escuelas especiales cuyo objetivo es el desarrollo de habilidades particulares de los estudiantes" (Torres González, et al., 2017, p. 206) as recognized by the DEPR. In 2012, there were 48 specialized schools: 11 art schools, 18 bilingual or language schools, 6 science and math schools, and 4 Montessori schools. The majority of the students that attend a specialized bilingual school must take two additional courses each year in the area of specialty in addition to the regular curriculum. The characteristics that exclusively define specialized bilingual schools as expressed by teachers and administrators will be explored in this study and will be open to emergent themes.
Summary

This dissertation is divided into five chapters. Chapter one, presents a statement of the problem, a historical background of the problem, the purpose of the study, the research questions and definition of terms. Chapter two contains a review of pertinent literature regarding the historical perspective of bilingual education in the United States and Puerto Rico, the development of bilingual public schools, and a detailed description of bilingual education in present day Puerto Rico. Chapter three provides a description of the research design of this qualitative study. It includes the research questions, a clear description of the data collection, and the schools that will form part of this investigation. Chapter four will explain the findings of the teacher interviews, researcher classroom observations and fieldnotes used to gather data in the study and the interpretation of the data. Finally, Chapter five delivers a detailed discussion and interpretation of the findings of this investigation and the implications of the study. The limitations encountered, delimitations and assumptions of this study will also be explained. While suggestions will be offered that can be taken into consideration for future studies.
CHAPTER 2: LITERATURE REVIEW

Introduction

Language has historically been tied to the land and not to the speakers. Hornberger (2002) references a one-language, one-nation ideology based on the idea that national unity is contingent on the use of one unifying language. To share the same language was considered more desirable for efficiency of communication and productivity of the state. Anderson argued in *Imagined Communities*, (1983) that nations were created by constructing communities based on similarities of their members, particularly language (as cited in García, 2009, p. 25). The creation of a standard academic language was the result of countries/states attempting to consolidate power by creating academies that standardized and legitimized the language which unified the people and strengthened their political power (García, 2009). These arguments explain the foundations for language ideologies that will become the basis for conflict in Puerto Rico's linguistic landscape. Parting from the premise that land, language and culture are intertwined, there was an assumption that there was no room was left to incorporate another language as was the case in Puerto Rico regarding the addition of English. In present day, worldwide technological advances have created greater access for contact among languages that is not restricted by geographic limitations and lays the groundwork for dynamic language contact leading back to the question of how to manage Puerto Rico's bilingual reality. This chapter will examine the historical trajectory of English instruction in Puerto Rico and the established educational language policies as
Historical View of Puerto Rico’s Educational Language Policy

After United States sovereignty was established, the foremost objective for U.S. government officials became to assimilate Puerto Rico with the United States through the use of a single shared language, referring back to the one-language, one-land ideology. The primary focus of a homogenous nation was “the integration into a single “linguistic community” (aka the modern nation-state)” (May, 2014, p.19). The logic was that a shared language would promote allegiance and loyalty toward the U.S. and the change would occur seamlessly one generation at a time. Through early education in the public schools, English as the medium of instruction, would teach Puerto Rican students U.S. culture, interests and ideologies (Torres, 2002). Language would be the conduit to assimilate Puerto Rico into the existing American empire beginning with "...the primary site of the creation of identity, the school..." (Farrell, 2010, p. 107).

This objective marked the beginning of major changes in educational policy regarding language instruction from 1898 to 1998 (Rivera & Mazak, 2017). Only those changes with significant impact on Puerto Rico's language policy are discussed below. (1) After Puerto Rico’s change in sovereignty the first education law implemented was by Governor Ruy Henry when he divided Puerto Rico into six school districts: Northeast- San Juan, East- Fajardo, West- Mayagüez, North- Arecibo, South- Arroyo and Central- Ponce (Enciclopedia de PR, 2017). This is the beginning of public schooling which adopted the U.S. model of co-education of boys and girls together from the ages of 6 to 18 and on
a Monday through Friday schedule. (2) General John Eaton, former U.S. Education Commissioner arrived in 1899 with the directive of "promoting Americanization via the English language" (Pousada, 1999, p. 37). (3) Dr. Martin Braumbaugh in 1900, first Commissioner of Education allowed for both languages in the school setting but in a separated fashion. Spanish was the language of instruction from 1st to 8th grade. Then from 9th to 12th grades there would be a shift to English. The 1902 Official Languages Act which declared English the co-official language with Spanish, legitimized the increase of English language instruction on the island. (4) In 1905, Commissioner Roland Faulkner implemented all English instruction for all grades which has been deemed an "out and out suppression of Spanish" (Pousada, 1999, p. 38). (5) While in 1916, Commissioner Dr. Paul Miller, believed that Spanish in grades 1 through 4, Spanish and English in grade 5 and then English from 6th grade forward would be the best bilingual schooling configuration. As a former teacher, Commissioner Miller recognized the importance of the Spanish vernacular and the vision of a bilingual student body. At the same time, the Teacher's Association of Puerto Rico, also known as AMPR, was vital to expressing the people's unrest with the new language policies being put into place in public schools in the beginning of the 20th century. "Maestros en 1917, el mismo año en que la Asociación inició, formalmente, su lucha a favor del español como idioma oficial de enseñanza en Puerto Rico, planteando el problema del inglés como un asunto pedagógico" [Teachers in 1917, the same year that the Association was instituted, formally initiated their dispute to favor Spanish as the official teaching language in Puerto Rico, suggesting the English
question was a pedagogical issue] (Ruiz-Rivera & García-Santiago, 2012, p. 60).

(6) Miller's successor in 1921 and first Puerto Rican Commission of Education Juan B. Huyke was unilaterally focused. He believed that "Las escuelas son agencias de americanismo en todo el país, y deben presentar el ideal americano a nuestra juventud" [Schools are Americanizing agents across the country and should present the American ideal to our youth] (as cited in López Laguerre, 1989). In addition to his "all English" policies regarding education, there was mandatory oral English tests for all high school graduate candidates as well as mandatory English competency testing for teachers. (7) Dr. José Padín, the Commissioner in 1934, made Spanish the language of instruction for 1st and 2nd grade students. Students in 3rd to 8th grades would receive a 90 minute period of English instruction which doubled the time of instruction previously received by students. English was emphasized in high school when it became the language of instruction and Spanish was taught as a subject. This decision may have been the result of a study he conducted in 1916 that demonstrated that even after twelve years of English instruction, basic skills were not mastered (Pousada, 1999). (8) Dr. José Gallardo was chosen as Commissioner of Instruction in 1937 by President Franklin D. Roosevelt with the President’s support to create a bilingual nation. President Franklin wrote to Gallardo, that mastery of the English language was an integral part of American policy and instituted a series of policies that attempted to use both English in Spanish as languages of instruction, depending on the subject matter. It did not appear to be successful since in 1945 and 1946 bills passed Puerto Rican legislation for Spanish to be the sole medium of instruction but were vetoed by President
Truman. (9) 1947 marked the first year that Puerto Ricans were able to elect their own governor. The next year, Governor Luis Muñoz Marín was elected who then appointed Mariano Villaronga as Commissioner of education. Villaronga made Spanish the language of instruction at all levels with English taught as a mandatory subject starting in first grade and his policy initiatives are still in practice today.

After a review of educational policy in Puerto Rico from the beginning of U.S. occupation, Rodríguez Arroyo remarks that "whenever there is a change in the political party in charge of the government, the approach to the language issue changes" (2013, p. 93). Educational policy is highly influenced by political agendas which are carried out by teachers and administrators in the public schools. As the political agenda changes so do the policies regarding English language instruction to reinforce the current agenda. These oscillations in favor of and then against English instruction have resulted in a precarious relationship between language instruction and education.

Since the Official Languages Act of 1902, English has been the co-official language with Spanish however, in 1991, the Official Languages Act was reversed, and Spanish was declared the only official language to reflect changes in public opinion demonstrating the importance of the Spanish language to the Puerto Rican populace. "The teaching of English was viewed as a manifestation of U.S. imperialism and a threat to Puerto Rican identity" (Pousada, 1999, p. 39). The following year in 1992, English was reinstated as co-official language with Spanish however, it was clear that to Puerto Ricans connected the Spanish
language to national identity, family, culture and as a result the language orientation chosen regarding English was language as a problem (Ruiz, 1984).

The controversial relationship between English language education and Puerto Rican politics has associated English as a threat to national identity and forced imperialism. However, on the other hand there has also been recognition that “... English is also a principle language of trade partners, academics, technical experts, advisors, tourists and popular culture (Gil & Adamson, 2011, p. 2;). Presently, English is recognized as a conduit for upward social, academic and economic mobility and a necessary tool in today’s global community (Pousada, 2011; Torres González, 2002). In a study conducted by Cuadrado Rodríguez in 1993, about 145 professionals in the eastern region of Puerto Rico found a positive correlation between the percentage of English speakers and a higher salary. "Puerto Ricans are quite varied in their personal characteristics due to social class, religious, academic, migratory, and political differences" (Pousada, 2011, p. 13). This variety of differences coupled with conflicting pressures have manifested in educational policy swings that have reflected Puerto Rico’s contentious relationship with English.

**English Language Instruction in Puerto Rico from 1960 to Present**

Torres González, et al.(2017) claim that each decade of education in Puerto Rico has had a particular method associated to English instruction. In the 1960's there was an emphasis on phonics, grammar and translation; This decade was known as "the Education Decade" and in an attempt aimed at improving public education, Dr. Quintero Alfaro, sub secretary of DEPR, designed the exemplary school program. This initiative later gave way to the
creation of “La Unidad de Escuelas Especializadas” [the specialized schools unit] described as “...adscrita al área de Proyectos de Transformación Educativa, ofrece asistencia administrativa y programática a escuelas con currículos innovadores que atienden a los estudiantes talentosos y dotados del Sistema” [ascribed to the Area of Educational Transformation Project, offering programming and administrative assistance to schools with innovative curriculum that focus on talented and gifted students in the System] (Christian Herrera, letter, 12 February 2018). Education in the 1970’s saw the rise of the audiolingual method and phonics; in the 1980’s the focus was on the natural and communicative approaches; in the 1990’s the communicative approach and holistic language; and at the turn of the century the methods and approaches of the 80’s and 90’s were combined to complement a balanced literacy approach and functional approach (Torres González, et al., 2017).

The Specialized Schools Unit [La Unidad de Escuelas Especializadas] (UnEE), was tasked with creating innovative educational programs which would in addition to regular DEPR requirements, promote student strengths in one of the following areas: math and science, sports, the arts and languages, throughout the island. Today, across the island there are 12 bilingual schools and three language schools of which two focus on the French language for a total of 15 specialized schools dedicated to bilingual education or languages. In addition to these 15, there are 24 specialized fine arts schools, 3 sports schools, 5 innovative curriculum schools and 9 math and sciences.

The first bilingual education program was implemented in Puerto Rico in 1971 in Santurce as a result of the English dominant children of the diaspora
who returned to Puerto Rico but were unable to easily transition to public schools due to their lack of Spanish proficiency (Clark, 1981; Pousada, 1999). The oldest bilingual school in Puerto Rico, Padre Rufo, implements a Spanish-English bilingual curriculum by providing students with two additional English classes a day at varying levels of proficiency and Spanish language support to those students whose first language is not Spanish.

The most recent initiative regarding bilingual education was instituted in 2012 by Governor Luis G. Fortuño Burset. The aim of this initiative was for all students to be bilingual by 2022. However, similar to proposals, such as the "Bilingual Citizens project", they were criticized as being too abrupt in its implementation and with a shortage of qualified teachers to implement it. Currently, natural disaster recovery, political changes and economic crisis have halted educational initiatives including those regarding bilingual education. Therefore, the policy set by Commissioner Villaronga in 1947 for all instruction in traditional public schools from kindergarten to 12th grade to be provided in Spanish with English being taught as a subject in a separate class remains the current educational framework in public schools across the island.

According to the College Board findings from the 2018 Suite of Assessments Annual Report (SAT), scores showed that 44% of students received less than 490 out of 800 on the reading, writing and language portion of the exam (College Board, 2018). The benchmark score of 480 reflects a 75% probability of the student earning at least a C in a college-level course. "Most Bachelor's degree programs require two years (twelve credits) of English composition and grammar. This data shows that almost half of the students
entering as first year university students would most likely need additional support in order to pass their English course with a 70%. Interestingly, 83% of the students reported in this data came from families in which at least one parent had at least an associate degree and 38% of test takers had at least one parent with a doctoral degree. Only 8% of test takers had parents with a high school diploma or less demonstrating how students are more likely to pursue post-secondary education if at least one parent has completed post-secondary education.

"There are significant differences in the scores on the Achievement Tests depending upon whether students have attended public or private schools. Specifically, average score differences in the English Achievement Test tend to be about 87 points higher for the private schools, 568 out of a possible maximum of 800, than for the public schools’ system (481). In Spanish, however, the gap is only twenty-nine points for the Spanish Achievement Test, 511 for public schools and, 540 for private ones" (Maldonado, 2000, pp. 491-492). Which shows that the disparity is not equal in both languages but that there is a deficiency in English. Current approaches to English instruction are not adequate for preparing public school students with the English skills necessary to compete in a global economy predominated by English as the lingua franca. By addressing these deficiencies through bilingual education, more students may benefit from the advantages of being a Spanish/English bilingual. Although English is taught at all grade levels along the educational pipeline, many students graduate from high school with a limited knowledge of English..." (Maldonado, 2000, p. 492). Given Puerto Rico’s unique historical
linguistic context "...bilingualism is often feared as a step toward displacing Spanish" (Pousada, 2011, p. 62).

Approaches to incorporate bilingual education have not been successful in promoting the vernacular while incorporating English. "Puerto Rico is a Spanish-speaking country, and to introduce in a massive way instruction in English is to try to Americanize us, to return to the past," said Attorney Carmelo Delgado Cintron, the former director of the Institute of Puerto Rican Culture and law professor, who now heads a group called Spanish First. (Navarro, 1997, p. 12). López-Laguerre (1989) analyzes the attitudes of public schools’ teachers towards bilingualism as a socio-linguistic phenomenon. She traces the aspects of public education in Puerto Rico regarding language teaching and learning and recommends an ongoing, objective evaluation of the teaching–learning process of English as a second language in Puerto Rico. Despite conflicting views and challenging linguistic terrain, there is a history of bilingualism as a goal for Puerto Rican students. And Puerto Rico remains actively looking for an effective solution for teaching Spanish and English (López Laguerre, 1989; Maldonado, 2000).

Models of Bilingual Education

The following bilingual programs represent how government policy is enacted in public education based on language ideologies. Bilingual education has been categorized according to weak and strong programs. Renowned linguist Colin Baker has outlined ten forms of bilingual education which fall into the category of weak or strong and which will be briefly explained below (Baker, 2011; Močinić, 2011). These models include the submersion, immersion,
pull-out, segregationist, transitional, mainstream with foreign language teaching, two way/dual language, heritage, maintenance and mainstream bilingual education models. In submersion programs, minority language students are immersed in the majority language which is why it is also known as the sink or swim method. Prior to Lau vs. Nichols, a Federal, US Supreme Court decision, this was the treatment of minority language students across the United States. Immersion bilingual programs place an initial emphasis on the second language where students are majority language users. This can be seen in French immersion schools where the majority of students are English speakers with the goal of developing bilingual and biliterate skills in French. Another form of submersion is immersion but with withdrawal classes that provide students with additional support in small groups outside of the regular classroom. This approach is flawed in that students’ first language and culture are rarely respected and used as part of the curriculum, it is currently the approach used in many contexts around the United States. A similar model is the segregationist model which separates students based on race or ethnicity and students have no choice or opportunity for change as it is prescribed by the government. Both of these models represents a monolingual approach to education for all students and are deemed weak bilingual programs because they have the objective of monolingualism of the majority language. The result is subtractive in nature as the end result will be a shift to the majority language. Monoglossic ideologies are non-diglossic bilingual education types which favor subtractive bilingual programs since they do not safeguard the "low" language from the societal pressure and power of the "high" language by not offering a
structure to ensure the maintenance and preservation of the native language. They represent one extreme of the bilingual education model spectrum.

The transitional model may begin with the student’s native language and gradually switch them over to the majority language. Transitional bilingual education is designed for emergent bilinguals typically follows one of the following routes: 1.) developmental, maintain home language across 5 or more years or, 2.) transitional “early exit”, transition to all-English instructing within 3 years (García, 2009). Another weak form of bilingual education is mainstream with foreign language teaching where students are taught in the majority language and the second or foreign language is a subject however it typically findings in limited bilingualism. This is the current model in public education both the United States and Puerto Rico.

Strong forms of bilingual education are known for the outcome of bilingual and biliterate students. Biliteracy is defined by Ovando, Combs and Collier (2006) as a person’s ability to read and write in two languages. These bilingual programs are diglossic and additive education types since the structure and objective of these programs is to maintain and add an additional language. Dual-language bilingual programs also known as two-way programs or the 90/10 bilingual immersion model, use both majority languages ideally in a balanced approach with half of the students being minority language users and the other half majority language users (Ovando, Combs, & Collier, 2006). The aim is for students to develop bilingualism and biliteracy and use language in a balanced way so that neither language becomes the dominant language. It has been noted that this form of education does not support language mixing
and both languages are kept separate (Močinić, 2011). Next, are maintenance/heritage language programs where students are minority language users and an emphasis is placed on the majority language while maintaining instruction in the native or heritage language. Finally, the mainstream bilingual education program is exemplified by instructing students who are native speakers of one of the majority languages and both majority languages are used during instruction.

Hornberger (2002) offers another way to conceptualize bilingual education models as she states that they can be classified as transitional, maintenance or enrichment. These distinctions are based on the school’s linguistic, cultural and social goals. In transitional models the linguistic goal is to move the student from L1 to L2 which will lead to cultural and social assimilation. In maintenance models the linguistic goal is to maintain the L1 while acquiring the L2. The cultural goal is to prevent heritage and cultural identity loss and the social goal of evoking one’s civil rights. The enrichment model has the linguistic goal of developing both the L1 and L2 with the cultural goal of expanding cultural boundaries while improving social autonomy.

**Theoretical Framework**

The primary rationale for this study uses a constructivist educational perspective and a pragmatic approach as a lens for analyzing the data due to the role of education in the formation of a progressive society. This study acknowledges the socio-cultural, socio-political and socio-psychological factors that represent both the dynamic and complex contexts of schooling and therefore will evaluate the data according to the proposed language
orientations of prominent linguist Richard Ruiz (1984). Language orientations are defined as "...language attitudes...[that] help to delimit the range of acceptable attitudes toward language and to make certain attitudes legitimate. What is thinkable about language in society" (Ruiz, 1984, p. 4). Ruiz (1984) identified three language orientations: language as a right, language as a problem and language as a resource. He argues that bilingual education is shaped depending on the orientation from which the society imparts and that instituted language policies reflect the language orientation of policy planners. Language orientations are highly useful for determining how language ideologies influence language policy and implementation of educational language programs.

Language ideologies

Psychological, sociological, economic, political, religious, cultural and linguistic variables make bilingualism an extremely complex phenomena and therefore there is not one agreed upon definition (Bialystok, 2006; Baker, 2011; García, 2009; Spolsky, 1978). Heller (2007, as cited by García, 2009, p. 25) states that "language is a truly social notion that cannot be defined without reference to its speakers and the context in which it is used." Language is an inextricable part of people. According to the Sapir Whorf hypothesis, developed in the late 40's by psychologists Edward Sapir and Benjamin Whorf, one's thinking is structured by their language (Whorf, 1956). The language sets the conditions and mode for how thoughts are formed. Therefore, different languages will promote various forms of thought. However, it is agreed that language and language use are not the same.
Language permits people to engage in communication with others in practices where language is used called languaging. Shohamy (2006b, as cited in García, 2009, p. 24) defines languaging as the language practices of people which includes the context in which language interaction occurs. "People engage in languaging for many purposes: expression, interaction, prayer, and are symbolic systems" (Ager, 2001, as cited in García, 2009, p.31). This is critical because "it is vital to understand the context within the speech community, the need for using the target language, the benefits derived from using the language, any disadvantages that may accrue from learning it, the opportunities for learning the language, and the availability of materials, teachers, and speakers with whom to practice the language" (Pousada, 2017, p. 8). The implications of bilingualism are multifaceted as the individual is impacted, and in return, impacts the society in which they participate. The interlocutors act, and are acted upon, from which a language ideology is constructed and languaging takes place. "Language ideologies are sets of beliefs, feelings and conceptions about language that form a mediating link between social structures and language practices." (Mackinney, 2016, pp. 301-302).

The way language is used among people is infused with values, beliefs, and attitudes (Blackledge & Creese, 2014). These agreed upon language ideologies assign meaning to languages and how languages are viewed. They also take into consideration the macro factors such as history, politics and economics. There are three prevalent language ideologies: diglossic, heteroglossic and transglossic.
**Diglossic ideology.** According to García (2009), the term diglossic ideology was initially conceptualized by Ferguson (1959). Those socially determined prestigious languages are seen as valuable and so are considered high languages chosen for use in formal institutions, government and education. Those languages associated with less prestige were termed "low" languages and were utilized in the home and for informal interactions. Diglossia was a prevalent theoretical construct in the early twentieth century that was limited to language varieties but was then extended by Fishman (1967) to apply to different languages as well (as seen in Blackledge & Creese, 2014). Some criticisms of diglossia are that it presents language use in a compartmentalized and strict fashion while ignoring the underlying conflict that determines whether a language is deemed by society to be high or low. From the diglossic view of languages as bounded, compartmentalized and mutually exclusive, the monoglossic theoretical framework emerged to treat bilingualism and bilingual education as though languages were separate, whole, and autonomous bounded systems which is currently a supported linguistic theory (MacSwan, 2017). The standard to be achieved was that of monolinguals since bilinguals were viewed as two monolinguals put together.

**Heteroglossic ideology.** In the text Heteroglossia as Practice and Pedagogy (Blackledge & Creese, 2014), the diglossic theory was challenged by Russian theorist Makhil Bakhtin (1981) who juxtaposed monoglossic beliefs with heteroglossic ideologies that consider multiple language practices inherent in language use and are profoundly interrelated. He proposed that language be evaluated in terms of individual language use, as it interacts with societal
language use, that is infused with historical, cultural and social attributes. Heteroglossic ideologies consider the importance of context on an individual's speech patterns. People's languaging practices should take into consideration the person, their ideals and their logic which form the way they use language to shape and send a message. Heteroglossic ideologies favor additive, recursive and dynamic bilingual programs. While Puerto Rico has traditionally held a diglossic view of English and Spanish, the actual language practices more closely reflect a heteroglossic ideology. Duany (2002, p. 32)

Puerto Ricans live on either side of a divided border that they transgress and remap continually in their everyday language, popular music, visual arts, and creative literature. It is the straddling of two linguistic and geopolitical frontiers that most precisely defines cultural identity.

Transglossic ideology. Fishman's research (1967) on diglossia has expanded its definition to include not only other languages but the reconceptualization of heteroglossia to what García (2009) has termed transglossia. A transglossic ideology is belief that one should use their full linguistic repertoire without regard for socially and politically imposed norms that dictate rules for language use (Otheguy et al., 2018). Language use in the twenty-first century is recognizing how bilinguals actually use language, accepting that languages are blended and may be used flexibility and without regards for social rules as a way to create shared understandings among individuals (García, 2009). Transglossic language use is further supported by linguistic ecology which supports flexible and natural changes in languages as they adapt to the context and contact with other languages (Mühlhäusler, 1996).
It is noted that translanguaging is important for developing bilingualism in educational contexts. Previous research has indicated that the opportunity for teachers to teach in either language and in any configuration is significant because it has a positive impact on students’ understanding and achievement. “El maestro que conoce las estructuras lingüísticas del idioma extranjero que enseña y las estructuras lingüísticas del idioma vernáculo de sus estudiantes, puede aprovechar las diferencias y semejanzas que hay en ellas para hacer más efectiva su labor” [A teachers that knows the linguistic structure of the foreign language and teaches and the linguistic structures of the student’s vernacular language, can take advantage of the differences and similarities among them to do a more effective job (López Laguerre, 1989, p. 14).

Renowned psychologist and educational theorist John Dewey believed that schools are an integral part of society and societal reform. The school’s function was to be formative, informative and transformative (Carrasquillo-Rodríguez, 2019). Schooling is the site of an elaborate system of language ideologies that are transmitted via language orientation and implemented programs. The school is a vessel to teach future generations the cultural heritage that they are to carry on. Therefore, the curriculum should be meaningful connecting with society, outside world, and real life. In today's global economy where contact with other languages is as easy as connecting to the internet, bilingual education becomes even more relevant to meaningful education. The previously delineated territory between English and Spanish is being marked by the influences of the English language and culture that are more present thanks to technological resources and more globalized
connections that allow for more agency regarding language choice (García, 2009, p. 29).

Dewey also supported "the role of education to transform the world into a more humane, just, and egalitarian society" (Sikandar, 2015, p. 192). Education would equip future citizens with the needed tools to correct wrongdoings and guide society’s advancement. In his book *How We Think*, Dewey (1933) states that subject matter is not enough to ensure that students learn but teachers must connect the content to student’s needs, interests, cognitive development and in the case of English language learners, their language proficiency. According to García (2009) bilingual education is a way of providing meaningful and equitable education as supported by Dewey. Education is also recognized as a tool for seeking freedom from society's imposed power structures. Dewey saw schools as social extensions of the political system, "donde podrían aprender y practicar destrezas y adquirir herramientas necesarias para vivir una vida democrática" [where we could learn and practice skills and acquire the tools necessary to live a democratic life] (Cano Guerrero, 2019).

Well-known Puerto Rican social scientist, Jorge Schmidt Nieto has explored the connection between politics and bilingual education as it pertains to Puerto Rico. One of his most powerful arguments is that the goal in bilingual education should not be to remove politics but understand the relationship and make schools democratic educational structures since they are the site of language policy creation. He claims that the language contact of English and Spanish in Puerto Rico led to a struggle for linguistic power which would later
be interpreted as political power. In the history of Puerto Rico, the conflict between the two languages was in a functionalist society school helps perpetuate and balance the society by promoting a social norm and developing integration of societal members. Through education, a micro society is formed that transmits societal norms in three forms: social solidarity, social rules, division of labor.

**Summary**

This study used Ruiz’s (1984) language orientations and Garcia’s (2009) transglossic language ideology as the theoretical frameworks with which to explore the characteristics of language use in the specialized bilingual school and classroom context. Language ideologies directly impact language policy which guides the model of bilingual education while considering factors such as educational needs, goals, and resources. García (2009) presents the transglossic ideology as the belief that bilingualism is dynamic, complex, and ever-changing based on language practices and contexts exempt from social norms. Therefore, language instruction should reflect the multi-faceted and non-linear nature of languaging.

Currently, there are no clear guidelines as to how students should be taught according to The Bilingual Education Act of 1968, which has led to a wide variety of English as a Second language and bilingual programs. International experts in bilingual studies were consulted regarding the state of English instruction in Puerto Rican public schools. These third party observers noted that Puerto Rico functioned as a monolingual nation and therefore English should be treated as a foreign language and not as a second language (Pousada,
1999, Torres González, 2002). Their recommendations were to change the approach of language instruction on the island to treating English as a foreign language which involves learning a language in a national context where it is not the majority language and is usually treated as a subject. "Traditional second or foreign language programs often aim to use only the target language in instruction, whereas bilingual education programs always include some form of more than one language in at least some parts of instruction" (García, 2009, p.6). Both instructional approaches are currently integrating language with content and as a result more closely resemble bilingual education objectives.

One of the great challenges for implementing bilingual education is that the attempt to define it is stunted because “…there is no tight representation of systems, and the same model may have very different features depending on how the many variables interact with each other” (García, 2009, p. 114). The type of bilingual program chosen for a government supported public school is based on the language policy that the government has adopted which is highly influenced by language ideologies. The government's goals for future citizens determines which form of bilingual program is chosen. The structure of a bilingual program may be based on grade level, content or language of instruction. This may explain why despite various educational policies and configurations in instructional formats, student outcomes do not reflect the time and effort received during K-12 education.

The language ideology of one land equals one language was critical to the establishment of the language orientation in education of language as a problem (Ruiz, 1984). This is paramount since language ideology directly informs the
language policy that is enacted in the classroom during language instruction. With effective bilingual education students receiving a public education will potentially be as academically competitive as their private and specialized bilingual school counterparts. If this issue is not addressed than many students with a public education will not be prepared to compete with their private school peers in post-secondary education which will potentially limit their job opportunities and the equality gap between social classes will continue to increase and perpetuate social class divide on the island.
CHAPTER 3: METHODOLOGY

Introduction

The rationale behind the study was to ascertain the unique and complex aspects of each individual school as characterized by teachers and administrators. Therefore, in this chapter the qualitative research paradigm will be explained as the most compatible research design for the purpose of studying teacher and administrators’ perceptions of their Specialized Bilingual School in DEPR. The justification for choosing particular schools from the ALIANZA study will be discussed. In addition, this chapter describes the methodology, along with a description of the participants, how participants were selected, materials, and the researcher’s role. Furthermore, an explanation is included of how data was collected, processed and analyzed, as well as potential ethical issues.

Research Method & Design

The objective of this study was to explore the current perceptions of teachers and administrators who represent the facilitators of the bilingual education policy instituted by the DEPR. For this reason, a qualitative research design represented the best way to collect the information necessary to answer the research questions. Each school context in the study was particular which requires investigation methods that provide the space for these educators to share their perceptions within a flexible framework. Participants’ perceptions include their beliefs, attitudes and meanings assigned to events that would be difficult to quantify mathematically. Creswell describes qualitative research as “an approach for exploring and understanding the meaning individuals or
groups ascribe to a social or human problem” (Creswell, 2014, p. 32). Compared to quantitative research, which requires test scores and numerical analysis data, qualitative studies are distinguished by the data collection of non-numeric data such as, interviews and questionnaires. A qualitative research method was chosen for the study principally based on the distinct and specific context that specialized bilingual schools in DEPR present that cannot be expressed numerically. Quantitative studies do not allow for the exploration and in-depth understanding of a phenomenon that includes political, historical and cultural aspects like a qualitative study does. Bilingual education is a highly complex topic and qualitative research allowed for emerging ideas and comments to be shared during the study that may not have been observed on school grounds or in the classroom. However, for understanding teacher and administrator perceptions, interviews allowed participants to share their experience in their own words which was most appropriate for depicting their distinctive teaching context. Yin (2014) advocates in favor of using qualitative research when a researcher’s goal is to examine a contemporary issue that involves real life topics. The qualitative research paradigm was chosen for its focus on the experience of the participants. "It is impossible to understand or evaluate bilingual education properly without also discussing the political and philosophical arguments and the whole societal context of it” (Skutnabb-Kangas, 1986, p 161). Given the unique circumstances of each participating school and the descriptive nature of this study, a qualitative design was found to be the most appropriate research methodology to be able to answer the research questions.
Multiple sources of data were used to provide a detailed and rich description of the characteristics of these bilingual schools and to triangulate the data which would establish its validity and reliability (Yin, 2011). As a member of the original research team that received Committee Institutional para la protección de los Seres Humanos en la Investigación [Institutional Committee for the Protection of Human Subjects involved in Investigations] (CIPSHI)’s approval in March, 2018, I utilized a segment of the existing data from the ALIANZA study, previously mentioned. Data collection methods at each of the participating schools included individual teacher interviews, self-study assessment questionnaires completed by the participants, school grounds observations and individual classroom observations. These data collections methods are characteristic of qualitative design are supported by researchers such as Creswell (2014), Hatch (2002), and Marshall and Rossman (2011) for the purpose of gaining rich, descriptive data that allows for the exploration of various levels of meaning.

**Nature of the Study**

The ALIANZA study included eighteen specialized language and bilingual schools, thirteen investigators, forty-eight teacher interviews resulting in a total of 1,879 minutes of interviews and 589 transcribed pages of transcriptions, forty classroom observations for a total of 2,010 minutes of classroom observations equating to 113 pages of transcriptions. The massive amount of data collected from this study led to an executive summary submitted to DEPR and the Specialized School division, but the findings were an overview of the larger trends and issues related to bilingual education. Therefore, this study
used a subset of that data that singularly focused on the characteristics of participating schools, as reported by teachers and administrators. For this reason, nine specialized bilingual schools in DEPR's that participated in the ALIANZA study were chosen in order to provide a detailed description of their bilingual school reality. The secondary purpose of this study was to describe these characteristics as they have potential applications for other public schools who would like to improve bilingual proficiency in their student population. A purposive sample of nine schools from the ALIANZA study and the rationale for selecting them will be discussed in the next section (Mason, 2010; Yin, 2014).

*Criteria for selecting participating schools.* The DEPR specialized language and bilingual schools consists of eighteen schools throughout the island. Three of the schools are language schools that teach languages other than English or Spanish and therefore were eliminated from participation. This left fifteen schools however, one school was closed before the study began in 2018 which left a possible fourteen schools. The ALIANZA study began in March of 2018 which for the participating schools was nearing the end of the 2017-2018 school year in May. It was also six months after the natural disaster of Hurricane Maria. Due to time constraints and strain on resources and conditions, not all schools were able to provide all of the requested data which reduced the total participating schools to nine based on purposive sampling. According to Champion (2005), Mason (2010), and Yin (2014), purposive sampling is used when there are “clear criteria for selecting the participants for the sample group to be studied” (p. 62). Purposive sampling allows the selection of the study units that provides most relevant, rich, in-depth, and abundant data based on the
topic research with typically small sample sizes (Gall, Gall, & Borg, 2007; Yin, 2014). Three criteria were used for selecting schools: completion of the self-study evaluation, a minimum of two different classroom observations, and a minimum of two teacher interviews.

Denzin and Lincoln (2005) mentioned that an adequate sample size to reach data saturation would have at least six participants. Moreover, a minimum small sample size of six participants is consistent with qualitative research studies (Merriam, 2009; Stake, 2006; Yin, 2011). A great benefit of this study was the comprehensive look at nine schools across the island, located in four different geographic regions. Within the nine schools selected, the sample will include data provided by teachers, administrators, self-study committee members and observations made by my fellow researchers and myself. A detailed description of each of the criteria for participation mentioned above will be addressed in the following section. The configuration of specialized bilingual school program for elementary schools consisted of Math, Science and English Language Arts to be taught exclusively in English while Social Studies, Spanish Language Arts and electives were to be instructed in Spanish. At the secondary school level, the same language division was realized. Additionally, students received two English classes; one to focus on conversational English and the other for reading and writing.

_School set-up and demographics._ Of the fourteen specialized English Spanish bilingual schools in the DEPR unit, only nine met the established criteria for participation. Data for these nine schools was separated from the larger aggregate data set in the ALIANZA study. These nine schools were located
throughout Puerto Rico, two in the metro area, three located in the southern part of the island, while the remaining four schools were located on the west coast of the island. Six of the schools were at the elementary level and the remaining three at the secondary level. Specialized bilingual elementary schools are distinguished by offering English instruction in the areas of Science, Math and English Language Arts; while Social Studies and Spanish Language Arts are in Spanish, all of which are typically taught by the same teacher.

*Interviews with teachers.* Qualitative interview design allows the reconstruction of one’s experiences as told by the participant (Rubin & Rubin, 2012). Only educators who taught in a DEPR’s specialized bilingual schools with Spanish and English target languages, were solicited to participate in these interviews. According to Creswell (2014), interviews are used as valuable resources to collect the data from the responses of the participants. Teacher interviews provided an avenue to allow the interviewers to explain the questions regarding the complexities of bilingual education and for the interviewees to express their perceptions without being limited to space or misinterpretation. Participants were assured anonymity in the hope that would feel free to express themselves without fear of reprisal from DEPR. Additionally, the informed consent discussed with participants at the beginning of the interviews, stipulated that the data collected would be intellectual property of the UPR-RP TESOL program.

Semi-structured interviews were utilized to gain an understanding of the characteristics of bilingual teachers and administrators of DEPR Bilingual schools and were planned carefully before the interview was carried out (Lodico, Spaulding, & Voegtle, 2010). Semi-structured interviews permitted
researchers to probe for additional information regarding the teacher's background, current position, experiences in the bilingual school and perceptions of the school in general. Experts in the field of TESOL developed an interview protocol that included a list of 20 questions to be addressed in the interviews with the participants but was not limited to only those questions. Like an observational protocol, the interview protocol helped guide the collection of data in a systematic and focused manner. The teacher interviews were comprised of twenty questions divided into three areas: teacher profile, implementation of the bilingual program and student achievement. Some of the questions included were: How they were recruited to work in their school. Do you teach your subject entirely in English? Please, elaborate to what extent, and what resources (textbooks and materials) does the school provide to ensure success in educational goals? The semi-structured interview protocol can be found in appendix F.

The questions surrounding the teacher profile section were directly related to obtaining teachers' background and information regarding their professional status. Regarding implementation of the bilingual program questions were directed toward bilingual curriculum strengths, weaknesses and areas of improvement as perceived by the teachers. The section of the interview questions devoted to student achievement were related to materials, instructional decision making and student assessments. At the time of the site visits, the other researchers and myself, provided the teachers with a brief orientation about the purpose of the study and verbal consent from the teachers was sufficient for participation in the audio-recorded interview. The semi-
structured interview allowed the research team to change the order of questions, omit questions, or vary the wording of the questions depending on the participants responses during the interview. Researchers were given the freedom to add other questions during the interview if clarification or explanation was necessary. After finalizing the face-to-face, on-site, semi-structured interviews, the researchers transcribed them verbatim and were member verified. The significance of the teacher interviews was that it provided information vital to the understanding of student success as they are the closest link between the school and student performance.

Data Collection Procedures

During the ALIANZA study, both interview and observation data were collected by six, 2- person teams. Each team was assigned at least two schools in the DEPR specialized bilingual school unit to conduct the interviews and observations. All data collection procedures were conducted simultaneously within the time frame of March to May 2018. Participants were invited on a voluntary basis for a one-time interview lasting no more than 50 minutes. All interviews were conducted with individual teachers, on school grounds and during regular school hours. The interviews were audio recorded and then transcribed by the primary researchers. Once they were transcribed they were member checked by the secondary researcher on the team to verify their accuracy and validity. The classroom & school observations were made using observation protocol to locate specific information (See Appendix G). Researchers had the flexibility to add information they found pertinent and all
observations served as supporting research data. Each section in the observation protocol contained ten open-ended, short answer questions.

The self-study committee also provided any supporting documentation that they considered necessary. A copy of the self-study evaluation is provided in Appendix H. According to Creswell (2014), conducting a needs assessment is a valuable tool for beginning a study as it focuses on the participants' perspective regarding their particular perspective and needs. Fourteen of the eighteen schools completed the self-study assessment. The ALIANZA study proposed that each self-study committee would be composed of nine participants: the principal, an administrative assistant, one or two English teachers, two teachers from other subject areas, one non-teaching staff member and two parents. This committee was responsible for completing the self-study assessment. The self-study assessment was comprised of fifteen pages that were divided into five sections. The sections were directed at targeting specific school processes such as: curriculum, teaching staff, student achievement, assessment and administrative processes (See Appendix E). Each section had a series of ten questions that could be answered in short narratives with the option to supply supporting documentation to the researcher once they arrived for an on-site visit. Each question was initially answered in terms of whether the prompt was met, partially met or not met. Questions such as "Does the school comply with the definition of bilingualism? How?, What teaching strategies does the teaching personnel use to promote bilingual/language program effectiveness? and Do the students' scores meet the expectations required in standardized tests like META, EEB, or APE?" were asked.
**Data Analysis**

There are six possible sources of evidence in qualitative studies; this study will utilize teacher interviews, school grounds and classroom observations and a self-study evaluation to provide an accurate and in-depth look at the current state of DEPR’s specialized bilingual schools (Stake, 2006; Yin, 2014). This study used a subset of the data collected from the ALIANZA study with a particular focus on nine participating schools that met the criteria requirements; a self-study evaluation, school grounds observation, a minimum of two teacher interviews, as well as a minimum of two classroom observations. These multiple data sources were useful during the data collection process to improve reliability and evaluation methodology (Leedy & Omrod, 2013). Once the interviews were transcribed, they were verified using member checking to ensure the validity and trustworthiness to the context of the questions.

A five-phased analysis cycle of compiling, disassembling, reassembling and categorizing, interpreting, and concluding was used to analyze the data (Yin, 2011). The compiling process was completed during the larger ALIANZA study from March to May 2018 where interviews, observations and self-study assessment data were collected from fifteen DEPR specialized bilingual and language schools. The disassembling phase required separating the subsection of data as pertained to the nine schools from the aggregate data in the ALIANZA study. I initially reviewed all of the transcripts & self-study evaluations holistically to familiarize myself with the data. The responses provided by the participants in the self-study evaluations were examined to identify how teachers and administrators characterized their particular school context. The
study employed four data collection methods resulting in four distinct groups of data which were analyzed using three levels of analysis: (a) open coding, (b) selective coding, and (c) theoretical coding. Conceptual theories and frameworks discussed in chapter two were used as the lens through which the data was analyzed. The reassembling of data included categorizing the codes taken from sentences or single ideas from the interviews and assigning them a label which reflected the general topic of the data. During selective coding, I began looking for repeated words, sentences or single ideas from the data. As I found them I manually highlighted them and assigned a code which reflected an emergent theme. The reassembling procedure was repeated several times as a part of a trial-and-error process of testing codes (Yin, 2011). The descriptions provided by the participants of the bilingual programs were examined to specifically identify how these programs were characterized by teachers and administrators. The data helped to identify the specific characteristics of the nine DEPR bilingual schools regarding their curriculum, instruction and demographic profile.

Once reassembling was complete, the data was thematically coded and categorized to expose various relationships among the data sources. The data was interpreted inductively to most-accurately reflect the wholistic and clear description of the schools under study. "In qualitative research, the intent is to explore the general, complex set of factors surrounding the central phenomenon and present the broad, varied perspectives or meanings that participants hold" (Creswell, 2014, p. 185). After the compilation of codes and themes was completed, the data was loaded into the Dedoose software program for further
analysis. The data was reviewed until a theoretical saturation occurred, in which no new themes arose, and information began to repeat. The grouping of data according to their codes affirmed the evidence and relationship among the data sources and initiated theoretical coding. As typical of thematic analysis, the data highlighted the unifying characteristics of the nine DEPR specialized bilingual schools with regards to their teaching context and aspects of the relationship with DEPR such as curriculum, materials & resources and professional development. The benefits of using Dedoose software program for coding were that it allowed a rigorous examination of the data and confirmation for the manual coding method (Boeije, 2010). Using Dedoose, various analyses were conducted to evaluate the frequency of codes per data set, how the codes overlapped and what could be inferred regarding the relationship across codes. Those codes most frequently appearing or in connection with other codes, were the basis for the theoretical coding. Revealing relationships among codes led to a better understanding of the factors that create the school context as defined by teachers and administrators.
FIGURE 1
Data Analysis Process

It is important to note that the following data is most representative of teacher perceptions as they represent the largest stakeholder group in the study. Understanding this group is critical since the findings represent data firsthand from those who implement the DEPR policies and make decisions that directly impact the students' learning experience. The first research question was defined in terms of unstructured time at school, structured class time, teacher profile and student profile. Quotes were cited by referencing the school number assigned by the ALIANZA study to maintain continuity between both
studies. The participating nine schools are school 1, 2, 3, 4, 9, 12, 13, 15 and 17, as they met the minimum requirements for teacher interviews and classroom observations to be included in the study. Many schools had more than two teacher interviews therefore the second number represents the order in which the interviews occurred. Teacher interviews will begin with the school number and teacher interview number (S#3, 01) for school number 3, teacher interview number 1. The school self-study evaluations will receive the school number and then the letters SS, (S#9, SS), and the linguistic landscapes will be labeled with the school number and LL (S#15, LL). Data collected from a classroom observation will begin with the school number followed by CO (S#3, CO).

*Role of the researcher.* As a member of the research team for the ALIANZA study, I collected some of the data. However, the rest of the data that was used in this study was collected by other researchers. The nature of qualitative research is interpretive, and the researcher is an integral part of the process that potentially introduces ethical and personal issues by not being the sole researcher there was an advantage for higher objectivity while reviewing the data. (Locke, Spirduso, & Silverman, 2013). According to Creswell, (2014) biases, values, personal history, gender and socioeconomic status shape researcher interpretations. As an English language teacher, I have a vested interest in promoting bilingualism in Puerto Rico. Therefore, I may view the interactions during the study with positive expectations. My personal history has led me to dedicate my life to this area of study which may have led me to look for the positive evidence of bilingual education that support my own personal views. The participants in the study are my contemporaries in the field
of education which may impact my subjectivity when reviewing the interview
transcripts. I do not have any prior or existing relationship with any of the
participants in the study and my role will only impact the data analysis since the
data was previously collected.

**Ethical Considerations**

Specific ethical consideration must be taken for all research that involves
human subjects (Yin, 2014). All necessary documentation was previously
submitted to CIPSHI at the University of Puerto Rico Rio Piedras and received
approval for the ALIANZA study (See Appendix B). Confidentiality and
anonymity of the participants was and will be protected by a code number (e.g.,
ES1 = School 1). The dissertation director and I will be the only persons that will
have access to the codes. The data will be archived for a minimum period of
seven years and then destroyed (Creswell, 2014). It is also important to
remember that because DEPR requires that all researchers leave a copy of any
signed consent forms at the front office, the research team requested and was
granted a waiver from our IRB so that participants were not required to sign a
consent form, but could give verbal consent which was recorded by the
researchers assigned to the respective schools.

A great benefit for the schools and the participants in this study was the
guided reflection of their professional growth and practice that the investigation
provided. Through the interview process, the principal, self-study group
members and teachers may have acquired a deeper understanding of their
particular school’s context with a more profound understanding of their role
than if they had not participated in the study. The findings obtained from this
investigation may be shared with the DEPR and may lead to a more justified understanding of the duties they perform and the rationale for performing them. In order to mitigate these risks, participants were assured that their participation was to be utilized solely for the purpose of the investigation and would remain anonymous. To ensure anonymity during the study, each school was assigned a number, the questions and answers from the participants will be referenced by the number assigned to that school and not the school’s name. Any information with the potential to identify a particular school or participant was deleted. Participants may have felt tired and stressed since the interview process will take time away from their ordinary duties. Participants did not receive compensation, nor would compensation be provided for recruitment and there were no direct benefits associated with the study. Follow-up will not be conducted at the conclusion of the study.
CHAPTER 4 FINDINGS

Introduction

According to findings provided by Maxwell (2012), Ostolaza (2001), Pérez (2011), Pousada (2000), Resnick (1993), Soto Santiago (2009), there have been great attempts to foster high English language proficiency particularly in K-12 public education in Puerto Rico. Nevertheless, the trend for the past 25 years has not shown a major shift in additional Puerto Ricans identifying as bilingual (US Census Bureau, 2000; US Census Bureau, 2010). Student performance does not reflect the 13 years of English instruction received in public schools. (AbrePR, 2018; López Laguerre, 1989; Pousada, 2000; META-PR, 2018). Conversely, in a study conducted on DEPR specialized bilingual schools in Puerto Rico by Martínez Rodríguez (2014), findings revealed that their students are successful at achieving English proficiency, thus, an interest in fully understanding how specialized bilingual schools achieve successful student outcomes (Ostolaza, 2001; Pérez, 2011; Pousada, 2000; Soto Santiago, 2009). The impact of elementary and secondary bilingual instruction merits investigation since it represents a promising solution for increasing students' English proficiency in traditional public schools throughout Puerto Rico. The purpose of this study was to explore how teachers and administrators in these specialized bilingual programs characterize their educational context as it may explain why their students are successful. The contents of this chapter reveal the findings of the qualitative research conducted to answer the following questions:
(1) How do teachers and administrators of DEPR’s specialized bilingual school describe their teaching contexts?

(2) How do teachers and administrators of DEPR's bilingual schools characterize their relationship with DEPR in relation to

(a) professional development?

(b) curriculum?

(c) materials & resources?

The information reported is a compilation of data collected from thirty-three teacher interviews, sixteen classroom observations, nine self-study evaluations and seven school grounds observations. They describe the perspectives as shared by teachers and school administrators in the nine participating specialized bilingual public schools in the DEPR. Included in this chapter are tables and graphics used to provide visual interpretations of the data along with poignant quotes from the data that highlight the salient themes. The chapter will conclude with a summary of the most significant findings.

A third of the schools in the study had been recognized as schools of excellence, receiving awards such as the highest ranking school on the island (1, 2). Three of the nine schools in the study scored in the top 10 of all of the schools in Puerto Rico on the English portion of META-PR in 2019 [See table 6]. The success of these effective bilingual schools is evident which is why the focus of this study was on teacher and administrator perspectives to better understand how they obtain positive student outcomes. While information was solicited from various members of school personnel and the administration, it is important to note that the bulk of the data represents the voices of the teachers.
As the most immediate link between the DEPR system and the students, teachers are the crucial vessel that transmit the DEPR educational policy and implement practices and ideologies that directly affect students' academic achievement.

**FIGURE 2**

**Data Collection Methods for 9 Participating Schools in Percentage**

*Overall School Environment*

The school environment refers to how language was used by school community members during unstructured school time and structured class time. This is also known as the environment's linguistic landscape. When more than one language system exists, members of the community have choices regarding how they communicate with others. These choices include, but are not limited to, the language chosen to communicate based on the speaker's purpose, intended audience or meaning to be conveyed. The amount of one
language used over the other, who to use certain languages with and even the
use of specific words in a given language may carry connotations known in the
community which are ultimately all linguistic choices. A teacher profile and a
student profile were also pertinent to understand the backgrounds of the
fundamental participants within the bilingual school. The specialized bilingual
schools in this study are proudly described by the participants as innovative
and set apart from "traditional" public schools for "... el tipo de ambiente, el tipo
de estudiantes, el tipo de experiencias no podría realizar" [the type of
environment, the type of students and the type of experiences that can be
provided] (S#4, 01). The school observations conducted during the ALIANZA
study followed a general protocol for collecting information. (See Appendix G)

**Unstructured time.** Seven school grounds observations were completed,
in four of the elementary schools and three in the secondary schools. These
observations included information on how school personnel used language in
their school environments including the office, hallways, and with colleagues.
The language of printed signs around the school, announcements, newsletters
and the school’s general infrastructure were all considered from an outsider’s
perspective. The protocol for the school observations can be found in Appendix
E. Included in unstructured time is the school’s overall linguistic landscape
which is shaped by components such as building structure, signage, and
language use among school personnel such as secretaries, cooks, students,
teachers and administrators in school common areas. There was no uniformity
in terms of the schools’ physical structure. Schools were located throughout the
island, two schools were housed in the metro area, three schools were situated
in the southern part of the island. While the remaining four schools were located on the west coast of the island. Schools ranged from being nestled in the middle of a busy urban area to being located alongside the beach with sand on the floor as you entered the building. Almost all of the schools in the study had security guards at the entrance who were consulted before entering the premise. The majority of the schools were described as clean with a common area, such as a square, located in the center of the campus.

The linguistic landscape of the school environment included print resources used around the school such as signage pertaining to how areas are labeled for visitors, bulletin boards and decorations. Among the nine schools, linguistic landscape observations identified the use of both languages in print resources such as bulletin boards, location signs and decorations. Three schools were observed to use English almost exclusively both in print resources and non-instruction areas outside of the main office (S# 1, 9, 13 & 15, LL) and three schools used mostly Spanish (S#2, 12 & 17, LL). School 4 was observed to use both English & Spanish in print resources but to varying degrees (S#4, LL). For example, "throughout the school most bulletin boards are in English depending on where they are located. Those located in front of Math, Science, and English classrooms are in English. Those located in front of Spanish, History, Drama, lunchroom, etc.... are in Spanish" demonstrating a clear language separation policy (S# 9, LL). In School 1 the classrooms were decorated almost exclusively in English except for the section dedicated to Spanish Language Arts (S#1, LL). School signage suggests that the language policy of assigning a language of
instruction to a particular subject was further expressed in the print materials used throughout the school promoting language separation.

Language choice during unstructured time as used by the administration, personnel, teachers and students varied widely. It was observed in four of the schools that teachers and students alike used a mixture of English and Spanish both in the classroom and during recreational periods. However, when it came to the main office, in a third of the schools it was observed that administrators and school personnel almost exclusively used Spanish while communicating with one another (S# 2, 3, and 12, LL). "administrators, secretaries, the school and support staff use Spanish. The students speak mostly English outside of class. However, whenever they went to the office to request or inform the administration, they would use Spanish" (S#2, 9, 12, 13, LL). This may reflect that language choice is associated with the position of the intended audience so as not to offend or appear disrespectful. "One could notice that students would always address administrators in Spanish" (S#13, LL). As part of an unspoken norm, students inherently knew that the language policy of the office was to perform administrative tasks in Spanish.

More than half of the schools in the study (S# 4, 9, 13, 15, 17, LL) were found to use both English and Spanish during informal conversations with colleagues and announcements by school personnel and administrators. The remaining schools reflected less of a balance between the two languages where some tended to communicate more in Spanish (S# 1, 3, 12, LL) while others used English almost exclusively (S# 11 & 14, LL). Through the analysis of the linguistic landscape observations, five of the nine schools in the sample were
noted as having a relative balance of English and Spanish with regards to print sources such as signs, announcements, and language use around the school. These findings provide evidence for language choice and use according to purpose and audience. Additionally, they provide evidence that bilingual practices were not limited to the classroom as they occurred outside of structured instructional time.

**Table 1**
**Comparison Of Signage, Technology And Library Resources By School**

<table>
<thead>
<tr>
<th></th>
<th>Informal language use</th>
<th>Signage</th>
<th>Technological resources</th>
<th>Library Resources</th>
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<td>_____</td>
<td>2, 4, 13, 15 &amp; 17</td>
<td>2, 4, 9 &amp; 13</td>
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<td>_____</td>
<td>_____</td>
<td>1, 3, 9, 10, 12</td>
<td>1, 3, 12, 15, 17</td>
</tr>
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<td>11, 14</td>
<td>3, 9, 15</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>Spanish</td>
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<td>2</td>
<td>_____</td>
<td>_____</td>
</tr>
<tr>
<td>Both</td>
<td>4, 9, 13, 15, 17</td>
<td>4, 12, 13</td>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>

One of the salient findings throughout all of the schools was that the overall environment contributed to the unspoken language policy of the school. All schools displayed an open language policy that allowed for flexible language use outside of the classroom. The school environment served to foster the goal of bilingualism by providing a space for users to decide how they would use their language skills. Findings revealed that "there is a continuous mix of Spanish with English in unstructured activity or time in between activities" (S#12, LL). The use of language by school personnel as well language use
throughout the school structure were reflective of the school's language ideology and mission to support their bilingual program:

Vas por el pasillo ve a los muchachos hablando en inglés y los ves escuchando canciones en inglés y ve el producto cuando ellos están fuera de este ambiente riguroso que tu dices están aprendiendo porque están aplicando en un área donde no hay supervisor pero lo están usando y de ahí tu ves que pasa la barrera de una estructura de enseñanza ha formado parte de la vida diario de ellos y yo encuentro que eso es muy importante” [Going through the halls one can see the kids speaking English and you can see them listening to songs in English and see the product when they are out of a strict environment and you say they are learning because they are applying it in an area where there is no supervisor but they are using it and there you see that it has passed through the barrier of a teaching structure and has formed part of their daily lives and I find that it is so important] (S#12, 01).

The idea of language learning for personal growth and development, not just in the English classroom, is vital to understanding the language orientation these teachers modeled for their students. English is not just another subject but a resource for life. All of these factors contribute to an environment where one teacher shares, the students “están acostumbrados al idioma no porque están en el salón de clase” [they are accustomed to the language and not because they are in the classroom (S#3, 04).

*Structured class time.* During the ALIANZA study, classroom observations were made in twelve of the fifteen schools. A minimum of two classroom
observations were required to qualify for participation in this study and therefore the number was reduced to nine qualifying schools. The purpose of classroom observations was to witness how language was actually used by the teachers and students during instructional time. The observation protocol included twelve starting points with flexibility for adding others as the situation merited. Questions included: What is the setup of the classroom? Is the class interactive? and what seems to be the language policy in the classroom? (See Appendix G) In the nine schools, sixteen classroom observations were conducted for a total of 1,055 minutes observed and 54 pages of typed transcripts. 75% of the observations took place in the elementary schools and 37.5% of the observations were of science classes. A third of the observations were of science class since the overt language policy was that English was the language of instruction in Science, Math and English classes. In terms of grade levels, three kindergarten classes, four 1st grades, two 2nd grade classes, three 4th grade classes, and four secondary classes from grades 7th to 10th grades were observed. Observations were not audio or videotaped nor were any pictures taken of the students, teachers or classroom itself in order to protect the participants’ identity. Doing so ensured that participants would be more likely to share their own opinions and experiences, especially when considering the research was commissioned by the DEPR. Three kindergarten classroom observations took place, four first grade classroom observations, two were conducted in second grade, three in fourth grade and one observation was conducted in a seventh, eighth, ninth and tenth grade classroom for a total of sixteen observations.
Eleven out of the twelve elementary school classrooms observed were described as welcoming, from the inviting door decorations to the overall classroom design (S#, 01, 02, 03, 12, 13, 15, CO). Teachers also provided students with print-rich environments with word walls, inspirational quotes and examples of student work which reinforced the value of their students' learning (S# 01, 13, 15, CO). "The walls were colorfully decorated with material pertaining to each academic subject in well-defined areas... with posters related to the dates of the year, months and weeks, the alphabet, geometrical figures, colors, growth charts, and word picture walls" (S#1, CO). English was the language most observed on the decorations inside the classrooms with the exception of the area relating to Spanish. In School 3 the desk configurations ranged from traditional single file rows, horseshoe formation, and large tables in place of desks to foster cooperative learning. None of the observed classes had more than 28 students. A few classrooms had as few as 17 students. During classroom observations teachers almost exclusively provided the students with copied material to support their instruction (S# 13, LL).

Details regarding how these schools implemented successful bilingual programs began with an understanding of the school’s language program. Information gathered using the teacher interview protocol questions from the ALIANZA study were used to solicit all open-ended questions that reflected on how class time was utilized. (See Appendix F) During interviews and in self-study evaluations, nearly half of the schools classified their program as "dual language" (S#1, 02; S#3,02; S#4, 01). Its implementation followed a typical class schedule of 50 minute blocks in both elementary and secondary. Teacher #2 in
School 15 stated, "Ofrezco el segundo grado basándonos en la adquisición de la lengua donde ahora se unió español con estudios sociales, este es un currículo atado. Unificado. También doy matemáticas, inglés y ciencias en inglés." [I teach second grade based on language arts where Spanish is combined with Social Studies, it is a linked curriculum. Unified. I also teach Math, English and Science in English]. Eleven other teachers at the elementary level confirmed that they also divided the language of instruction based on the subject matter. "Las clases que doy completamente en inglés son matemáticas, ciencia e ingles" [The classes I teach completely in English are math, science and English] (15, 1; 15, 2).

The specialized secondary school is distinguished by offering two English classes to their students: one English language arts with a focus on reading and writing and the other is a conversational English that focuses on speaking and listening. 55% of the elementary school teachers in this study reported that they taught all subjects for their given grade level. Schools 3, 4, 9, 12, 13, and 15 all reported that content areas are divided by language; math, science and English in English and social studies, Spanish and electives are taught in Spanish. Schools 1, 2 & 17 reported using both languages in all classes regardless of material which were confirmed by classroom observations. Electives such as art, music and physical education were dependent on the language preference of the teacher. At the elementary level, typically the same teacher taught all of the subjects however, at the intermediate and secondary level, each subject was taught by a different instructor.
Despite the intended division of language, the reality in the classroom involved an innovative language formula. The language practice in the classroom was tailored to the school’s context and the students’ needs which is consistent with the literature. Teacher 2 from School 12 shared that "la implementación es completamente en inglés. Al menos que el estudiante presente dificultad ahí es cuando se le presentan los conceptos o destrezas en español" [The implementation is completely in English. Unless the student presents difficulty and then is when they are taught the concepts or skills in Spanish]. This idea was echoed by another teacher when she shared that "We're a hybrid of Caribbean countries that is a hybrid of Latin America and of the states. It’s a hard thing to match up... culturally, it wouldn’t be possible to do it all in English. And you know, you work with the base of Spanish to do differences and similarities between languages to explain it" (S#11, 02). It is necessary "utilizar el dual language para que ellos hagan esa mezcla de conocimientos" [to utilize dual language so that [the students] make a mixture of knowledge] (S#3, 02). These quotes reflect teachers' understanding of bilingualism not as two separate bodies of knowledge but as one connected, inter-working system that is strategically used and recognizes the peculiarities of the Puerto Rican context (Garcia & Wei, 2014). It also provides evidence of the teacher constructed language policy enacted in the classroom regardless of the language policy of the DEPR.

During the typical 50-minute periods observed in schools, all but one of the schools in the study reported a school community that frequently used both languages as a medium of instruction. The interchange between them was so
constant that it was indistinguishable which language was used more than the other. The only exception was school 17 where "English is mostly used through the presentations by both the teacher and the students" (S#17,LL).

The use of both languages in the classroom was strategic in nature with the purpose of improving students' understanding. "[The teacher] allows them to answer in both and provides assistance by translating and reinforces what the students hear when one says something in Spanish she immediately translates it to English (S#1 & S#2, CO). In a first grade science class the teacher uses translanguaging when she says "Esas manecillas in English are called hands" (S#, 01). This instructional strategy was frequently used to establish connections between the native language and the second language. Code switching was another instructional strategy observed in the classroom. "The teacher code switches at all times. When he writes on the board, he writes in both languages. The teacher uses the DE's curriculum, and he had to translate it. They use both languages" (S# 2, CO). Code switching allows teachers to weave both languages together to establish and solidify the connections being made by students. Not only were both languages spoken but "the teacher's presentations were written in both languages" (S#4, CO). Presenting content in both languages, whether written on the board or in PowerPoint presentations, was noted in two-thirds of the secondary schools in the study reflecting teacher modeling bilingual behavior that students then imitated in their own language practices (Palmer, Martínez, Mateus, & Henderson, 2014).

Teachers also implemented an open classroom language policy as students were given the option to choose which language to use in a variety of
situations. In a math classroom, the teacher encouraged students to present in both languages but ultimately the student decided which language to use to conduct their presentations and code switching was permitted among students as well. He shared that "... if you see the student’s notebooks tienen definiciones en español y en inglés" (S#12, 02). These behaviors are supported by the literature that has shown the importance of teacher modeling since students will likely follow their lead. "Students participated actively in class and switched from English to Spanish among themselves, in this particular class students used more English among themselves" (S# 2, CO). Even in electives such as art and physical education, that were not designated as English instruction students demonstrated flexible language use and appeared comfortable doing so (S#13, S#17, LL).

The teachers’ language ideology included a clear vision for students to develop functional English language proficiency as opposed to an aspiration of native-like proficiency in the second language. "La especialidad a pesar de que tenemos ese calificativo de bilingüe realmente lo que queremos llevar al estudiante es que tenga destrezas de comunicación y eso aplica a todo a cualquier profesión" [In spite of the bilingual specialization, what we really want is to help students develop communication skills and that applies to any profession](S#4, 02). In addition to the practical view of bilingualism, language ideologies also included importance given to both languages during class instruction. "Trabajamos los idiomas simultáneamente...En muchas ocasiones tenemos que enseñar los conceptos en ambos idiomas"[We work with both languages simultaneously...Often we have to teach the concepts in both
languages] (S#12, 04). Teachers often mentioned the importance of maintaining the Spanish vernacular in addition to acquiring English. Bilingualism "es importante para toda la ciudadanía, pero reforzando también el español" [it is important for all citizens but reinforcing Spanish as well] (S#17,01). It was evident that the specialized bilingual school context is characterized by an open language policy that honors the value of each language both during unstructured school time and structured class time.

Teacher profile and demographics

A requisite for inclusion in the study was a minimum of at least two teacher interviews per participating school. From the nine participating schools, a total of 33 teacher interviews were conducted for this study for an average of 3 interviews per school. Twenty three interviews were with elementary teachers in schools that served kindergarten to eighth grade, representing 72.7% of the interviewed population. The other 10 interviews were with secondary teachers in schools serving sixth to twelfth grade. Ten percent of the teacher population interviewed mentioned having lived outside of Puerto Rico at some point in their lives. The range of teacher experience of those interviewed was from less than five years to over 20 years in the classroom. The largest population in terms of experience were in the 5 years or less range, representing 46.8% of the teachers in the sample.

Each teacher interview was conducted on school grounds during regular school hours. The interviewees worked with students from kindergarten to 12th grade. There were 22 elementary school teachers and 11 secondary school teachers for a total of thirty-three semi-structured, face to face interviews. Twelve
teachers interviewed taught all subjects in their grade level, followed by two teachers who taught English only, six teachers who taught a combination of classes such as Spanish, science, math, a computer science teacher and one teacher who taught only Spanish. At the secondary level there were two math, one science, one Spanish language teacher, one physical health teacher, a public speaking teacher, an advanced English teacher, an English conversation class teacher and an English Language Arts teacher.

TABLE 2

Teacher Interview Participants By Grade Level

<table>
<thead>
<tr>
<th>School number</th>
<th>Number of interviews</th>
<th>Grade level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>Kindergarten (K)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3rd</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English only</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3rd Spanish, science &amp; math (S, S &amp; M)</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>K</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3rd (S, S &amp; M) (2)</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adv. English 11th &amp; 12th</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7th &amp; 8th Lang. Arts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English conversation class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public speaking (6, 9, 10)</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>3rd (S, S, &amp; M)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English only Grades 3-5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Soc Studies &amp; math only</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>K</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3rd (Science, math, &amp; English)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Science 5-9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spanish 5-9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Math grades 5-9 (2)</td>
</tr>
</tbody>
</table>
There were 1,171.45 minutes of teacher interviews for an average of 35.5 minutes per interview and 285 pages of transcriptions. The transcriptions were written verbatim from the audio recorded interviews (Bogdan & Biklen, 1992). Participating teachers’ educational backgrounds ranged from a minimum of a bachelor’s degree, multiple bachelor’s degrees, master’s degrees and doctoral degrees. Teachers also reported certification from DEPR in their respective subject areas but only six reported having the bilingual certification credential. Nearly a third of the 33 participating teachers, reported having fifteen years or more experience in the teaching field. This demonstrates that the information provided represents a wide range of experience and includes those teachers who have significant insight into the workings of the specialized bilingual schools. All teacher participants were asked in which language they preferred to be interviewed. Nine of the interviewees responded to the interview in English only, six responded in both English and Spanish while the remaining eighteen participants answered in Spanish only. This is significant as it shows that the language of choice for the teachers is Spanish which has implications in classroom practices. It may be assumed that many of the
teachers were most likely second language learners as well which affords them an accurate perception, based on their prior experiences, of how native Spanish speaking students best learn English.

FIGURE 3
Teaching Experience In Years

Teacher interview participants. The self-study evaluations revealed that bilingual teachers in the specialized schools were all considered highly qualified and effective educators. A highly qualified educator is a teacher who holds a bachelor’s degree, has full state certification or licensure, and proves that they know each subject they teach (U.S. Depart. of Ed, 2005). The bachelor’s degree was determined to be the credential that validated their authority to teach. All teachers in the bilingual specialized schools had at least a bachelor's degree. Five had obtained a master’s degree and one mentioned having multiple degrees. Of the teachers interviewed 9% held doctoral degrees. This explains why teachers were described as, "facultad altamente capacitada. . .experimentada, comprometida y colaboradora"[highly trained faculty...experienced, dedicated and collaborative] (S#4, SS). Passing the teacher
certification exam was the criteria to establish whether the teachers were adept in the subject they teach since it demonstrated a knowledge of current developments in education. All participating teachers had passed the "la prueba de certificación de maestros (PCMAS)" [Teacher certification exam]. Teachers commonly held teaching certificates in their content area or as certified teachers of English as a Second Language teachers, however only six of the 33 participants had acquired the bilingual certification.

The participating teachers were organized and well-prepared to share their verbal and content knowledge with their students. The academic achievement of students is directly correlated with teacher knowledge. Knowledgeable teachers tend to be more confident, positive and engaging when presenting content material that they have mastered translating to improved student understanding (Stronge, Tucker, & Hindman, 2004). Teachers were described in a self-study evaluation as having "el dominio de comunicación en el idioma inglés. Excelente dominio del desarrollo de una clase. Buen control de grupo... organizados y con una disposición para participar en talleres ofrecidos por el Departamento" [Mastery of communication in the English language. Excellent mastery of how to develop a class. Good classroom management...organized and willing to participate in the workshops provided by the Department] (S# 1, SS). This is vital to student achievement because it creates communication that is reciprocal.

When teachers are effective communicators, students are able to better understand the content. A component of effective communication lies in the teacher's intuition and perception of students' understanding. These teachers
exhibited a synchronization with their students during the lesson and accurately detected when students required another explanation or clarification. Teacher support was unwavering and stemmed from the learning ideology that their students were competent and therefore openly expressed their expectation that "eventually, they will get it." (S#12, 03). Teachers were committed to student success as seen by Teacher 2 from School 15 who stated "cada año que pasa va mejorando el idioma" [Each year that passes they get better at the language]. Teacher expectation has the power to promote or diminish a student's learning experience (Alderman, 2004).

One of the goals for 21st century education according to the DEPR is to help students become critical and reflexive thinkers (DEPR, 2014). A key component in the development of critical thinking is the importance of metacognition in the learning process. Metacognition promotes autonomy and resilience (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010). In the language classroom this means that students feel competent when engaging in new tasks and then learn from their mistakes in order to try again. These bilingual teachers began the cycle of developing critical thinking students by teaching students to work metacognitively by evaluating their own understanding and learning from prior mistakes. The importance of giving students feedback as Teacher 5 from School 4 did when she said, "I give something easy and quick to correct and then I give them the grade the next day, so they see where they stand." Students are encouraged to reflect on their own learning as well as their individual strengths and weaknesses in order to plan accordingly when faced with the next learning task. The value placed on
students' metacognition encouraged active participation and willingness to take risks.

These distinguished teachers also modeled the behaviors they wanted to instill in their students. In interview 1 at School 9, the teacher commented that "I am not an English teacher, but I want to do my best". The overwhelming majority reported an active engagement in a continual learning process, adhering to the notion of lifelong learning all the while embracing change which required various adaptation abilities. Responses such as a "... teacher needs to be up to date" (S#4,05) and "first work with what you have. Make it better, make it work... make it excellent..."(S#9, 02) were commonly shared during interviews and make notable the characteristics of these bilingual teachers.

The participating teachers exhibited accumulated competencies which included enthusiasm for their class, a positive rapport with students and a commitment to their success. In School 2, a classroom observation revealed that "the teacher was very energetic and ... students were very eager and engaged in the class and responded in English." Enthusiasm from the teacher towards their content material inspired a space that was inviting and secure which appeared to ignite the joy of learning in students. In School 12, it was apparent during a classroom observation that the teacher's "goal was to make his classroom as fun and welcoming as possible". The students reacted by positively and actively by responding to the teacher's prompts, demonstrating their focused attention by participating in class activities without apprehension. Numerous observations recorded techniques teachers used to stimulate students' interest and support favorable behavior such as positive reinforcement, music, and total physical
response activities. Classroom observations revealed that they are indeed providing student-centered learning experiences in the classroom which are yielding positive student results.

Teacher interviews also revealed that teachers frequently reflected on their practice and felt a sense of social responsibility to their students. One of the greatest advantages to bilingualism is the opening of opportunities both economic and social (Grosjean, 2010). Teachers in this study repeated the utility of being bilingual. Globally, many educated people learn English for the purpose of professional aspirations not as a social or cultural venture. English has the role of a tool which is very impersonal and distinct in an individual’s life. Fuller (2009) references the term “elite bilingualism” which is when the acquisition of another language is viewed as advantageous and prestigious. Therefore, those who become bilingual and one of their languages includes English are regarded with a great amount of prestige. Unfortunately, the advantage of learning English well, is also dependent on the economic resources of the family and therefore is still used as a means to divide the social classes.

Historically, quality English instruction had been associated with private schools which for many families may not be an option for their children. These teachers recognized their bilingual programs as providing students the opportunity to receive quality English instruction. "...If they cannot afford to pay for a private school, this school offers them an alternative to learn a second language" (S#13, 03). In school nine, teacher number 2 shared that "this school has contributed to many students, who would have not learned English another way..." (S#9,02). The teachers in specialized bilingual schools can be
characterized as highly qualified, effective classroom practitioners with a positive approach to language learning and their students. Observations and interviews confirmed that they modeled approaches to learning that they themselves have used to become competent learners.

Student profile

Enrollment in specialized bilingual schools is elective which means that parents need to make an extra effort to enroll their child in these schools. As such, the children who are enrolled in this schools come from families who have played an active role in seeking out these educational opportunities. Once parents have located a school, parents must apply for admission and present the required documentation for enrollment. At a later time, students must take an entrance exam. "Aquí vienen a estudiar niños de otras comunidades y de otros pueblos porque la escuela es bilingüe" [Here, children from other communities and other towns come to study because it is a bilingual school] (S#15, 02). Family corroboration is another factor that provides students with external motivation and support to overcome challenges that may be encountered in throughout the process of linguistic development.

The school environment, composed of administrators, teachers, students and parents function simultaneously with the common purpose of developing competent bilinguals which is the unifying factor among the schools in this study. Teacher 1 from School 17 noted that when compared to other public schools she had worked in, "la responsabilidad (de los estudiantes) muchas veces es diferente y más el entusiasmo también por la clase de inglés que no la había visto en otros lugares" [the students’ responsibility is often different, and
they are more enthusiastic for English class which is not seen in other places].

The student profile was described as distinctive due to the "calidad de estudiantado" [quality of the student body] (S#4, 02) with students characterized as motivated learners with a vested interest in developing their bilingual skills. Students were described as self-motivated and willing to undertake additional language classes given their enrollment in the specialized school was optional. At School 13, during an interview teacher 1 mentioned that "they want to enroll in the school; they want to be here". The mutual respect between teachers and students became apparent when an interviewee said "Aprendemos. Es una enseñanza recíproca. Tú me enseñas y yo te enseño" [We learn. It is reciprocal teaching. You teach me and I teach you] (S#12, 05). It may be inferred that teacher's expectations for students prompted learner motivation that was seen in their positive task orientation and perseverance despite demands or mistakes. Students know that they will be challenged but "llegan estudiantes propicia a aprender" [the students arrive ready to learn] is a direct link to a reciprocally positive teacher-student interaction (S#4, 02).

Teachers and students come to school with a shared objective and disposition toward their best performance resulting in high student achievement. These students tended to be persistent and directed their efforts towards the goal of bilingualism. Their teachers' behaviors and expectations perpetuated this cycle of success.

The student body and their families represent a crucial component of the school environment. Both teachers and administrators at School 17 shared that their school is unique in terms of responsibility and enthusiasm for learning
that may not necessarily be typical of a "traditional" public school. "Es distinto a los de la escuela regular no solo en lo académico sino que ellos quieren estar aquí. Los padres quieren que sus hijos están aquí...todos tienen interés" [It is different from a regular school not only in academics but that they want to be here. The parents want their children to be here...we all have a vested interest] (S#17, 01). The joining of efforts from all stakeholders has revealed quantitative evidence of its functionality.

**TABLE 3**

**Academic Achievement Score on META-PR in English**

<table>
<thead>
<tr>
<th>School rank</th>
<th>School name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Educación Bilingüe Luis Muñoz Iglesias Cidra</td>
<td>94%</td>
</tr>
<tr>
<td>2</td>
<td>Escuela Especializada Alcides Figuerca Añasco</td>
<td>90%</td>
</tr>
<tr>
<td>3</td>
<td>Ernesto Ramos Antonini Yauco</td>
<td>86%</td>
</tr>
<tr>
<td>4</td>
<td>Padre Rufo (Bilingüe) San Juan I</td>
<td>84%</td>
</tr>
<tr>
<td>5</td>
<td>Central de Artes Visuales San Juan I</td>
<td>84%</td>
</tr>
<tr>
<td>6</td>
<td>Julián E. Blanco (Ballet) San Juan I</td>
<td>81%</td>
</tr>
<tr>
<td>7</td>
<td>Escuela de Bella Artes Humacao</td>
<td>80%</td>
</tr>
<tr>
<td>8</td>
<td>José Mercado Caguas II</td>
<td>79%</td>
</tr>
<tr>
<td>9</td>
<td>Género Cañiño Guayama</td>
<td>78%</td>
</tr>
<tr>
<td>10</td>
<td>Jesús T. Piñero Cidra</td>
<td>73%</td>
</tr>
</tbody>
</table>

The DEPR school system is currently divided into seven regions with 78 municipalities and approximately 834 elementary and secondary schools. (DEPR, 2019). There are five specialized school units; the Arts, Sports, Innovative Curriculum, Languages and Science & Mathematics. The table above
represents scores from the top ten schools on the 2018-2019 META-PR exam.

Three of the nine schools in the study scored in the top 10 of all of the schools in Puerto Rico; high schools Luis Muñoz Iglesias and Alcides Figueroa, with the top two highest scores, middle school Padre Rufo in fourth place and elementary school Jose Mercado in eighth place. This table provides further evidence for the academic success that students achieve within specialized bilingual schools.

DEPR support

Research confirms that the most important factor contributing to a student’s success in school is the quality of teaching (Mizell, 2010). Therefore, professional development is crucial for improving the quality teaching through continuous training. All of the teachers in this study referred to professional development in the formal capacity of workshops, in-service days and seminars. Teachers shared the view that they were supported in terms of professional development workshop offerings for improving instructional practices. When asked to share how frequently professional development was offered one participant responded "claro, con bastante frecuencia. Como cuatro veces al año" [Definitely, frequently. Like four times a year] (S#2,02; S#4, 04). This participant's response was confirmed by the DEPR policy which requires 25 hours of professional development workshops annually.

Workshop offerings included an "English is Fun" project dedicated to K to third grade, differentiated instruction, Problem and Project Based Learning, on-line planning and Teaching English to Speakers of Other Languages workshops (S#1, S#4, SS). Despite multiple opportunities for continued
learning, a notable shortcoming was that there were no offerings for workshops tailored to bilingual education instruction. While teachers received professional development workshop opportunities they were not specific to the bilingual education program leading to only partial effectiveness in terms of application for participating teachers. Schools in the study recognized the value of tailored professional development and requested "mayor preparación del docente en educación bilingüe y su implementación en clases" [more bilingual education teacher preparation and implementation in class] (S#12, SS). The connection between dedicated teachers and their desire to improve their practice has a direct effect on students’ learning experiences which indicates one of the key factors that propels the cycle of success in these schools.

Teachers recognized that becoming certified in bilingual education would have a positive impact on student outcomes as well as professional and personal growth. Since many of the teachers possessed the English as a Second Language (ESL) certification, they clarified that their bilingual programs do not have the same objective as an ESL program. "Adquirir una certificación en bilingüismo, ya que no es lo mismo que enseñar inglés como segundo idioma" [Earning a bilingual certificate is not same as teaching English as a second language](S# 1, S#3, S#4, S# 9, SS). The difference between a bilingual program and an ESL program is crucial to the DEPR’s mission for the specialized bilingual schools’ unit. ESL classes are taught completely in English to students from various language backgrounds. The curricular goal is to become proficient in English. Whereas in bilingual education, students share the same linguistic background and the teacher uses both languages during instruction. English
proficiency is not the main curricular goal for bilingual education. The curriculum is presented in both languages with the aim of developing proficiency in each language.

When participants were asked if they felt satisfied with the overall functioning and organization of the specialized bilingual school the overall response affirmed teachers’ acceptance however, communication between the DEPR and the specialized bilingual schools was signaled as particularly deficient. "Uno de los problemas que encuentro yo es la uniformidad en todo interpretar en la misma forma que les está pidiendo" [One of the problems I find is the uniformity for interpreting in the same way what the [DEPR] is asking] (S#12, 01). This suggests that the guidelines provided are ambiguous and general which then lends itself to individual school interpretation. Teacher 1 in School 17 shared that "lo que pasa es que no se ha hecho una buena reunión que se le diga a los maestros que realmente enseñar. Hace diez años que no dan ni ofrecen ningún tipo de certificación, nunca se han reunido con nosotros. No hay comunicación con el Programa de Escuelas Bilingües" [what is happening is that there has not been a good meeting where teachers are really told what to teach. It has been over 10 years since a certification has been given or offered. They have never met with us. There is no communication with the Bilingual Schools Program.] (S#17, 01).

The lack of communication between the DEPR and the specialized bilingual schools stemmed from the teachers' need for a clear vision and model of what the specialized bilingual program should be. The overwhelming majority of participants agreed that it would be "bueno que se defina el modelo
que vamos a estar utilizando... el bilingüismo no es que hablen inglés. Es que dominen ambos idiomas" [good to define the model that we are going to be utilizing...bilingualism is not speaking English. It is mastering both languages] (S#7, SS). While teachers recognized that bilingual education and ESL are not synonymous, they were unclear about the DEPR's vision for them.

La administración debe facilitar una conexión entre la visión escolar, las metas propuestas y las acciones afirmativas para alcanzar estas. Debe proveer liderato, la administración debe ser la voz proactiva e informada, dentro de la comunidad escolar, para orquestar y facilitar los recursos que hagan del bilingüismo una realidad en el plantel. Proveer la asistencia necesaria que facilite y acelere el éxito del programa de educación bilingüe. La administración debe también cerciorarse que existe articulación entre todos los componentes del programa de educación bilingüe. La administración es responsable de crear e implementar un programa de desarrollo y capacitación para el personal docente que les ayude a adquirir y afinar las destrezas y el conocimiento requerido para la exitosa implementación del currículo bilingüe. Debe también proveer al maestro con la ayuda técnica y asistencia especializada para sus funciones.

[The administration should facilitate a connection between the school's vision, proposed goals, and affirming actions to achieve them. They should provide leaders that are proactive and informed, within the school community to orchestrate and facilitate those resources that make bilingualism a reality in the school. They should provide necessary assistance that facilitates and accelerates
success of the bilingual education program. The administration should verify that articulation between all of the components of the bilingual education program is taking place. The administration is responsible for the creation and implementation of a development and training program for teaching staff that helps them acquire and refine the skills and the knowledge required to successfully implement the bilingual curriculum. Teachers should also be provided with technical and specialized assistance for these functions] (S#9, SS).

The result of ambiguous communication between the DEPR and the specialized bilingual schools affects how the program is implemented which may lead to a lack of uniformity among the specialized schools. An example of this can be seen in the absence of a standardized admissions test for the bilingual schools (S#3, 03 & S#3, 04). "Se carece de instrumentos adecuados para la admisión de nuevos estudiantes. Al presente solo se tiene una prueba de kindergarten" [There is a need for adequate instruments for new student admission. At the present there is only one exam for kindergarten] (S#1, SS). The lack of a standardized admissions exam requires schools to create their own or administer the kindergarten version to students that are entering other grades. "Each school has an admission process and a test so every kid that wants to enter the school in kindergarten, he or she has to pass the test. For kindergarten or any other grade"(S#3, 04). In school 17, students must participate in an interview in English and then another in Spanish. Their grade point average and any standardized test results such as the Pruebas de Ingreso y Evaluación para el Nivel Secundario (PIENSE) [High School admissions exam]
are also taken into consideration as part of the decision to accept the student in
the bilingual program. Currently, the exam is in Spanish and so some schools
have opted to create their own (S#12, SS). Ambiguous policies and guidelines
have led to the striking observation that the Department has not been clear as to
its vision, definition of bilingualism and recommended teaching model to be
utilized which directly influences curriculum decisions.

**Curriculum**

Respondents were asked during teacher interviews to indicate how they
would evaluate the bilingual curriculum being implemented in their schools. All
of the teachers shared that the curriculum used in the specialized bilingual
schools is the same curriculum as "traditional" public schools only translated to
English. "Al no existir un currículo bilingüe cada maestro implementa los
curriculos existentes en inglés con excepción de adquisición de la lengua y
español" [Since a bilingual curriculum does not exist, each teacher implements
the existing [curriculum] to English with the exception of Spanish language arts]
(S#1, SS). The lack of a separate bilingual curriculum supports the ambiguous
communication between the DEPR and the specialized schools given that
teachers are left to modify the language of instruction as they see fit. Teacher 4
in School 1 shared that the curriculum "es el mismo que ofrecen en las escuelas
regulares pero yo lo adapto para que sea apropiado para esta escuela bilingüe"
[It is the same as what the regular schools offer but I adapt it so that it is
appropriate for a bilingual school]. The idea of modifying the curriculum was
further elaborated by Teacher 1 in School 13 when she said, "we don't have
books...we take the curriculum and align the activities and then we divide
everything by the weekly lesson plan" The lack of a localized curriculum specific to bilingual education is the result of the lack of a shared vision among the specialized bilingual schools. The principal outcome from the lack of a localized curriculum is diverse implementation for each school. School 10 stated their definition of the bilingual curriculum:

Nuestra escuela cuenta con un curriculum de enseñanza en ambos idiomas, los objetivos instruccionales de carácter inmediato, abarcan el dominio de las cuatro habilidades lingüísticas; entender, hablar, leer y escribir. Por lo tanto, en la enseñanza obligatoria, los contenidos, las estrategias y las actividades propuestas deben considerar el desarrollo de aspectos relacionados con la comprensión y la producción oral y escrita. De manera que el estudiante se convierta en un ciudadano bilingüe. [Our school relies on a teaching curriculum in both languages, with immediately relevant instructional objectives, that encompass the mastery of the four linguistic abilities; comprehension, speaking, reading and writing. Therefore, the teaching content, the strategies and the activities proposed should consider the developmental aspects related to oral and written comprehension and production. So that the student becomes a bilingual citizen] (S#10, SS).

This school's definition provides an overarching view of bilingual instruction however, teacher responses consistently highlighted their desire for a unified framework specific to the bilingual classroom with particular and
detailed methods of instruction and instructional strategies. "Una de nuestras mayores limitaciones es que el DEPR no provee un currículo diseñado para el programa bilingüe, se adapta el mismo que es utilizado en todas las escuelas de P.R." [One of our greatest limitations is that the DEPR does not provide a curriculum designed for the bilingual program, the same one used by all schools in P.R. is adapted] (S#9, SS). There are no grade level learning objectives or standards other than those pre-existing in the regular mainstream curriculum. Teachers often assumed that the standards would remain the same for students in the bilingual program with the addition of students being able to achieve those standards in English.

By not having established expectations, it has provided these schools and their teachers with a great amount of autonomy. It is important to understand that adaptations for a bilingual program are not clearly outlined, therefore schools and teachers interpret the curriculum as they deem appropriate for their specific population. The lack of clear guidelines leads to increased teacher autonomy and implies a level of teacher competency to plan, create and deliver instruction as the teacher deems most appropriate for student's needs. Teacher 2 in School 12 explains that "hemos tomado decisiones para discriminar qué es lo más importante de ese currículo" [We have made decisions in order to discriminate what is most important in the curriculum. This finding has potentially positive ramifications in that teachers are able to personalize the curriculum they provide their students without apprehension for achieving specified milestones. Teachers decide what to teach and how to teach it based on their particular context. On the other hand, if teachers and administrators
are not prepared to make the appropriate decisions as mentioned earlier, the result will be poor quality teaching, lowered student expectations, delayed progress and poor student performance. Teacher autonomy should include sufficient guidance to maintain quality instruction and answer the question of student learning outcomes. How instruction is delivered is an area where teacher autonomy is most valuable since the teacher is the person most adept in student abilities, interests, community and areas of improvement.

Teacher autonomy was further complicated by a DEPR instructional policy for specialized bilingual schools that was in contradiction with DEPR assessment practices. An overt language separation policy was instituted assigning Math, Science and English to be taught in English however the same overseeing body, DEPR, imposed a contradictory policy that required all students from 3rd to 8th grade and 11th grade to participate in a standardized exam that would test student skills in Math and Science but in Spanish, potentially placing students in specialized bilingual programs at a disadvantage (S#3,02; S#9,01; S#13, 01; S#15, 02). This contradiction requires teachers to implement the curriculum in a way that achieves both the instructional policy and assessment practices. Teacher 1 from school 13 shares the dilemma of instructing in one language and then assessing in another.

Now for example, META. Now, I am re-teaching everything in Spanish because they will not be able to identify English that have been taught in English now to they will not be able to identify it in Spanish. If I say the tenths place, in Spanish is decena. They don’t know how to say it in Spanish. La decena, la
centena. So, they get left behind because I have to stop the curriculum to reteach everything in Spanish. And if the students don’t do well, they say we teachers are not doing our jobs (S#13, 01)

Irrespective of the overt language policy to teach math and science in English, teachers instructed in both languages in order to prepare their students for the META-PR exam. "En muchas ocasiones tenemos que enseñar los conceptos en ambos idiomas. Porque cuando los estudiantes se enfrentan a instrucciones con conceptos desconocidos, y afectaban grandemente las áreas de matemáticas y ciencias"[on many occasions we have to teach concepts in both languages. Because when students are confronted with instructions and unknown concepts, it greatly affects the areas of mathematics and science] (S#12, 04). Teachers expressed the challenge that this posed for their students. Teacher 3 in School 13 reported that "math and science are in English and that’s why I translate. META PR is in Spanish and how will you be able to take a standardized test in Spanish if you have learned the concepts in English. I know it is not a lack of knowledge, but students might have a problem of making connections".

All subject areas have vocabulary specific to the skills that are required to become proficient in that area. Understanding the vocabulary is paramount to understanding concepts and making connections that determine meaningful learning. Nonetheless, knowing certain terms in one language does not mean that they are the same terms in another language. "Plus see por ejemplo, las METAS-PR que es la forma en que nos evaluamos y a evalúan a los estudiantes,"
son en espanol [for example, META-PR is how we are evaluated and the students, they are in Spanish] so I can't say un conepto if I'm giving a concept for example "catetos" that's in Spanish and in inglés serían [English it would be] legs so you have to give them both definitions both concepts in English and Spanish. "I am practicing the vocabulary in Spanish now so that they don't get confused, because the concepts they know in English...so they can associate" (S#9, 01).

Teachers also reported obstacles caused by changes in curriculum that were brought on quickly and without warning. Lack of planning or ill-informed planning has led to the implementation of policies and programs without reasonable parameters. Teachers frequently mentioned that they would receive training for implementation of a new program and once they achieved a level of mastery that facilitated the use of the program, a new program was introduced, and the process would need to begin again. "Hay muchos cambios drásticos no paulatinamente. Cuando hicieron el cambio del currículo fue demasiado brusco, quedan muchas lagunas en medio." [There are many, frequent, drastic changes. When they changed the curriculum it was too abrupt, many gaps were left behind] (S#12,05). These changes were reported to occur without teacher input or feedback. There was minimal to no notice that a major change was about to occur. The changes were not accompanied by a declared implementation schedule and therefore caused an abrupt change that could have been a seamless transition. Teacher 1 in School 12 describes this process as:

Se implementan cosas nuevas que tu puedas simplemente master them que tu puedes adquirir unas experiencias que luego tu te sientes que
tienes una base firme que luego tu te sientas se hacen cambios y
preguntas al supervisor y te dicen una cosa y preguntas a la escuela y te
dicen otra. Tú vienes a ver que no hay una uniformidad en esos cambios
y eso afecta. [they implement new things that you can simply master
them and you can acquire new experiences than later you feel that you
have a firm base and then you feel like they make changes and you ask
the supervisor and they say one thing and you ask the school and they
say another. You come to see that there is no uniformity in these changes
and that affects us].

Teachers expressed a feeling of instability with regards to changes to their
school programs since changes occurred suddenly and without warning which
left them lacking preparation to navigate their new circumstances.

Ambiguous communication from the DEPR regarding curricular
expectations, increased teacher autonomy and rapid program changes, left
bilingual teachers feeling an increased workload when compared to their
traditional schoolteacher counterparts. Teachers in specialized bilingual schools
must "traducir el material, todo lo que sea las tareas de desempeña que están en
el mapa curricular y los laboratorios que exigen todo esta en español" [translate
the material, all of the homework that is in the curriculum maps and the
laboratory that require everything, it is all in Spanish] (S#12, 01; S#12, 05). The
lack of a clear bilingual curriculum left teachers to recreate materials and
resources so that they would apply to the bilingual setting. However, this in
addition to planning lessons, evaluating student progress and ongoing
administrative tasks that are also required.
Materials & Resources

Educational materials and resources are used to support student learning by encouraging the active development of a particular skill in addition to being attractive to learners. Materials and resources are tools to aid teachers while focusing student attention on information in the form of textbooks, images, maps, photographs, manipulatives, diagrams, films, websites all represent materials and resources that increase student understanding and therefore their eventual performance. According to Bušljeta (2013), the use of teaching materials in the classroom is that they:

- Evoke prior knowledge, increase student motivation, develop creativity,
- encourage decoding, organising and synthesising of the educational content and.... contribute to the development of different skills and the acquisition of values of students, as well as the retention of desirable knowledge, skills and attitudes (pp. 56-57).

The constant factor among the nine schools in this study was that there were no two schools alike in terms of their linguistic landscape and student resources. Schools were highly variable with regard to technological classroom resources, textbooks, and school libraries however, teachers consistently petitioned for textbooks and resources in order to promote student learning.

Participating schools unanimously reported the lack of educational materials. Four schools specifically mentioned the lack of textbooks (S#3, S#4,S# 12, S#15, SS). Textbooks help to guide teachers and ensure that educational outcomes are in process. They also support students’ learning experiences (UNESCO, 2016). Without a textbook, teachers commented that
they look for resources in their own personal libraries or online (S#9, 02). A solution to this problem was that schools reported that copies were made to share with students. "I enrich my classes with other reading material that I consider would be useful and make copies" (S#4, 02; S#4, 03). Another school met with parents and determined that parents would buy the chosen text:

    Well, I made the decision to request parents to buy the resources so for example I have the parents buy these books which are for Science and English. This works because the resources allow me to provide a better class in English (S#3, 03).

This final option speaks to the previously mentioned description of the bilingual school student population. Both students and parents support the goals of the school and dedicated to student success.

Teachers expressed a need for appropriate educational material for the simultaneous development of linguistic and curricular content. "Send us tools, materials to motivate students. We need books, flashcards, pictures, markers, white boards and...things that help students learn. We should have more resources and materials. We have to do everything on our own" which increases teacher workload leading to potential burnout or exodus from the teaching profession(S#13, 01; S#12,SS). According to most schools, the DEPR does not supply the schools with the teaching materials required to facilitate bilingual instruction. Nor do they provide the financial resources needed to buy them. "Estamos en un punto aquí que no tienes libros de texto, no tienes una guía" [We are at a point here that you have no textbooks, you have no teacher's guide...(S#12, 01). A self-study evaluation revealed that the process involved in
requesting materials from the DEPR is tedious, lengthy and does not necessarily result in receipt of materials. School 1 shared the following: "los únicos recursos son los mapas curriculares y sus anejos trabajos creados por los maestros, ya que la escuela cuenta con un presupuesto muy pequeño para adquirir libros de textos y materiales educativos, tecnología y programados" [The only resources are the curricular maps and supplements that were created by teachers since the school's budget is too small to afford textbooks, educational materials, technology and programs].

A major indicator of successful bilingual programs are books and resources in both languages which represents an area for improvement for the DEPR’s bilingual specialized schools. Only three of the nine schools reported having a school library. While the books in the three schools were found to be appropriate for the grade levels serviced, they were not balanced with regard to both languages. One school housed books mostly in English while another housed books mostly in Spanish. "Next to an engaged and prepared teacher, well-designed textbooks in sufficient quantities are the most effective way to improve instruction and learning" (UNESCO, 2016, p. 1). The lack of access and availability of books suggests that these schools and their students are not valued enough to merit the expense required for purchasing texts. The effect of vague communication from the DEPR, lack of curriculum and materials may create a tone for both teachers and students the suggests that bilingual education is not adequately valued by the DEPR.

In terms of technology, the response to this question was most often that technological resources were non-existent. Teachers frequently mentioned
buying their own computers and/or projectors and printers for classroom use. Very few schools had smartboards and those that did, reported only a few in the entire school. The challenge posed by the lack of projectors, smartboards or other visual tool is that students are not receiving the visual scaffolding that is useful when discussing new content in English. However, the open language policy in the classroom may mediate this challenge by the teachers’ ability to provide verbal scaffolding in Spanish.

**Summary of Findings**

This study sought to understand how teachers and administrators characterize their bilingual school context. The specialized bilingual schools showed no uniformity in terms of building structure and signage, however all schools demonstrated the use of both languages to varying degrees outside of structured class time. Three schools had signage almost entirely in Spanish, while three others had it in English and the remaining three schools exhibited a balance of them both. During structured class time, teachers implemented an open language policy with flexible language use. Teachers and students constructed their own linguistic landscape. As supported by the literature teachers modeled bilingual practices and students followed their lead. The teachers in this study were all highly qualified meaning they had a minimum of a bachelor’s degree, were certified in their subject matter and had successfully been evaluated by the administration. They were described as organized, prepared, and most importantly as effective communicators. These teachers also mentioned a sense of social responsibility by supporting their student’s language development. Teachers and students appeared to share a common
objective and disposition toward their best performance resulting in high student achievement. All of the teachers in the study shared that the curriculum used in the specialized bilingual schools is the same curriculum as "traditional" public schools only translated to English. They identified this as a limitation since it was not specific to bilingual education but was adapted from the regular program and resulted in an implementation that was not-uniform to all bilingual schools. Three areas were identified as deficient in terms of DEPR support of bilingual specialized schools: professional development, standardized admissions tests and educational materials such as textbooks. Teacher autonomy was increased by the lack of material support and was further complicated by a DEPR instructional policy for specialized bilingual schools that was in contradiction with DEPR assessment practices. Overall, bilingual teachers left feeling an increased workload when compared to their traditional schoolteacher counterparts. The dedication these teachers exhibited along with their desire to improve their practice has a direct effect on students' learning experiences which may indicate one of the key factors that propels the cycle of success in these schools.
CHAPTER 5: DISCUSSION

Introduction

Chapter five provides a detailed discussion of significant findings and reflects on relevant literature related to bilingual education in conjunction with the findings presented in the previous chapter. Characterization of specialized bilingual schools was approached using a thematic model to interpret the findings that distinguish DEPR's bilingual schools (Bogdan and Biklen, 1982). The thematic model methodology revealed a top-down approach to bilingual education which may provide a more comprehensive picture of their collective experience: government language ideology is interpreted through the creation of educational policy. Administrators and teachers are the vessels that implement these policies in their schools and classroom. The linguistic landscape in the schools is a reflection of the language policy being implemented. This chapter will discuss the implications and progression of language ideologies.
### From Language Ideology to Education Policy

Education policy is highly influenced by the language ideologies of policy makers who determine school program models. Bilingual program policy and program models are instituted in schools via administrators and teachers putting them into practice. Therefore, in this section I sought to identify how administrators and teachers implement language ideologies as seen in their linguistic landscape and classroom contexts. The effectiveness of a bilingual program is influenced by the "social, economic, political and cultural context of such education and may"... be measured at the micro student level, classroom level, school level or the highest macro level, the program (Baker & Wright, 2017, p. 245). Other studies have measured specialized bilingual program effectiveness at the program level according to their standardized test results.
on the META-PR or College Board exam (Martínez Rodríguez, 2014). This study maintained a focus on program effectiveness at the classroom level with a lens on the teaching methods and characteristics that create effective learning conditions.

The language ideology that underpins macro level decisions and policies sets an expectation for bilingual programs to follow at the micro, classroom level. "Language is used in culturally specific ways that reinforce (or, on occasion, challenge) ideologies within that community" (Herrera Rocha, 2019, p. 14). This study uses Mackinney (2016)'s definition that "language ideologies are sets of beliefs, feelings and conceptions about language that form a mediating link between social structures and language practices" (pp. 301-302). According to Blackledge and Creese (2014), language ideologies are broadly defined as heteroglossic (pluralist) or monoglossic (purist). The policy implemented by the DEPR is monoglossic in nature because it seeks to divide language use based on subject matter within the specialized bilingual program. In the strict sense of English only for certain subjects and Spanish only for others, language division is not realistic nor is it advantageous for students. The reality in the classroom is to aim for continuous student language development with the caveat that the flexible language use of English and Spanish is acceptable and endorsed.

Of the schools that participated in this study, at the elementary level there was typically one teacher for all subjects therefore Spanish and English are only divided by subject matter. At the secondary level, where different teachers teach different subjects, the languages are divided by subject matter. Teachers confirmed the DEPR's overt language policy. Language separation
policy is an attempt to manage the languages as to not place more emphasis on one language over the other. However, it is purist in nature since it promotes an unspoken norm that languages are not to be intermingled since one language may threaten the other. The overt language separation policy was supported by school grounds observations of signage where bulletin boards and decorations were divided by subject and language. Teacher 2 from School 12 shared, "inglés se ofrecen tres materias: matemáticas, inglés y ciencia, siendo el idioma principal el español se trabajan las materias de historia y español. Ofreciendo la oportunidad a los estudiantes de no perder su primer idioma y adquirir el inglés como Segundo idioma" [English is used in three classes: Mathematics, English and Science. Being that the principal language is Spanish, it is used in History and Spanish. This offers students the opportunity to not lose their first language and acquire English as a second language].

It has been argued that the language separation policies which compartmentalize languages are socially constructed and are not supported by the research demonstrating that bilinguals do not section their natural language use (Canagarajah, 2013; Garcia, 2009; Garcia & Wei, 2014; Sayer, 2008). An individual’s linguistic repertoire most closely resembles an open system where information in all of the individual’s languages can be retrieved (Garcia & Wei, 2014). "Therefore, according to this view, learners’ use of their entire repertoire of knowledge to derive at meaning is disabled through the separation of “languages” which does not utilize their full linguistic resources and maximize their communicative potential (Herrera Rocha, 2019, p. 10). In addition,
students are receiving the covert message that languages should remain separated as intermixing is discouraged.

Previous studies have shown that failure to implement effective language policy can be attributed imposed bureaucratic decisions that are not communicated and are inflexible. La Ley para el Desarrollo de las Escuelas de la Comunidad (Ley Núm. 18 de 1993) y la Ley Orgánica del Departamento de Educación de 1999 (Ley Núm. 149 de 1999) were created to ensure greater school autonomy in terms of decision making by teachers, parents, community members and students, as an effective means to improve educational services. However, a lack of dialogue between DEPR and stakeholders has resulted in programs that were not implemented as expected by participants. Furthermore, teachers reported experiencing rapid changes to the program that did not take into consideration the valued input of other important stakeholders who will be affected by those changes. Studies of public education in Puerto Rico have revealed that the DEPR administration has remained relatively unchanged with decision making power held by the central office (Torres González et al., 2017; Schmidt, 2014). Therefore, administrative processes remain in the top-down format with all decision making power held by the DEPR with less collaboration, clarity and coordination that lead to the creation of a successful language policy.

The monoglossic language ideology chosen at the macro-level set an expectation for bilingual programs to follow at the micro, classroom level. However, the overt language policy did not correlate to the language ideologies modeled by the teachers and the way they use language during instructional time and in conversations with students. This was most evident when the
overwhelming majority of teachers in the study demonstrated positive beliefs towards bilingualism supporting a heteroglossic ideology which was then implemented in their classrooms. These teachers consistently referenced a dual language approach to teaching (S# 3, SS; S#1, 01; S#3, 01; S#4, 01; S# 4, 02; S#9, 01; S#9, 02):

The term *dual language* refers to any program that provides literacy and content instruction to all students through two languages and that promotes bilingualism and biliteracy, grade-level academic achievement, and sociocultural competence—a term encompassing identity development, cross-cultural competence, and multicultural appreciation—for all students (Howard et al, 2018, p. 3).

Analysis of the observations, interviews and self-study evaluations, positively supported teacher claims that the schools in the study were providing dual language instruction to their students. "Lo que hacemos es que si el niño de kinder tiene que contar hasta 100, lo tiene que hacer en español y en inglés. Trabajamos los idiomas simultáneamente" [What we do is if a student in kinder has to count to 100, they have to do it in Spanish and in English. We work with both languages simultaneously] (S#12, 04). Both teachers and students engage in language practices that reflect the flexible use of Spanish and English in terms of code-switching. "Students switch from English to Spanish at all times. The teacher code switches at all times" (S#2, CO). When asked on the self-study evaluation if Spanish and English are used during class instruction, school 12 responded "Our teachers use both languages in their courses as a “code
switching” mode, but our perspective is going to a “dual language -immersion program”. The current composition in these specialized bilingual schools reflects the definition of a one-way dual language program where the majority of students are almost exclusively from the same language background with the goal of promoting bilingualism and biliteracy (Howard, et al., 2018).

The proposed language orientations of linguist scholar Richard Ruiz are a useful framework for analyzing the link between language ideologies as they are transformed to language policies and later enacted in instructional practice. According to Ruiz (1984), language orientations, or ideologies, can be classified as one of the following: language as a right, language as a problem and language as a resource. Ruiz argues that bilingual education is shaped by the orientation from which the society imparts. The teaching of English in public schools may have been historically viewed as a problem given the political climate which was highly influenced by the discord between the U.S. government and public sentiment (Carroll, 2016b). However, in terms of this study both students, teachers and school personnel made the decision to belong to the bilingual environment. Their disposition to belong to a bilingual environment implies that they most likely subscribe to the language as resource ideology. For this reason, the focus of this analysis is how teachers implemented language as a resource in their classrooms.

The language practices demonstrated by the DEPR bilingual schools are referred to in the literature as dynamic bilingualism (Garcia, 2009). This form of bilingualism departs from the idea of double monolinguals and from the notion of additive bilingualism because language practices are viewed as interrelated.
Dynamic bilingualism recognizes language use as multi-faceted and non-linear in nature. (Garcia, 2009; Lambert, 1974). Teachers validated that strategic language integration is a condition for an optimal bilingual classroom environment and vital to student progress. This flexible use of languages in the classroom gave students the additional benefit of sociocultural competence as they learned to navigate language as it relates to purpose, audience and context.

*Language as a Resource.* The language ideologies expressed during teacher interviews were aligned with the instructional practices observed. These teachers reported a student-focused approach to language teaching and sense of autonomy to determine the strategies and techniques that would be most appropriate to their students. Therefore, they chose a linguistic configuration using both languages that had the most benefit for student understanding. “El maestro que conoce las estructuras lingüísticas del idioma extranjero que enseña y las estructuras lingüísticas del idioma vernáculo de sus estudiantes, puede aprovechar las diferencias y semejanzas que hay en ellas para hacer más efectiva su labor” [A teachers that knows the linguistic structure of the foreign language and teaches and the linguistic structures of the student’s vernacular language, can take advantage of the differences and similarities among them to do a more effective job (López Laguerre, 1989, p. 14). For this reason, in spite of the value placed on English language skills, teachers also acknowledged the importance of maintaining Spanish in addition to acquiring English (S#1,01; S#3, 01; S#4, 01; S#4, 04; S#4, 05; S#9, 01; S#11, 01; S#11, 0 2; S#12, 03).
Language learning was not an "either or scenario" but a resource that was mutually beneficial and did not limit students to one language over the other. Learning English "es importante para toda la ciudadanía, pero reforzando también el español" [It is important for all citizens but reinforcing Spanish as well (S#17,01). Research has shown that the use of both languages in the classroom does not have a negative effect on native language development. In a study conducted of biliteracy among Somali-Swedish children in their early years, researchers found that "...more flexible language use does not automatically lead to a diminished use of the mother tongue" (Paulsrud, Rosen, Straszer, & Wedin 2017, p.219). Research has shown that flexible language use practices do not lead to delays in the native language and therefore pose no risk to the students' overall bilingual development. When the participants were asked about the effectivity of the bilingual program, the general consensus among teachers was that being bilingual affords students a tool they can use for life. Teachers saw the future professional and economic benefits that being bilingual would give students. Teacher 4 in School 12 stated that "aunque el inglés no es el idioma más hablado, es un idioma global que le provee muchas oportunidades a los que los hablan" [Although English is not the language most spoken, it is a global language that provides many opportunities for those who speak it].

The influence of philosopher, teacher and psychologist John Dewey is reflected in the way these bilingual teachers viewed the use of education as an effective vessel through which students can be prepared for the democratic society they will participate in and the importance of meaningful activities in
the classroom. Teachers in this study stated language ideologies that included
the agreement that curriculum should be relevant and authentic for students. If
the curriculum were connected to the outside world, society and applied
practically to real life, learning would be more significant for students.

A large component of this practicality is the ideology of language as a
resource for communication:

Realmente lo que queremos llevar al estudiante es que tenga destrezas
de comunicación y eso aplica a todo a cualquier profesión ...la dinámica
es sumamente interesante como un estudiante de retorno o inmigrante
puede aprender de un hispano. Y viceversa porque se da bilingüismo de
una manera no tradicional pero efectiva... aquí hay un balance de dual
language [Really we want students to have communication skills and that
applies to any profession...the dynamic is extremely interesting how a
student returning to Puerto Rico or an immigrant can learn from a
Hispanic. And vice versa because bilingualism occurs not in a traditional
way but effective... here there is a balance of dual language] (S#4, 02).

Learning English was not seen as a violation of their heritage but as an
opportunity to communicate effectively with others which included sharing
their own vernacular as well. "Language is about interacting and culture and
who we are as people"(S#11, 02).

When the approach to language is as a resource the school embraces the
mentality of language as a skill in preparation for their role in a global society
(Ruiz 1984, Thropp, 2007). One teacher commented "I think it is great because
they can learn English not just in the English class"(S#13, 03). Students in
bilingual programs not only learn the language but use the language in other content areas. Spanish is also viewed as resource to propel their development in English. "se enfatiza las similitudes lingüísticas y gramaticales entre ambos idioma" [the linguistic and grammatical similarities between both languages are emphasized] (S#4, SS). "You work with the base of Spanish to do differences and similarities between languages to explain it" (S#11, 02).

According to Dewey (1904) learning was defined as a process of adapting to one's environment and potential challenges the environment may pose (Sikandar, 2015). For this reason, his theory is highly applicable to the bilingual classroom. Students must adapt to the environment of a dual language classroom while using all of their linguistic resources in order to overcome linguistic challenges that they may experience as a part of their language development. Hornberger's Instructional Model of Enrichment (2002) is also applicable in the bilingual classroom and follows the language as a resource orientation since it has the linguistic goal of developing the L2 with the added goal of expanding cultural boundaries and social autonomy in terms of user agency as mentioned in the ecological approach. Hornberger's (2002) Instructional Model of Enrichment can be seen in DEPR's specialized bilingual schools in that the program's tenet is that students will develop language proficiency skills and will receive content instruction in both languages even though the configurations will vary from classroom to classroom. These results are consistent with those of other studies and suggest:

The goal of the bilingual program at the school level is to develop bilingual, biliterate and bicultural students, capable of leadership and
success in the multilingual society of the global economy. To become bilingual and biliterate, or to maintain these skills and abilities, students must not only learn the language, they must also use their native language to learn (Robledo Montecel & Cortez, 2001).

School personnel expressed a singular focus on the practicality of language use as opposed to learning English to be nativelike. "They try to focus on real life scenarios, because language is about interacting, culture, and who we are as people" (S#11, 02). Teachers were most concerned with students' abilities to communicate with others rather than being grammatically correct or with perfect pronunciation. "Aunque no sepan un inglés perfecto pero por lo menos tener el conocimiento básico porque como somos una escuela bilingüe todos debemos ser conocedores del idioma" [Although they don't have perfect English at least they have a basic understanding because we are a bilingual school and we should be getting to know the language] (S#1, 03).

**Moving from Language Policy to Educational Planning**

Language ideologies are established by society and highly influenced by current politics and the country's history. Macro structures such as the DEPR are influenced by these factors when determining the school language policy which is then circulated among schools. Each school transforms the policy into an action plan which shapes the school's linguistic landscape. The domino effect continues as this is transmitted to the classroom at the microstructure level when teachers perform these ideologies in the classroom (Rivera & Mazak, 2017). Typically, the transition from one level to the next is consistent. However, this study provides evidence for teachers' deviation from the DEPR
language policy in favor of their own. Instruction is not objective as one's teaching style has a direct relationship to the teacher's philosophy about language and learning. These ideologies are constructed from experience and personal background.

Teachers were not asked for their ethnic background or place of origin and were given the option to respond in either English or Spanish. After reviewing the language used during the interviews, Spanish was the language of preference. Of the 33 teacher participants, 18 answered only in Spanish. Six teachers used both languages during the interview. The remaining nine teachers answered only in English. From this finding, it may be inferred that most teachers were previously English language learners as well, which would explain their keen attunement to student needs and a profound understanding of how to guide students on becoming bilingual citizens. Firsthand language learning experiences represent a great advantage for both teachers and students since teachers understand firsthand the language learning process that their students are experiencing. While the majority did not have a bilingual certificate, teachers still demonstrated an understanding of the process of English language acquisition that may be attributed to their own personal histories.

Paramount to creating the classroom language policy is the teachers' personal beliefs regarding language learning (Rivera & Mazak, 2017). Teachers in this study demonstrated inclusive language ideologies that utilized both languages to maximize learning and allowed for customized language use in the classroom for both teachers and students. Teachers reported a practical approach to language learning when they shared that using the language was
more important than being accurate. Teachers often repeated that making errors is an accepted part of the learning process. In addition to the importance of this practice is the affective aspect of speaker agency to choose their language. "Some students answer in English others answer in Spanish "(S 12, CO). Students demonstrated the liberty to answer in either language which was a direct reflection and imitation of teacher instructional practices. These specialized bilingual schools took liberty to reconstruct their classroom contexts in a way that aligned their language ideology which was suited to their local context. (Re)constructing language policy to meet the needs of their student population has resulted in positive benefits for students (Thropp, 2007).

All of the schools were committed to maintaining the students’ primary language and culture while promoting learning English. Statements expressed by teachers, highlight the impact of their language ideologies on the bilingual program and their effects on planning for an inspiring language environment. "We’re a hybrid of Caribbean countries that is a hybrid of Latin America and of the states. It's a hard thing to match up... culturally, it wouldn’t be possible to do it all in English. And you know, you work with the base of Spanish to do differences and similarities between languages to explain it "(S#11, 02). Teacher attitudes and beliefs exert influence on the planning and later implementation of the classroom language policy (Thropp, 2007). "Es importante para toda la ciudadanía, pero reforzando también el español [It is important that for all citizens but reinforcing Spanish as well] (S#17, 01). When asked about the curriculum that is implemented in the school, one teacher
reported that, "lo uso y lo manejo verdad a los beneficios de mis estudiantes y a las necesidades de ellos" [I use and manage it according to what benefits my students and their needs] (17,3). During teacher interviews they were asked if they taught their material only in English, one teacher replied "en realidad traduzco del español al inglés y viceversa porque no todos los niños tienen el mismo nivel de comprensión" [In reality I translate from Spanish to English and vice versa because not all of the children are at the same comprehension level] (3, 3). "Cada grupo es diferente..." [Every group is different] (12, 3).

Teachers' instruction was explicitly student-centered. "I have to make the class according to their needs" (11, 1). Teachers frequently mentioned the use of adapting the curriculum and their instructional practices to their specific population while selecting examples related to students' prior cultural knowledge to illustrate concepts. These statements were corroborated by classroom observations. In a first-grade class Teachers advocated the importance of the student's cultural background by incorporating texts students may already have knowledge of such as the traditional Puerto Rican folktale of "Juan Bobo" (School 2).

An important factor for program planning is the teacher's sense of autonomy "en realidad cada maestro tiene su ambiente de salón" [in reality each teacher has their own classroom environment] (S#1, 02). Teacher autonomy is seen in the ways that teachers exert authority over how and what they teach. It promotes creativity and allows teachers to be more effective since they are more responsive to student needs.
El DEPR provee el currículo. El maestro de nuestra escuela trabaja con el mismo currículo que el resto de las escuelas, pero cada maestro lo evalúa y ajusta a la necesidad y particularidad del grado y materia asignada, según el idioma (español o inglés) que utiliza al enseñar [The DEPR provides the curriculum. Our teachers work with the same curriculum that the rest of the school’s use, but each teacher evaluates and adjusts it to the needs and particularities of the grade and subject assigned, according to the language (Spanish or English) that they use to teach] (S# 12, SS).

Responses regarding whether designated classes are taught solely in English were that "tenemos que tener más flexibilidad porque el maestro es el que realmente conoce la calidad de estudiante con la que se está trabajando en el salón" [we have to be more flexible because the teacher is the one who really knows the quality of student that they are working with in the classroom] (S# 17, SS). Teachers report an autonomy to decide how to optimally instruct students inside their classroom. Most teachers reported that they followed the curriculum assigned by DEPR, but in terms of the instructional strategies used and instructional language configuration "me siento en ese área empoderado de lo que doy" [In this area I feel very empowered by what I teach] (S#4, 02).

During interviews teachers were asked which strategies they use to provide effective instruction. A high-school teacher responded, "aprendizaje significativo y inteligencia emocional" [meaningful learning and emotional intelligence] (S#4, 02). There was recognition of the emotional aspect of language learning as a necessary component of student achievement. "Provide
students with teachers that...can teach them in a way that they are not afraid of English. That they enjoy English, teach them to love English" (S#4, 03).

Teachers in the study also recognized the affective component of language learning. To foster an environment that promotes positive collaboration, teachers used flexible grouping practices. In addition to whole-group instruction they were seen implementing collaborative learning. A benefit of collaborative learning is that "...se animan entre ellos mismos..." [they encourage each other](S#4, 02). While using flexible groupings teachers were observed analyzing errors, giving constructive feedback, and working with struggling students independently. Research supports that "reading fluency and comprehension outcomes improve when teachers implement paired instruction in the classroom, regardless of students’ disabilities or achievement levels" and the teachers in specialized bilingual schools are utilizing them to maximize student potential (Fuchs & Fuchs, 2005). Repeatedly teachers demonstrated a high sensitivity towards student needs and the autonomy to make instructional decisions that led to positive student outcomes as evidenced by the most recent META-PR results. The teacher’s attunement with their students allowed them to identify problematic areas during the lesson and to adjust the instructional approach to resolve them through the use of an open language policy.

**Planning & Classroom Implementation**

The macro policy which emphasizes language separation was not evident in the micro language policy of the classroom. While the question of "which" languages were to be taught with which subject was established by the DEPR macro policy, the question of "how" languages will be taught is directly related
to a teacher's own language beliefs also known as their language ideology. A teacher's instructional practices are managed by their beliefs towards language which influences the application of the classroom language policy and the orchestration of how language is used for instruction (Blackledge & Creese, 2014). Despite the proposed language policy of science and mathematics in English, "trabajamos los idiomas simultáneamente... la clase de matemáticas se da en ambos idiomas. La clase de ciencias, también se da en ambos idiomas" [we work with both languages simultaneously... math class is taught in both languages. Science class is also taught in both languages] (S#12, 04). In Schools 4 and 12 where ten teacher interviews and seven classroom observations were conducted, English and Spanish were used interchangeably and purposefully to promote the most meaningful learning experience for students. "There is a continuous mix of Spanish with English" was noted as various bilingual language strategies were used throughout the class to introduce and explain new concepts (S#12, CO). It was apparent, almost universally, that the teachers exercised their autonomy and disregarded the compartmentalization language policy in favor of a language policy that benefited student needs.

Classroom effectiveness can be defined as optimal classroom conditions for achieving language proficiency in Spanish and in English. This can be determined by examining "how the use of two languages are synchronized and sequenced, negotiated and changed... how meanings are constructed... in the classroom" (Baker & Wright, 2017, p. 246). Therefore, the teachers established classroom language policy was analyzed to see how they orchestrated language use during instruction. Findings revealed that they modeled bilingual language
use which covertly teaches what is considered acceptable. "Both languages are used in an integrated and coherent way to organize and mediate mental processes in learning" (Garcia, Johnson & Seltzer, 2016, as cited in Garcia, 2009, p. 280). As the authority in the classroom, students will conform to the regulations set forth by the teacher. The teacher synchronizes how and when language is used:

The language policy appears to be open... the students appear comfortable that they can choose either language and not be reprimanded. Neither language is required from the teachers either. Students switch from English to Spanish at all times. The teacher code switches at all times. When he writes on the board, he writes in both languages (S#12, CO).

This excerpt demonstrates fluid language use as is typical of natural bilingual practices. Students followed the language policy set and used language in a similar fashion to the teacher. Those teachers that were self-described "English only" teachers, also reported a language policy process of assimilation according to the students’ needs. "Empiezo con el dual language para ellos cogen confianza en su idioma natal" [I start with dual language so that they feel confident in their native language] (S#4, 02). The division of Spanish and English varied from classroom to classroom. One observation noted that "the students are not stuck on any one language" (S#12, CO).

Language configurations were dependent on the decisions made by the teachers based on their knowledge of student skills and the target objective. One teacher commented "definitivamente tengo que utilizar el dual language
I definitely have to use dual language so that they have a mixture of knowledge (S#3, 01). The language policy negotiated during instruction was one that was provided in English & Spanish with a push toward developing their English skills. In the classroom language negotiations took various forms:

- To clarify: "Aunque ambos idiomas en ocasiones se intercambian para aclarar alguna duda" [Although both languages interchange to clarify a doubt] (S#9, SS). An example of this is seen in a 4th grade science class. "Why do you think there are more sedimentary rocks where water is?" Students remain silent for what seems like a while. The teacher then repeats the question in Spanish (S#13, CO).

- To explain: Translation was used throughout the class to introduce and explain new concepts. Concepts that had already been taught, such as living things, were reviewed in English (S#12, CO).

- To translanguage: the kindergarten teacher says "Esas manecillas in English are called hands" [These clock hands in English are called hands] (S#1, CO).

- To make connections/associations with Spanish "That’s why I am doing it in Spanish as well, so they can associate" (S#9, 01; S#4, 03).

- To recast: "The teacher translates to English when the student says "Ella esta loca" by saying “She’s not crazy” (S#2, CO).
Meanings and understandings were constructed through the use of Spanish and English as a strategy for reinforcing comprehension for the benefit of the student and not due to a lack of teacher preparation or dedication to teaching English. "Se les enseña ambos idiomas... se les explica la importancia de esto" [They are taught using both languages...the importance of this also explained to them (S#2, SS). Teacher ideologies were critical for articulating an open language policy that resulted in student achievement. "Esta escuela si, han salido, muchos angloparlantes hablando español y mucho muchos que hablan español hablando inglés" [From this school, many English speakers have left speaking Spanish and many, many that speak Spanish have left speaking English] (S#4, 01).

During classroom observations it was also evident that teachers automatically and consistently adjusted their instruction after informally assessing student needs. Teacher reflections maximized every student’s ability to access the material and achieve both language and content objectives. "Integran estrategias de instrucción diferenciada y se atiende el nivel de proficiencia lingüística del estudiantes" [Differentiation strategies are integrated and tailored to the linguistic proficiency level of the student] (S#12, SS). Teachers in the specialized bilingual program excelled in providing student-centered instruction beginning with the understanding of their students' background:

El estudiante viene con unas diferencias a nivel cultural. A nivel regional, bien. Porque el estudiante del área metropolitana, y el de la costa y el de la montaña son completamente diferentes. Tienen unas experiencias de
vida que se manifies en la clase [The students come with differences at a cultural level. At the regional level as well because the students from the metropolitan area, the coast and the mountains are completely different. They have life experiences that manifest in the classroom] (S#17, SS).

Dynamic teacher practices, such as engaging students interests by spring boarding off of their cultural background allowed students to connect new material in English to previous knowledge accrued in Spanish. Teachers made obvious attempts to make their classrooms interactive and welcoming. An example is in a classroom observation where both the teacher and the students moved a lot around the room. In a first grade science classroom the teacher integrated subjects such as physical education (the students exercised at the beginning of the class by moving like a swaying tree), language arts (the poem Trees Grow was read and discussed), Spanish (there were references to the story "La Gallina Colorada"), and art (students draw their own trees) (S#1, LL). This example of meaningful instruction which shows how the integration of languages and subject matter contributes to a more profound learning experience. And in the case of the specialized bilingual schools it supports the research that flexible and open language policies do not disadvantage students but instead enrich their linguistic development.

Best practices were observed in a first grade English class as students began with “Good Morning Teacher Yadira”. Then they began a song “Hurray! It’s time for school”. The teacher leads the song and they follow along in singing with gestures. It is clear that this is the routine for starting the class
and the students seem eager to participate. Then the teacher says: "Quick review, what are we doing in English class?" (S# 2, CO). This teacher capitalized on the use of music to engage learners in authentic production. She also reminded students of their class objective. These types of teacher-to-student interactions that were meaningful and focused on instructional tasks are a strong indicator of their effective classrooms.

**Summary of Discussion**

The findings of this chapter revealed that both Spanish and English were used in the majority of modalities of communication within the school environment: signage, announcements, and informal conversations. During instructional time the DEPR’s overt language policy was to divide language based on the subject being taught. Despite the intended division of language, the reality in the classroom involved the use of both languages simultaneously during instruction. Teachers were found to be highly qualified and students reflected a disposition to language learning that was directed towards fulfilling the school’s mission to develop language proficiency. However, an apparent challenge was the additional burden on bilingual school teachers to translate the existing Spanish curriculum and convert it to a bilingual curriculum. This was further complicated by limited communication regarding student outcome expectations and instructional guidance for bilingual educators. Textbooks were mentioned as the most important but lacking resource.

The aim of Chapter 4 was to present the qualitative research findings addressing the two research questions of this study. It also explained the characteristics that contribute to positive student outcomes so that they may
be utilized by other educational institutions to promote higher student achievement in English proficiency. This chapter, Chapter 5, presented a more detailed discussion, based upon the results presented in Chapter 4. Using a top down approach, the DEPR policy makers implemented an educational policy using a monoglossic ideology of language. As is typical of a top down approach, the inflexibility and lack of collaboration with teachers led to an unsuccessful implementation of the bilingual education policy. What was successful was the autonomous teacher practice to create an open language policy for students’ overall benefit. The implementation of the classroom language policy is both explicitly and implicitly taught and includes the teachers’ personal language ideology (Thropp, 2007). Classroom teachers demonstrated an attunement to their students and strategic language instruction which supported student achievement as evidenced by standardized tests results. The ability to make decisions in the classroom regarding how to use both languages to teach the content material, using the knowledge of their students’ needs, background and strengths most certainly led to more effective instruction.
CHAPTER. 6: CONCLUSIONS & RECOMMENDATIONS

Introduction

The ineffectiveness of "traditional" public education to develop bilingual students upon graduation from Puerto Rico public schools has been a social, economic and political concern for decades (Disdier & Cruz, 2019; College Board, 2019; Pousada, 2000; Schweers & Vélez, 1992; Torres, et al., 2017).

Students’ English proficiency has the power to impact the construction of both a national and a global identity that is connected with other English speaking countries. Communication in English fosters a cultural exchange and allows for informed linguistic exchanges and debates regarding economic and political issues on the island and around the world.

Many reasons have been offered to explain this situation. Among the most important found are the following: Puerto Rican students’ negative attitudes and resistance towards English;...the short teaching periods dedicated to teaching English as a second language;...the use of textbooks and methods that are inadequate and not interesting or attractive to the student body; deficient English teacher preparation; the great shortage of teachers that can teach it; the continued practice of the Department to hire English teachers lacking skills or teaching preparation] (Translation by author, Torres González, et al, 2017, pp. 507-508).

While 61% of public school students in traditional programs were rated with English skills at the pre-basic and basic levels on the 2019 META PR, three of the specialized bilingual schools scored in the top 10 schools with the highest English proficiency scores on the island (Disdier & Cruz, 2019). The fact that
30% of the schools that were the highest ranked across the island are specialized bilingual schools is additional evidence as to their success in achieving the bilingual student objective. This disparity between unsuccessful "traditional" English programs is highlighted by the success of specialized bilingual schools from which the purpose of this study was to describe how teachers and administrators in the DEPR specialized bilingual schools characterize their particular context that leads to such positive student outcomes.

Understanding instruction in the classroom is paramount to characterizing their success since student results are a directly related to the instruction received. In a study of over one hundred undergraduate students from the University of Puerto Rico, they were asked what factors contributed to their English proficiency. Education was cited as the second most frequently provided response after television (de Vries, 2018). Not all of these students were categorized as proficient bilinguals and instruction was a factor that was signaled as either promoting or impairing language development. A decisive force for improving student achievement would be to change the instructional model in schools that demonstrate low student achievement. Bilingual programs have proven to be effective at raising students' English proficiency and the current characteristics of the nine specialized bilingual schools in the study provide insight into quality bilingual programs. Each of these areas represents an integral component of an effective bilingual program and should be studied independently as well as in conjunction to the whole.
Effective bilingual programs were found to communicate a shared definition of bilingual education. This definition includes the ultimate goals of the program with a specific and targeted objective. The definition would then be conveyed to all involved stakeholders thereby strengthening the focus of each member of the community to act in ways that promote achievement of the goal. Communication among program community members and frequent revisiting of a program’s goal have been vital to establishing cohesion within the program. Once the vision is established, a strong bilingual environment supports program goals by creating the context for students to flourish. Our environment is key to shaping our progress and practice as demonstrated by these specialized bilingual teachers. The teachers in this study were also adept at creating meaningful and engaging classroom interaction. Their languaging strategies granted their students access to the material so that classroom activities were effective for their learners.

Bilingual education in the twenty-first century is recognizing how bilinguals actually use language, accepting that languages are blended and may be used flexibility in ways that create shared understandings among individuals (García, 2009). This is supported by the actual language practices in Puerto Rico’s specialized bilingual school classrooms, as evidenced by interviews and observations. The classrooms in this study consistently demonstrated what is referred to in the literature as which reflect an ecological approach to language (Mühlhäusler, 2002). Teachers and students crafted a functional balance of both languages that was adjusted to match the content being taught while aligning to students’ linguistic needs. A key component of the ecological approach is
speaker agency. Language users decide how language will be used to fit their environment. This is seen in Puerto Rico at all levels of English proficiency as loan words, code-mixing and translanguaging are part of everyday Spanish language use which all suggest the high degree of language contact between the English language and Puerto Ricans. "Puerto Ricans live on either side of a divided border that they transgress and remap continually in their everyday language... It is the straddling of two linguistic and geopolitical frontiers that most precisely defines cultural identity" (Duany, 2002, p. 32). This ecological approach supports flexible and natural changes in languages as they adapt to the context and contact with other languages which is characteristic of the Puerto Rican linguistic landscape (Mühlhaüsler, 1996). By analyzing the voices of teachers and administrators in this study, these programs' strengths and practices that lead to student success have been more accurately identified.

**Research Question 1**

The first question in the study was "how do teachers and administrators of DEPR's specialized bilingual schools describe their teaching contexts?"

During teacher interviews, they were asked if they felt comfortable working in their school and 100% replied "yes". Most notably, the majority of teachers reported the utmost confidence regarding the ability of bilingual schools to be successful at developing bilingual citizens. Teacher 4 at School 3 said "I believe they should open more bilingual schools because they work." The result of their confidence in their teaching abilities and the abilities of their students to achieve high bilingual proficiency, may explain why the teachers felt autonomy
to deviate from the DEPR language policy in favor of one that best fit their classroom and student needs.

The teachers’ overall confidence in their abilities to deliver quality instruction was paramount to providing activities and meaningful instruction in various language configurations. The majority of teachers demonstrated an understanding and "disposición en realizar actividades en ambos idiomas" [disposition to conduct activities in both languages] (S#9, SS). Teacher interviews repeatedly shared the teacher’s recognition that they must adapt the curriculum to their student’s linguistic needs. Of the 33 teacher interviews, 31 reported fluid language practices in the classroom. These fluid language practices were characterized by using language strategically to facilitate learning. There were no strict regulations about when, how and why to use either language but a spontaneous use of language that was highly contextualized.

Teacher confidence in their professional assessments of the situation and their students' needs may foster autonomy and user agency to make instructional decisions. One respondent shared that as a grade level team, they divide classes based on the strengths of each individual teacher to provide the highest quality of instruction for their students. "Algunas veces hasta cambiamos de salones para apoyar algunas destrezas que algunas dominan mejor que otras. Porque si dominamos ciertas cosas pues nos podemos apoyar mutuamente" [Sometimes we even change classrooms to support skills that some have mastered better than others. Because if we have mastered certain things well we can mutually help each other] (S#1, 04). This type of
communication within the schools is the foundation of the informal professional development that occurs in learning communities.

The notion of a community of learners extended to include the students as well. Another unique characteristic of these specialized schools in the study is the teaching ideology that values the contributions of all members of the school community. "Aprendemos. Es una enseñanza recíproca. Tu me enseñas, yo te enseño" [We learn. It’s a reciprocal teaching. You teach me and I teach you] (S#12, 05). This teaching ideology promotes an environment where both teacher and students are valued, creating a sense of cooperation among all stakeholders that is mutually beneficial. Taken together, high student achievement and teachers’ confidence in bilingual schools support the existing literature that there is a direct association between teacher expectation and student responsiveness (Murata, 2013). Teacher 2 in School 4 shared "y los maestros nos inspira llevarles un poco más fuera de su comfort zone y darles otras experiencias que a lo mejor un escuela regular no podría realizar” [And us teachers are inspired to get them out of their comfort zones and give them other experiences that a regular school may not be able to provide]. The ability of teachers to recognize their students’ capabilities encourages teacher autonomy and student responsiveness.

**Strong bilingual linguistic landscapes**

The context of this study was highly specific as it pertained to the nine participating specialized bilingual schools in the DEPR. The bilingual teacher profile created from the findings of this study showed that teachers exhibited excellent communication skills in English and Spanish, created an environment
to support bilingual practices, and expressed a willingness for continuous professional development. "Nos sentimos muy contentos de ofrecerle algo más a esos estudiantes" [We feel happy to be able to offer something more to these students] (S#12, 04). As mentioned in chapter 4, the linguistic landscape during unstructured school time revealed that most schools had signage in both languages resulting in visible promotion of the equal importance of both languages within the school environment. Both administration and personnel in five of the nine schools (S# 4, S#9, S#13, S#15, & S#17) were heard using both English and Spanish during informal conversations around school grounds and during announcements. Perceived teacher and administrator commitment were evidenced by their engagement in bilingual practices both in and out of the classroom, and strategically while delivering instruction. The use of language by school personnel as well and how it was displayed throughout the school structure reflected the schools' language ideology and mission to support their bilingual program. All of these factors contribute to an environment where students "están acostumbrados al idioma no porque están en el salón de clase" [they are accustomed to the language and not because they are in the classroom (S#3, 04). Their linguistic environment created a bilingual language policy that supports the goals these schools were trying to achieve.

Despite the intended division of language during instruction according to subject matter, the reality in the classroom involved a different formula of language. All but one of the schools in the study reported a school community that frequently used both languages as a medium of instruction. These findings align with the definition of bilingual education programs since they "... always
include some form of more than one language in at least some parts of instruction” (García, 2009, p.6). The results of this study are supported by Pousada (2017), Mackinney (2016), and Blackledge and Creese (2014) because their research has shown that the context of a speech community is critical to understanding how language is used. Supportive bilingual language communities promote bilingualism universally. Bilingual language practices are apparent in the signage, bulletin boards, informal conversations, announcements and instruction. The bilingual landscape serves as an indicator of the language ideology and policy being advocated. The way that language is used around the interlocutors affects the language ideology that is constructed particularly in an educational environment. Mackinney (2016) states that language ideologies are the connection between social environments and the way language is used. These agreed upon ideas and beliefs assign value to languages and the study revealed that both English and Spanish were held with high value and used interchangeably with one another. The speech communities represented by these nine schools revealed flexible language use that positively valued an open language policy throughout the school environment.

The language ideology most closely exhibited by the specialized bilingual schools is that of a transglossic ideology (Garcia, 2009). This ideology contends that languages are blended and may be used flexibly and without regards for social rules as a way to create shared understandings among individuals. It is noted that translanguaging is important for developing bilingualism especially for children since it reflects dynamic bilingualism which is context specific and ever-changing based on the language users. Dynamic bilingualism recognizes
language use as multi-faceted and non-linear in nature. Transglossic language ideology and dynamic bilingualism are further supported by linguistic ecology since it favors natural changes that occur in languages as they adapt to the context and make contact with other languages (Mühlhäusler, 1996). The practices of the specialized bilingual school teachers and administrators are supported by the literature, particularly the ecological approach as it supports the use of language as deemed appropriate by the users according to their context and purpose.

According to the literature, eight of the nine schools reflected mainstream bilingual education programs where the majority of students are native speakers of one of the majority languages of instruction and both majority languages are used during instruction. While almost all schools described themselves as having a dual-language bilingual program which use both majority languages ideally in a balanced approach, these schools did not meet the criteria of half of the students being minority language users and the other half majority language users (Ovando et al., 2006). The aim for both dual language programs and mainstream bilingual programs is for the students to develop bilingualism and biliteracy by using language in a balanced way so that neither language becomes the dominant language. The practices exhibited by these bilingual schools in the classroom differ from the goals of traditional dual language programs since they do not support language mixing and both languages are kept separate (Močinić, 2011). This expectation is certainly not evidenced in classroom instruction as seen in the DEPR bilingual specialized schools.
Research Question 2

Cooperation between the specialized bilingual schools and the DEPR is crucial since the Department of Education is responsible for establishing policy, providing assistance and evaluating administrator, teacher and student performance. The most recent educational policy reform the Ley de Reforma Educativa de Puerto Rico (Ley Núm. 85 de 2018) [Education Reform Law of Puerto Rico] cites that student development is built on five pillars: (1) teachers and educational leaders, (2) parents, the community, collaborating local businesses, (3) education methodology, (4) learning centers, schools, libraries, and (5) public policy (DEPR, 2018). The fifth sector is determined by government institutions such as the Department of Education to oversee the creation and implementation of said public policy. The second research question was focused on how teachers and administrators of DEPR's bilingual schools characterized their relationship with the DEPR. This question resulted in three major findings: ambiguous communication, diverse curriculum implementation and insufficient professional development specific for bilingual educators.

Ambiguous communication

Pursuant to the most recent guidelines sent by the DEPR (2016), Carta Circular Núm. 26-2016-2017, bilingualism is defined as highly subjective and must be clarified within context since it may refer to a multitude of language proficiencies in various linguistic contexts. Within this guide there are three dictionary definitions of bilingualism but which or all three are to be applied by DEPR personnel is not specified. In the same letter on p. 11 the objective for
student development is for the student to become an effective communicator. "Leerá con fluidez y se expresará con propiedad de forma oral y escrita en español e inglés...Expresará sus ideas con claridad y seguridad; escuchará con atención para aclarar y sintetizar nueva información..." [The student will read with fluency and express themself correctly in oral and written from in Spanish and English...the student will express their ideas clearly and with certainty; listen attentively to clarify and synthesize new information.” The provided description of the goal for bilingual students is ample as it is the ultimate learning outcome for students. However, the grade level expectations, milestones for demonstrating progress and specific learning outcomes would be further elaborated in a bilingual curriculum. With regards to the bilingual curriculum Carta Circular Núm. 26-2016-2017 (DEPR, 2016) states that "se podrán utilizar diversos enfoques de integración... El estudiante desarrolla destrezas, actitudes y habilidades ...claridad y precisión en la lectura y la expresión oral" [One may use utilize diverse integration focuses...the student will develop skills, attitudes and abilities...clarity and precision en reading and oral expression]. Teachers and administrators would benefit from stated learning outcomes that are observable and measurable as they are essential to planning units and lessons.

The result of ample definitions and guidelines have left specialized bilingual teachers with a feeling that they are missing "la visión de la especialidad. Que mis compañeros tengan una misma visión." [the vision of the specialty. That my colleagues have the same vision] (S#4, 01). Some teachers mentioned that they felt their school was more about teaching English than
teaching both languages. Others mentioned that Spanish was used more than necessary for a dual language program. It was apparent that a more elaborated language policy and clear definition of bilingualism would facilitate teacher, administrator and student alignment with DEPR policy. Most schools in the study expressed the desire for a clear definition of the recommended bilingual model and how it should be implemented. It was evident that they wanted to comply with the goals of the specialized bilingual school unit, but they were unclear as to what that shared vision was. Clearly expressed student learning outcomes for each grade level would enhance teachers and administrators’ abilities to orient and align their practices with the specialized bilingual schools’ unit and with DEPR and enable all stakeholders to focus their efforts on a single target.

Teachers also expressed a lack of leadership that was proactive and informed within the school community to orchestrate and facilitate those resources that make bilingualism a reality in the school. The general mandate from DEPR was to teach math, science and English in English while social studies, and Spanish language arts would be in Spanish. However, it did not take into consideration that both math and science are assessed in Spanish on the yearly administered, standardized test, META-PR. For this reason, teachers frequently reported that they felt compelled to use dual language practices while teaching in order to best prepare students. Nevertheless, it must be considered that if the DEPR had issued more specific guidelines, teachers may not have felt empowered to make the accommodations evidenced by their
classroom language policy. More explicit guidelines may restrict teachers and limit their autonomy to develop their own classroom language policy.

Communication is what links the DEPR with the specialized bilingual school unit and the programs and policies that they will execute. However, when teachers were asked about the admissions process for students for new student enrollment, all schools informed that only a kindergarten admissions test was provided and as a result, each school creates their own evaluation for those students entering after kindergarten or simply administer the kindergarten exam to students of all grades. The ambiguity of admissions policy poses both advantages and disadvantages to the lack of DEPR guidance. Regarding admissions, schools were allotted the space to decide how they would measure student admission requirements. Conversely, a standardized admissions exam would provide schools with a baseline for English language proficiency that was expected at each level of schooling. From this baseline, teachers and administrators could validate whether existing instructional practices were effective in achieving the desired proficiency levels as informed by the DEPR.

Ambiguous communication was frequently expressed during teacher interviews as an obstacle to effectively implementing a plan or program and fosters a lack of uniformity among the specialized bilingual schools. Psychological, sociological, economic, political, religious, cultural and linguistic variables make bilingualism an extremely complex phenomena and therefore there is not one agreed upon definition (Baker, 2011; Bialystok, 2006; García, 2009; Spolsky, 1978). Worldwide it would be challenging to decide on a
universally agreed upon definition of bilingualism. However, it is reasonable for the DEPR to have a definition that represents the goals and ideology specific to Puerto Rico’s public school students. Researchers and educators agree that bilingual education is highly contextualized and therefore a definition tailored to the Puerto Rican linguistic landscape is highly reasonable. Teachers were actively looking for reinforcement that their school’s practices and vision were in alignment with that of DEPR. Many expressed the desire for confirmation that balanced bilingualism was the goal to which they should direct their instruction. Vague directives led teachers and administrators to interpret the curriculum and its implementation as they deemed appropriate.

**Diverse implementation of curriculum**

The lack of a curriculum specifically for bilingual schools may lead us to the assumption that students in specialized bilingual schools should learn all of the "regular" curriculum in both English and Spanish. The lack of the DEPR's clearly established definition of bilingualism or teaching model to be utilized, directly impacted the way the curriculum was implemented in the classroom. Overwhelmingly, teachers shared that one of the greatest challenges to teaching in a bilingual school was that a separate bilingual curriculum has not been established. All of the schools in the study used the regular curriculum provided by the DEPR to all public schools. This curriculum was in Spanish, so it had to then be translated by the teachers to present in English. From there teachers decided the language configuration to be used during instruction. The lack of a bilingual curriculum would present significant difficulties for new teachers and teachers that may be unfamiliar with modifying the curriculum for a bilingual
program which directly relates to the need for specific professional
development workshops that would enrich teachers' abilities to make
modifications to the curriculum that could be uniformly applied to specialized
bilingual schools.

The majority of respondents shared that the one directive that was clear
from the DEPR was that math, science and English were to be taught in English,
while all other classes would be taught in Spanish. However, this expectation
did not consider the reality of the bilingual classroom. Teachers often
mentioned how it was not feasible to teach entirely in English for the variety of
proficiencies among students. Furthermore, students would be required to take
META-PR in which the math and science portions are in Spanish. However, if
math and science in the specialized bilingual schools is taught in English only,
students would not be equipped with the vocabulary to articulate the concepts
evaluated in these areas even though they may know them in English, their
demonstration of knowledge would be limited.

Many recognized that English and Spanish are uniquely blended in
Puerto Rican classroom and that an all or nothing approach would not meet
student needs. However, the lack of a clear definition allowed space for the
misinterpretation of some teachers to believe that bilingualism meant that
everything should be taught in English since Spanish is the language spoken in
the home. These types of misunderstandings are supported by the literature
considering that according to Garcia (2009) the challenge facing bilingual
education is to promote the development and functional interrelationship
among the languages. An interrelationship suggests a complimentary approach
to teaching that is not specifically one or the other. "Teachers need to use their attunement to the multiplicity of factors that matter in ELL achievement and construct (and continuously re-construct) language policy that best services students in their own classroom context" (Thropp, 2007, p. 54). The general mandates allowed the teachers in this study to re-construct their own language policy which served their students as evidenced by their students’ successful learning outcomes.

The difficulties posed while implementing the curriculum were magnified by the lack of educational materials. Three areas of resources and materials were mentioned in order of frequency: the lack of textbooks, educational materials such as manipulatives and technology in terms of computers and classroom projectors (S# 3, S# 4, S# 12, & S# 15). A policy paper from the Global Education Monitoring Report (UNESCO, 2016) in developing countries such as Zambia, Malaysia and Cameroon, were cited as not having a textbook for each student. This finding was surprising since Puerto Rico is not a developing country, however similar to those students in developing countries, Puerto Rican students do not have access to a textbook either. "Next to an engaged and prepared teacher, well-designed textbooks in sufficient quantities are the most effective way to improve instruction and learning" (UNESCO, 2016, p. 1). A clearly delineated vision of bilingualism and student expected outcomes is necessary for implementing the curriculum as uniformly as is possible so that regardless of location on the island students in the DEPR specialized bilingual unit are receiving the same quality of education. Textbooks also provide the
teacher with a guide for instruction and provide the student with material for reinforcement as well as an additional source of language input.

**Insufficient professional development specific to bilingual schools**

The fourth finding answered the question of how teachers and administrators characterized their relationship with DEPR in terms of professional development. All teachers and administrators responded that there were significant opportunities for professional development however none that are specific to bilingual school educators. The DEPR requires 25 hours of professional development workshops annually, approximately four times a year. Despite the continuous offering of professional development, there are no workshops tailored to implementation, instructional models or strategies specific to the bilingual education context. Furthermore, previous opportunities for bilingual educator certification are no longer being offered. Teacher perceptions of a lack of professional development specific to their needs, limits their professional growth and in turn the quality of instruction that teachers can deliver. Many teachers interviewed reported that they were TESOL certified but not bilingual education certified.

Given that these areas are not synonymous, teacher methods used for instruction may be contradictory. Teachers that instruct using the teaching English as a second language or TESOL model, instruct exclusively in English and the goal is solely focused on English language proficiency. Conversely, bilingual educators use both languages to teach content material with the goal of developing proficiency in both languages. Opportunities and incentives for bilingual educators to become certified would facilitate professional
development and clarify the distinction between these two different instructional models (Rodríguez Arroyo, 2013). Ironically, one of the criticisms many researchers have is that there is a shortage of teachers qualified to implement these programs which could be remedied by providing professional development and certification opportunities tailored to bilingual educators.

Opportunities for teacher certification and professional development are consummate to the success of any educational program. Teacher professional development is a principal responsibility for DEPR, and teachers reported a constant offering of professional development workshops at a minimum of four times a year. Nevertheless, they reported that the workshops were not directed at bilingual educators as the target population and therefore were often not applicable to their training needs. Professional development specifically tailored to bilingual educators was an area of needed improvement since it would most definitely enhance and refine educator teaching skills required to successfully implement a bilingual curriculum. This would also include accessibility to bilingual certification which is presently unavailable.

Implications

For over 100 years, bilingual education in Puerto Rico has maintained the objective of student language acquisition in both English and Spanish. In the 1916 study authorized by Education Commission Miller, he states how since American occupation in Puerto Rico, the goal of the DEPR was to establish and develop bilingual education to preserve Spanish and include the acquisition of English, "...both to be mastered sufficiently for practical use" (Padín, 1916, p.12). Since "practical use" is not further defined, it most closely resembles the term,
functional bilingualism, which has also been mentioned in the DEPR guidelines (López Laguerre, 1989).

The broader social significance of this study lies in support of the theoretical framework of John Dewey and "...the role of education to transform the world into a more humane, just, and egalitarian society" (Sikandar, 2015, p. 192). Low English proficiency among Puerto Rican students is most commonly "...attributed to the poor quality of English instruction in many schools, particularly within the crisis ridden public school system" (Pousada, 2000, p. 104). In Spanish, the META-PR gap between public school and private school students "...is only twenty-nine points for the Spanish Achievement Test, 511 for public schools and, 540 for private ones" (Maldonado, 2000, pp. 491-492). However, on the English portion, the gap skyrockets to 87 points in favor of private school students. A disparity between English proficiency among public and private schools has been consistently reported and may be correlated to socioeconomic status (Bischoff, 2017; Carroll, 2016a; de Vries, 2018). With effective bilingual education, students receiving a public education will have the opportunity to be as academically competitive as their private and specialized bilingual school counterparts which may offer professional and personal opportunities that would otherwise be limited.

By addressing this disparity, students with a public education may be better prepared for post-secondary education which will increase their academic and professional opportunities thereby lessening the equality gap between social classes. "The evidence suggests that developing bilingualism and biliteracy within 'strong' bilingual education leads to higher achievement across
the curriculum and therefore a better usage of human resources in a country, economy, and less wastage of talent" (Baker & Wright, 2017, p. 373). Today’s students are tomorrow’s labor force, so the investment made in education is ultimately most beneficial for society at large and fulfills one of the roles of education in improving social justice for all.

**Clear vision and language orientation.** A program’s vision ultimately directs stakeholder actions which is why it was important to identify the DEPR’s mission for the specialized bilingual program. The aim of communication with DEPR would be to clarify the DEPR’s mission for the specialized bilingual schools’ unit. An organization’s mission is a statement that expresses the fundamental purpose for the organization. It describes the reason for being and the distinguishing principles for which it is known. The mission statement clarifies what the organization does and why. Carta Circular Núm. 26-2016-2017 (DEPR, 2016), Normas y Principios Generales para la Organización y el Funcionamiento de las Escuelas Especializadas o Proyectos Educativos Innovadores, [Guidelines and General Principles for the Organization and Functioning of the Specialized Schools or Innovative Educational Projects] stipulates that "La ley establece que los programas de estudio de la escuela se ajustarán a las necesidades y experiencias de sus estudiantes...y cuenten con programas dirigidos a atender las necesidades académicas de cada estudiante" [The law established that the school’s programs of study would adjust to the needs and experiences of their students...and relay on programs aimed toward tending to the academic needs of each student].
The specialized bilingual schools followed this directive and chose a language orientation to guide their instructional focus. It was particularly clear in this study that all participating schools decided to approach English acquisition from the orientation of language as a resource which may explain positive student impact and parental willingness to learn (Ruiz, 1984). Teachers frequently remarked about the practical benefits that the English language has as a tool for communication. "La especialidad a pesar de que tenemos ese calificativo de bilingüe realmente lo que queremos llevar al estudiante es que tenga destrezas de comunicación y eso aplica a todo a cualquier profesión" [This specialization aside from being classified as bilingual, what we really want is for students to have communication skills and that applies to any profession] (S#4, 02). Adding English to the students' language repertoire was for their benefit and posed no threat to the vernacular:

Fuera de este ambiente riguroso que tu dices están aprendiendo porque están aplicando en un área donde no hay supervisor pero lo están usando y de ahí tu ves que pasa la barrera de una estructura de enseñanza ha formado parte de la vida diario de ellos [Outside of this rigorous environment you say they are learning because they are applying in an area where there is no supervision but they are using it and from there you see that it passes the barrier from a teaching structure to forming part of their daily lives] (S#12, 01).

Quotidian understandings of bilingualism remain relatively vague and poorly defined resulting in various terms being used in different ways and even interchangeably. In this study, bilingual programs were often confused with
English immersion programs. Teachers and administrators shared anecdotes of having to explain to parents and community stakeholders that bilingual education is not synonymous with English-only education. Parents would question why some instruction was done in Spanish. "Le tuvimos que explicar que esta no es una escuela de inmersión en inglés que es una escuela bilingüe" [We had to explain that this is not an English immersion school but a bilingual school] (S#17, 02). Teacher 3 in School 12 stated, "Well, por lo menos yo tengo entendido que esta escuela es de inglés para aprender español. That’s the way I see it. Every class is in English. So, I don’t see it as a bilingual school because bilingual is in two languages [Well, at least the way I understand it is that this is an English school is to learn Spanish]. This misunderstanding is also evident in the fact that teachers in bilingual schools hold an English as Second language certificate, nevertheless, teaching English as a second language is not synonymous with bilingual education.

The English as a Second language (ESL) program has the goal of English language acquisition with no use of the students' native language. The student population in these programs have a variety of native language backgrounds. Instruction is only in English and this program has multiple instructional configurations such as ESL pull-out, ESL class, or Sheltered English instruction. However, bilingual programs are typically characterized by a homogenous student population that shares the same native language. The teacher instructs in both languages. The Puerto Rican public school context most closely represents a bilingual language program. English as a second, language and bilingualism are not synonymous. "En mi opinion debería ser que se le diera
más énfasis al bilingüismo" [In my opinion, there should be greater emphasis on bilingualism (S#17, 01). The expression of a program’s orientation and vision should then lead to its declaration among all stakeholders involved called program articulation.

**Program articulation.** The components of an effective bilingual program include a clear vision, program articulation and stakeholder commitment (Robledo Montecel & Cortez, 2001). However, the specifications for program implementation were too vague and therefore subject to various interpretations (Schmidt-Nieto, 2002). According to Carta Curricular Núm. 2016-2017 (DEPR, 2016), regarding the specialized schools’ unit:

La UNEE tiene autonomía para planificar, crear, apoyar e implantar procesos administrativos y docentes para el logro de una gestión educativa efectiva y el funcionamiento óptimo de las escuelas. Asimismo, podrá tomar decisiones, realizar acciones e implantar la política pública de acuerdo con las necesidades de cada especialidad, las normas y las directrices establecidas por el secretario de Educación, sin socavar la autonomía de cada escuela establecida en la Ley Núm. 149-1999, según enmendada (pp. 15-16).

[The UNEE has the autonomy to plan, create, support and institute administrative and teaching processes to achieve effective educational management and optimal school functioning. Likewise, to make decisions, carry out actions and institute public policy according to the needs of each specialization, regulations and the guidelines established by the secretary of education, without undermining the autonomy of each school as]

This statement highlights a very delicate situation for teachers. Specialized bilingual schools are granted autonomy however within the guidelines stipulated by the DEPR. To better understand their position, teachers requested more specific guidelines as to how the DEPR defines bilingualism and which instructional methods were considered most appropriate for best practices in bilingual education. They struggled with abrupt changes to programs and uninformed policies that made understanding exactly what was being required of them confusing. This study found that ambiguous communication between DEPR and specialized public schools had two effects. First, it enabled schools and teachers to develop their own language policy by encouraging school autonomy. Second, its diminished teacher security and increased their sense of isolation from other schools in the specialized school unit. To avoid ambiguous directives Schmidt (2014) recommends a decentralization of power that leads to greater stakeholder participation and policies that accurately reflect each school's unique context.

"Currículo es un plan escrito en el cual se establecen las metas y los objetivos, y se sugieren las actividades o experiencias de aprendizaje, los materiales educativos y las estrategias a utilizar al llevar a cabo una evaluación" [Curriculum is a written plan where goals and objectives are established, and learning activities or experiences, educational materials and the strategies to be used to conduct an evaluation are recommended] (López de Méndez, Rodriguez Rivera, González Nazario, & Vazquez, 2008, p. 4). The reality for the specialized
bilingual schools’ unit is that they are translating all curriculum to English and then implementing it in the classroom. However, this reflects the language ideology of bilinguals as the same as two monolinguals in one. The current situation treats students as though they are English-only students which is not an accurate portrayal of the student demographic. This signals a need for professional development to support and inform teachers of bilingual best practices which will be discussed later in the chapter.

All stakeholders in the specialized bilingual schools’ unit would benefit by frequently revisiting the link between policy and practice also known as the vision for bilingual schools. Alignment of the vision with student learning milestones for achieving them would offer autonomy to consider their unique population’s needs while informing student learning outcome expectations. The creation of an official, universally accepted definition of bilingualism may also support the re-orientation of the language policy in Puerto Rico. While specialized bilingual schools have chosen to approach language from the stance of language as a resource, this may not be the case for traditional public schools. Clearly articulated programs inform stakeholders of what the expected outcomes should be and provide guidance for all members to focus their practices on the same desired result making their efforts more effective.

**Stakeholder commitment.** The correlation between teacher expectations and student performance is also supported by this study (Murata, 2012). The teachers and administrators in the study exhibited commitment to their purpose as bilingual educators, expressed strong belief in the bilingual program and the utmost confidence in the ability of teachers to instruct. Despite
the challenges faced by educators, such as ambiguous policies, lack of materials and deficient professional development, in the specialized bilingual school unit, they were advocates for their students and maintained high expectations for their success. This study has demonstrated that student success is highly correlated to teacher beliefs regarding teaching and learning even before beginning instruction. Teachers represent an indisputable, crucial factor regarding student achievement and a force for change. In a study of university students and their experience of favorable conditions for developing bilingualism, the participants reported that the factor most attributed to their success in English was their schooling (Pousada, 2000). For this reason, it is paramount to understand the current characteristics of specialized bilingual schools and how their students have achieved success.

Positive bilingual school climate. Teacher and administrator's commitment to the bilingual education program is often visible in the school climate. This study's outcomes were similar to a 2001 study conducted by the Intercultural Development Research Association (IDRA) funded by the U.S. Department of Education, Office of Bilingual Education and Minority Languages Affairs (OBEMLA) to identify characteristics that contribute to the high academic performance of students served by bilingual education programs. As in this study, the IDRA study also found that school community stakeholders: parents, teachers, students, and administrators were all committed to achieving school expectations as an indicating characteristic of successful bilingual programs. As previously mentioned, most teachers expressed an unconditional belief in the ability of their students to achieve their maximum potential and be
competent in both English and Spanish. In addition, all schools in the study were observed to have environments that were safe and orderly which also contributed to the community sense that their school was a place of value.

Previous research has indicated that valuing and celebrating linguistic and cultural diversity have a positive impact on students' English development (Carroll, 2018; Howard et al., 2018, Murata, 2014; Padín, 1916; Schmidt-Nieto, 2002). One of the ways this is accomplished is by the signage located around the school. Both school and classroom should have everything labeled in both languages which also reinforces the equitable value of both languages. These schools clearly recognized the value of students' dominant language and did not limit language as an either/or scenario but rather focused on language for practical communication and potential benefit. This is an area that can be improved within the "traditional" school's programs.

*Best bilingual practices.* Howard et al. (2018) found that comprehensive language instruction occurs when student-to-student and teacher-to-student interactions are frequent, meaningful and focused on instructional tasks. In an attempt to characterize DEPR bilingual specialized schools, this study has evidenced that the specialized bilingual programs include those teaching strategies that integrate both languages in learning that is relevant and active. Specialized bilingual schools in the DEPR have effectively incorporated many of the recommended instructional strategies which have led to successful English acquisition among students. Through these methods, it was possible to ascertain how teachers deliver quality instruction in high performing
specialized bilingual schools with potential generalizability to traditional public schools.

**Welcoming and secure classroom environments.** The specialized bilingual school teachers in this study first established classroom environments that were welcoming and can best be described as "crear una comunidad de aprendices, en la que todos se sientan que pertenecen, que están en un ambiente seguro y que son tan importantes como los demás; un lugar en el que aprendemos juntos" [the creation of a community of learners, where all feel that they belong, that are in a secure environment and that they are as important as the rest; a place where we can learn together] (López de Méndez et al., 2008, p. 6). Students were assured that it was acceptable to make mistakes as a normal part of the learning process. "Vamos a hacerlo en inglés aunque te equivoques te ayudamos para que lo vayas haciendo" [We are going to do it in English even if you make a mistake, we will help you so that you can do it] (S#12, 05). The respect for their students and high regard for their feeling supported led to the majority of observations of teacher-to-student interactions.

Teachers also created lessons that were engaging and dynamic, regularly incorporating movement, visuals, and the integration of music and art to enrich their classes. "Uso muchas imágenes... de esa manera se van acostumbrando más y más al idioma" [I use a lot of images... this way they become more and more accustomed to the language (S#15, 01). Music was also used to promote active involvement. Teacher 3 in School 3 shared, "I also use musical time and I use songs to teach everything including English ". While many elementary schools had cooperative seating, such as at round tables, an area for
improvement found would be to incorporate more cooperative learning activities such as literature circles into daily lessons. Cooperative learning has been shown to support individual learning by the offering a variety of approaches among students (Murata, 2012).

*Purposeful and relevant instruction.* Effective instruction begins with content that is relevant and purposeful (Padín, 1916). The traditional curriculum is one where "el estudiante recibe información que muchas veces no tiene significado para sí" [the student receives information that many times has no significance to them] (Ortiz Hernandez, 2017, p. 37). In a study conducted by Sambolin and Carroll (2015), they found that a way to bridge learner gaps is to connect students' background to the material being taught such as literature that features student's culture in the target language. Teachers in this study often connected their material to their students' prior knowledge or cultural experiences to facilitate student's comprehension.

*Strategic language instruction.* Former education Commission Dr. Jose Padín (1916) radically shaped education policy when in 1934 he endorsed the use of Spanish as the medium of instruction at the elementary level with English as a special subject. Additionally, he expressed the recognition of the utility of moderate use of Spanish in the English classroom to facilitate learning particularly regarding an abstract idea, technical term or idiomatic expression for intermediate and secondary levels. His plan openly allowed for teacher autonomy to make individual classroom decisions and adapt the curriculum to local contexts. This supports findings that advise utilizing Spanish and English to make comparisons and contrasts between them. In Pousada’s (2008) study,
“[t]he complexities of bilingualism in Puerto Rico”, she found that teachers did not explain the rationale for language constructs in English or their connections to Spanish. Students wanted to know why a particular grammatical construction occurred one way in English and not in Spanish. However, these types of explanations would naturally be facilitated by translation in Spanish which supports the bilingual practice observed in the specialized school classrooms where both languages were used to explain, clarify and instruct.

As no two bilinguals are ever the same, these teachers crafted their own classroom language policy to reflect the particular needs of their students with positive outcomes. Teachers demonstrated an attunement to student needs which led teachers to model practices typical of the Sheltered Instruction Observation Protocol (SIOP) in their classrooms (Echevarria, 2012). Classroom observations confirmed that teachers used many of the components of the SIOP model. Their lessons incorporated building background, providing comprehensible input and metacognitive strategies for students as part of language learning. Professional development opportunities would further refine existing skills and focus attention towards the other components of the model not observed such as how to incorporate more student cooperative activities, application strategies and review techniques.

Another best practice highlighted in this study was that of teacher autonomy in the classroom as optimal for student success. The teachers in this study demonstrated an attunement with the needs of their students that coupled with their ability to instruct using both languages as they best saw fit, led to the creation of optimal instruction for bilingual students. "Sometimes you
go against all odds. We make big bold moves, teachers. We love what we do have love for the kids. We go beyond any administrative issues" (S #9, 03).

Schmidt-Nieto’s study (2002) found that a "common element among teachers is a sense of ownership within the classroom. Teachers’ classroom behavior is difficult to supervise on a daily basis, so there is a tendency for teachers to develop a great deal of autonomy "(Schmidt-Nieto, 2002, p. 11). Both classroom observations and teacher interviews confirmed that most teachers exerted their autonomy and chose not to comply with the overt language policy but instead crafted an open language policy that worked best for their students. The teacher’s attunement with their students’ needs allowed them to identify problematic areas during the lesson and to adjust the instructional approach to resolve them through the use of differentiated instruction. "No one could be better attuned to this complexity than the reflective, inquiring practitioner" (Thropp, 2007, p. 58). Teachers repeatedly and strategically used Spanish during classes designated for English to clarify, explain, translanguage, establish connections between both languages and model language by recasting with the common goal of improving understanding (Rivera & Mazak, 2017; Sayer, 2013). This is directly connected to the classroom climate that values each community member:

Students’ identities are affirmed and academic achievement promoted when teachers express respect for the language and cultural knowledge that students bring to the classroom and when the instruction is focused on helping students generate new knowledge, create literature and art,
and act on social realities that affect their lives (Schmidt Nieto, 2006, p. 34).

An interesting finding was that a more structured curriculum may not be in the best interest of teachers or student needs. "In the interest of utilizing a "research based" reading curriculum, programs like Open Court are often adopted. These programs tend to constrain teachers, structuring their time and goals in ways that limit (and even eliminate) the possibilities for native language instruction, thus constraining teacher policy (re)creation" (Thropp, 2007, p. 52). To counter the negative effects of a rigid curriculum, an outline of student expectations at each level would orient teachers without reducing their autonomy in the classroom. According to Carta Curricular Núm.: 26-2016-2017, a general objective of the specialized schools' unit is "implementar estrategias de impacto reconociendo que la escuela tiene sus propias necesidades y estas deben ser atendidas de forma diferenciada" [to implement impactful strategies recognizing that the school has its own needs and these should be addressed accordingly]. In spite of the objective above and the open language policy applied in the classrooms, my observations found a reluctance on the part of the teachers to openly express their use of Spanish during instruction as a resource to aid students' understanding. As the teachers understood the overt language policy of English-only in certain subject areas, it appears that they worried about potential repercussions for non-compliance. This is directly associated with the unclear definition of bilingual language policy and practice that is unmistakable in its limits & allowances. It also speaks of teacher beliefs, autonomy in the classroom and commitment to student success in spite of
educational policy. With improved professional development and more clearly articulated program expectations these challenges could be addressed.

*Professional development.* A common misconception among teachers was that professional development had to occur formally such as workshops, conferences or seminars. During the study, professional development was singularly focused on formal training through seminars or workshops. However, informal professional development is another opportunity that should be considered. Informal development may take place in the form of independent research, mentoring or learning communities. Specialized bilingual school teachers expressed a willingness to improve their own professional skills for themselves and their students. Professional development for specialized bilingual schoolteachers was very limited since many opportunities were offered from DEPR however, none that were tailored to bilingual instruction resulting in professional development that was only partially beneficial. Informally, many specialized bilingual schools created their own learning communities. Rodríguez, García, and Villarreal (2011) define learning communities as forums to “enrich teaching and learning... by combining individual skills and strengths of each teacher into a collaborative effort with a shared vision of student success.” Collaboration within schools is vital "porque si dominamos ciertas cosas pues nos podemos apoyar mutuamente" [because if we have mastered certain things then we can mutually support each other] (S#1, 04). These opportunities allow interaction among colleagues with an added benefit of providing a space for experienced teachers to share their wealth of knowledge with new teachers. Some studies have suggested that this
type of mentoring is an important and effective, perhaps the most effective, form of supporting the professional development of beginning teachers (Hobson, Ashby, Malderez, & Tomlinson, 2009). The benefits of mentoring are realized whether it occurs formally as a required course or informally as being assigned a mentor teacher during their first years as teachers (McCluney, Fallaize, & Schempp, 2018).

Teachers with frequent interaction among colleagues regarding instructional topics and methods as occurs in learning communities, report greater job satisfaction and less job desertion. One teacher cited the sharing of ideas and thoughts among the staff as being of the utmost importance to her teaching practices. “Curriculum planning and mapping here at the school helps us to see that we are all going in the same direction,” (S#13, 01). This comment supports the literature which states that stakeholders must mobilize efforts in a unified direction to yield positive student results. Learning communities represent individualized experiences that are tailored to a particular context which makes them highly applicable since teachers share a mutual understanding of their unique school context and population. Meaningful professional development is beneficial for both teachers and students since improved instructional practices resulting from constructive professional development yields higher student achievement.

**Recommendations**

While current government policy pushes toward standardization and centralization, increasingly there is evidence that the most successful
approaches to improving schooling for English language learners are variable and context specific.

Schmidt-Nieto (2002) speaks of the importance of school autonomy and the need to decentralize power from the department of Education to the individual schools who best understand their particular context and student population. Decentralization of power leads to greater stakeholder participation and policies that accurately reflect each school’s unique context. Policy makers are influenced by the larger society’s language orientation which directly impacts the language policies in education and how they are implemented in the classroom (Ruiz, 1984). The specialized bilingual schoolteachers repeatedly maintained a student centered-focus. They deviated from the mandated language ideology that was translated into educational policy and opted to enact a classroom language policy that was best for their students. Teacher interviews expressed an unofficial classroom language policy however, a specialized bilingual school unit language policy would ground teacher and administrator practices and clear the confusion caused by ambiguous directives. Once established, the frequent revisiting of the DEPR language policy or vision for the specialized bilingual schools’ unit by teachers and administrators would aide in establishing the link between policy and practice. Stronger connections need to be made in order to promote the language as a resource orientation. All stakeholders need to be informed of the positive benefits of the ecological approach to language and classroom applications. This study recommends a collaborative exchange between the DEPR and specialized bilingual school
stakeholders which has the potential to demystify the educational language policy of DEPR.

The DEPR’s language policy should be determined and verified in terms of Puerto Rico’s current linguistic landscape in conjunction with recommendations from teachers and administrators. Specialized bilingual schoolteachers have requested “proveer un currículo y programa de estudio que ayude a enseñar con los niveles de proficiencia lingüística, efectivamente” [Provide a curriculum and program of study that helps to teach linguistic levels of proficiency effectively] (S# 12, SS). A universally applicable method of expressing an updated language policy would be the establishment by the DEPR of student outcome expectations utilizing differentiated admissions exams according to grade level, possibly K-3, 4-6, 7-9, and 10-12. This would ensure uniformity among the specialized bilingual schools’ unit with regards to expected student outcomes and would convey a standard that substantiates the updated language policy without rigidly prescribing methods of instruction.

An integral part of the updated language policy is how the languages will be used during instruction. "...English and Spanish be treated as complementary modes of communication, not segregated." (Schweers & Velez, 1992, p. 31). One option would be initially providing instruction in Spanish with a carefully planned introduction into each grade of specified subjects using SIOP techniques as shared in professional development workshops and learning communities. There are various formations of language integration in the classroom. For example, a class use the translanguaging strategy of reading and discussing a topic in one language, then writing about it in the other language.
would promote the development of student skills in both languages. It is critical that administrators, teachers and students receive an official acceptance to utilize both languages in the manner that is most appropriate to their context and facilitates language acquisition in both languages. Additionally, an open language policy most accurately reflects natural bilingual language practices and is true to the Puerto Rican linguistic landscape. Best teacher practices are fomented by clear communication among stakeholders.

One of the greatest contributions from educational philosopher Paulo Freire (1985) was the convergence of the dichotomy between theory and practice in the area of education called praxis. Freire asserted that only when theory is combined with action can transformation be possible. Reflection was pivotal for evaluating theory and past actions that would then determine the direction of future actions in the classroom. Professional development is a potential site of praxis as it provides a forum for educators to connect theories with the actual implementation in the classroom. The abilities of a skilled teacher, “no se desarrolla automáticamente con los años: la experiencia no necesariamente lleva a más y mejor enseñanza” [do not develop automatically with time: experience does not necessarily lead to more or better teaching] (Lunenberg, Korthagen, & Swennen, 2007, p. 597). Pousada (2011) noted that one of the major factors that impeded students' English development, were poorly trained teachers which has a direct connection to the lack of professional development opportunities aimed at bilingual educator practices (Martínez Rodríguez, 2014). Both informal and formal professional development would provide a forum for teachers to improve their practices and therefore the
quality of their instruction. "A commitment by the school to provide its teachers with formal and informal opportunities of long-term professional development is an essential element to improving practice." (García, 2012, p. 2).

Formal training, learning communities and mentoring are the types of professional development recommended following the findings of this study. First, formal training in language teaching techniques and strategies such as SIOP, have been shown to positively influence practitioner beliefs. In place of generalized professional development workshops, teachers and administrators would be best supported with DEPR sponsored workshops and activities tailored to bilingual education. Secondly, within individual schools, teachers can develop learning communities. "Teachers in learning communities build a trusting relationship with other teachers and encourage collective reflection and feedback as best practices are modeled in the context of in-classroom experiences" (García, 2012, p. 2). Finally, another form of professional development within schools would be through mentorships. Mentoring is one of the most effective ways of promoting quality teaching practices that directly benefit student achievement, new teacher retainment and increased job satisfaction for both mentor and mentee. Some of the most substantial benefits for new teachers with mentors are lowered anxiety and feelings of isolation while enhancing their capacity to self-reflect and problem solve. All of which improve a new teacher’s confidence in their abilities to perform which increase job satisfaction, resulting in higher student achievement. Improved communication and targeted professional development will yield more prepared teachers which this study has found to be one of the most crucial
factors in developing students’ bilingual proficiency. Ultimately, highly qualified English teachers and academically successful bilingual students will lead to greater prosperity on the island because one of the greatest advantages to bilingualism is the opening of opportunities both economic and social (Grosjean, 2010).

Limitations

Noted limitations were that the data was collected only six months after Hurricane Maria which affected all schools’ everyday operations due to power outages and even occasional building closings. The data was also collected from March-May of the 2018-2019 school year which meant that many teachers were in the process of concluding their academic year, one that had already experienced extreme delays, thus making participation challenging. These factors contributed to lack of uniform participation on the part of all eighteen schools in the specialized bilingual school unit.

Given the large scope of this project, there were many different doctoral students and one master’s student who were involved in the data collection. While the research team helped create the various instruments and protocols, we were all at different phases of our studies and had varying experiences with qualitative data collection and write-up. Thus, some of the field notes and interviews with teachers were at times rushed and showed this inexperience. It should also be noted, that the members of the research team were also working full time, studying and helping with the collection of the data, often in schools that were over an hour and a half from where they lived which reduced the
amount of time that some members of the research team could spend at the school sites.

Another limitation to this research is that it largely does not include the perceptions and voices of parents and community members. While we tried to get these voices included in each school’s self-study evaluation, time constraints, pressure to finish the semester and the general stress of working on such a large document meant that much of the work in completing each school’s self-evaluation was completed by the school principal and a small committee of teachers.

Another extremely important limitation was which was left out for practical and ethical reasons, was getting formal interviews and focus groups with students who study in the participating schools. While the research team was able to take field notes about observations of students inside and outside of the classroom as well as ask informal questions to students, a more formal survey of students’ thoughts, experiences and opinions regarding their bilingual school would have been ideal as they are the primary stakeholders in all of this.

**Suggestions for Future Research**

Despite everything that is discussed in this dissertation, there are many questions that were beyond the scope of this study. This is particularly the case in terms of how the curriculum was implemented in schools and then assessed in META-PR. All schools in the study reported that mathematics and science were assigned to be taught in English. While Spanish language arts, social studies would be taught in Spanish. However, no written justification was found to support why math and science were assigned to English. The hard sciences
which include math and science have historically been highly valued, while the soft sciences are traditionally characterized subjective and secondary. Based on this premise, this covert language policy may appear to favor English as the more valuable language. Surprisingly, in spite of mathematics and science being taught in English, these content areas are administered in Spanish on META-PR. This would potentially be a disadvantage for bilingual school students who may not demonstrate their competency in these areas due to linguistic limitations as the majority, if not all, of their instruction would have been conducted in English. However, results of META-PR did not support this assumption. This may be attributed to teacher autonomy in the classroom to institute an open language policy during instruction which may have compensated for the shortcomings that the English-only instruction would have caused.

The importance of this research is two-fold. First, it presents a current look at how specialized bilingual schools’ teachers and administrators characterize their teaching contexts and their relationship with DEPR. And secondly, it documents current language use in bilingual education in Puerto Rico. The relationship between the specialized bilingual schools’ unit and the DEPR was evaluated with regards to how schools were characterized, and their relationship with DEPR in terms of professional development, curriculum and materials and resources as reported by teachers. To develop a full picture of bilingual education, additional studies are needed that include family, student and/or community member perspectives to add to the existing body of literature on bilingual education on the island. Moreover, DEPR perspectives were not within the realm of this study and also merit investigation that may
offer justification for the findings previously mentioned. As interrelated components, the link between DEPR and the specialized bilingual schools needs to be investigated with a poignant look at how communication occurs and can be improved. Further research should be undertaken to investigate the comparison of specialized teachers receiving targeted workshops to those who do not and its impact on student academic achievement. While the value of quantitative educational outcomes such as standardized testing is uncontested, qualitative outcomes such as self-concept, emotional adjustment and language attitudes are also important factors to be studied as they also contribute to student performance.

Conclusion

According to the Ley de Reforma Educativa Puertorriqueña (2018) "En las economías modernas, la educación se ha convertido en uno de los factores más importantes de la producción nacional" [In modern economies, education has transformed to be one of the national production's most important factors]. This educational ideology is transformed into educational policy to support the development of human capital in public school systems. However, schools are only as effective as the programs and curricula they implement. The components of an effective bilingual program include a clear vision, program articulation, stakeholder commitment, positive bilingual climate, optimal language instruction and professional development (Robledo Montecel & Cortez, 2001). This study informs educators, administrators and policy makers by confirming the current fundamentals of successful bilingual education as seen in DEPR's specialized bilingual schools. The significance of this inquiry to
researchers, teachers, and administrators may either confirm their existing practices or inform their practice, research or program. The significance of these results is in their potential to be generalized and implemented in regular DEPR programs or provide guidance for bilingual programs that are in initial stages. Upon answering both of the research questions, this study revealed four key findings. First, teachers and administrators described their teaching contexts as extraordinary due to the shared & targeted objective of bilingualism from all stakeholders (administrators, teachers, students & families. They were proud of the school’s social responsibility to provide English instruction to students that may not have the opportunity otherwise. The specialized bilingual school community members were clear in their purpose to promote bilingualism by actively cultivating a bilingual school landscape. Teachers reported a teaching environment that supported their transglossic language ideologies which were implemented in the classroom through flexible language use. The second finding was that instruction purposeful and engaging with interactions that were meaningful and focused on instructional tasks. Teacher attunement to student needs was critical in shaping strategic language instruction in both English and Spanish. The third finding was that teachers and administrators characterized their relationship with PRDE as ambiguous due to a lack of a clear bilingual school vision and expected student outcomes. They were frustrated with translating the traditional curriculum from Spanish to English and having to make their own materials. The fourth finding revealed that as exemplary professionals they were committed to continuous
professional development however, they shared that currently it was not tailored to bilingual educators and therefore only partially effective.

This research will affect how I mentor intern teachers as they learn to informally and formally assess their students' learning and make decisions according to student needs. Most importantly, teacher autonomy was critical as it propels effective instruction and decision making in the classroom that in the students' best interest. These teachers displayed an exceptional commitment to work with the resources at hand despite recognizing how it limited their instruction. Teacher expertise cannot be underestimated as they execute the directives set forth by DEPR. This study's results reaffirm the capacity of skilled teachers to modify their instructional practice as needed by their students and adds to the existing literature that supports fluid language practices as an optimal instructional strategy for bilingual classrooms. The results of this study are applicable to "traditional" public school English instruction programs as well and may improve English language instruction for students so that they have a greater potential to be as academically competitive as their private and specialized bilingual school counterparts.

My experience during the research process has enriched my understanding of Puerto Rico's distinctive linguistic landscape. Historically, a diverse linguistic context was not practical or convenient however it is now our reality. As previously imagined language borders are disappearing, this has become the best time to reinvent how we will define our dual language status. López Laguerre (1989) calls the period after the implementation of language policies in Puerto Rico's public schools the awakening of "a linguistic
consciousness”. This consciousness could lead to a custom-made definition of bilingualism for Puerto Rico that can be set as the target for bilingual educators. If we could adopt strategies for reconciling multilingualism such as the acceptance of flexible language use or language use according to specific purpose, which may lower the perceived threat to individual identity & language take-over and increase comfortability with our actual multilingual context.

I am truly inspired by these bilingual educators as they consistently affirmed the notion of continual professional development and lifelong learning while providing excellent models for students to follow. Regardless of their degrees, professional experiences, or years in the classroom, the teachers in specialized bilingual programs demonstrated that a great teacher is always improving. If the greatest influence on student achievement is the classroom teacher, then the quality of the teacher is paramount, and it was my honor to learn and grow with them.
Appendix 1. CITI Program Completion Certificate

This is to certify that:

**Jacelyn Smallwood**

Has completed the following CITI Program course:

- Social & Behavioral Research - Basic/Refresher (Curriculum Group)
- Social & Behavioral Human Research (Course Learner Group)
- 1 - Basic Course (Steps)

Under requirements set by:

**Universidad de Puerto Rico, Recinto de Rio Piedras**

Verify at [www.citiprogram.org/verify?w12b47952-feb8-41d6-8013-391e9c84f13d-20528666](http://www.citiprogram.org/verify?w12b47952-feb8-41d6-8013-391e9c84f13d-20528666)
Appendix 2. IRB Approval letter

COMITÉ INSTITUCIONAL PARA LA PROTECCIÓN DE LOS DERECHOS HUMANOS
EN LA INVESTIGACIÓN (CIPSHI)
IRB 30000944

AUTORIZACIÓN DEL PROTOCOLO

Número del protocolo: 1716-077

Título del protocolo: Alianza entre la Unidad de Escuelas Especializadas (UnEE) y el programa de Enseñanza de Inglés como Segundo Idioma (TESL) de la Universidad de Puerto Rico para Evaluar las Escuelas Bilingües y de Idiomas del Departamento de Educación de Puerto Rico

Investigador principal: Dr. Kevin S. Carroll

Tipo de revisión: Initial □ Renovación □ Modificación

Revisado por:
□ Comité en pleno
□ Procedimiento expedito bajo la(s) categoría(s) del Federal Register 43 FR 60366-60367: 6 y 7

Fecha de la revisión: 28 de marzo de 2018

Otras acciones:
□ Condiciones verificadas y aprobadas por □ Miembro del CIPSHI □ Personal de Cumplimiento el 9 de abril de 2018.
□ Dispensa concedida en el procedimiento estándar de consentimiento informado.

Esta autorización expira el 9 de abril de 2019.

Si la investigación no concluye para esta fecha, tiene que solicitar la renovación de la autorización de acuerdo al tipo de revisión que le corresponda, por el comité en pleno o expedito. Cualquier modificación posterior a esta autorización requerirá la consideración y renovación del CIPSHI. Además, debe notificar cualquier incidente adverso o no anticipado que implique a los sujetos o participantes. Al finalizar la investigación, envíe el formulario de Notificación de Terminación de Protocolo.

dish@upr.edu http://graduates.upr.edu/cipshi

Margaretta Nocesoto, Ph.D.
Presidenta del CIPSHI o representante autorizado

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## Estándar 1: Currículo

### Standard 1. Curriculum

**Preguntas relacionadas con el currículo para asegurar la efectividad del programa bilingüe o de idiomas.**

Questions related to curriculum implementation with the purpose of establishing bilingual/language program effectiveness.

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<thead>
<tr>
<th></th>
<th>Puede responder en un texto breve. Si tienes documentación que apoya su respuestas, guardalo para la visita del comité evaluador.</th>
<th>Logrado Met</th>
<th>Logrado parcialmente</th>
<th>Sin lograr Not met</th>
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</table>

1. ¿Su escuela cumple con la definición de *bilingüismo*? ¿Cómo?

Does the school comply with the definition of *bilingualism*? How?

2. ¿El currículo de su escuela se desarrolla en la escuela o se lo provee el DEPR? (Provea ejemplos.)

Do you create your own curriculum or is it provided by the PRDE? (Provide examples.)

3. ¿Se utiliza tanto el español como el inglés durante las clases? (Provea ejemplos de planes, lecciones, actividades, exámenes, etcétera.)

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<th>Answers could be provided in short narratives. Please keep any supporting documentation in a folder for the on-site visit.</th>
<th>Logrado Met</th>
<th>Logrado parcialmente</th>
<th>Sin lograr Not met</th>
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<thead>
<tr>
<th>Question</th>
<th>Spanish</th>
<th>English</th>
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<tbody>
<tr>
<td>Are both languages used during the instruction of the class? (Provide examples of plans, lessons, activities, tests, etc.)</td>
<td>¿Quién evalúa el currículo? ¿Cómo se evalúa el currículo? ¿El DEPR está involucrado de alguna manera en el proceso de evaluación?</td>
<td>Who evaluates the curriculum? How is the curriculum evaluated? Does the PRDE have any involvement in the evaluation process?</td>
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<td>Are the students’ needs taken into consideration when drafting and implementing the curriculum in the class?</td>
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<td>6. ¿Se consideran a los miembros de la comunidad escolar en el desarrollo del currículo? ¿Cómo?</td>
<td>Are the school community members considered when drafting the curriculum? If so, how?</td>
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<td>7. ¿El personal administrativo o docente tiene algún tipo de preparación en el diseño curricular? ¿El personal administrativo o docente ha recibido algún adiestramiento en diseño curricular? (Provee evidencia en un apéndice por separado.)</td>
<td>Does the administrative staff or the educators have any preparation in curriculum design? Has the staff or teachers received training in curriculum design? (Provide evidence in a separate appendix)</td>
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<td>8.</td>
<td>¿Existen clases de nivel avanzado que puedan aprovechar los estudiantes? Si es así, ¿cuáles son y cuáles son los criterios de elegibilidad para tomarlas? (Provea evidencia.)</td>
<td>Are there any AP classes that the students can take advantage off? If so, what are they and how are they eligible for them? (Provide evidence.)</td>
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<td>9.</td>
<td>¿Existe alguna limitación en la implementación y el desarrollo del currículo bilingüe? ¿Cuáles son estas limitaciones?</td>
<td>Are there any limitations in implementing and drafting the bilingual curriculum? What are these limitations?</td>
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<tr>
<td>10.</td>
<td>¿Cuáles son algunas áreas que se pueden mejorar del currículo bilingüe o de idioma actual? ¿Estas mejoras asegurarían la efectividad del programa? ¿Estos cambios considerarían las necesidades de los estudiantes?</td>
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### Estándar 2: Personal docente

**Standard 2: Teaching Personnel**

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<thead>
<tr>
<th>Questions relacionadas con el personal docente para asegurar la efectividad del programa bilingüe o de idiomas.</th>
<th>Puede responder en un texto breve. Si tienes documentación que apoya su respuestas, guardalo para la visita del comité evaluador. Answers could be provided in short narratives. Please keep any supporting documentation in a folder for the on-site visit.</th>
<th>Logrado Met</th>
<th>Logrado parcialmente Partially met</th>
<th>Sin lograr Not met</th>
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<tbody>
<tr>
<td>1. ¿Qué credenciales posee el personal docente para enseñar en una escuela bilingüe o de idiomas?</td>
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<td>a. ¿Qué certificaciones posee el personal docente?</td>
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<td>What credentials do the teaching personnel have in order to teach in a bilingual/language school?</td>
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<td><strong>What certifications do the teaching personnel have?</strong></td>
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<td><strong>¿Cómo se involucra el personal docente en la toma de decisiones relacionados con la adaptación o la implementación del currículo?</strong></td>
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<td><strong>How does the teaching personnel get involved in the decision making of curriculum adaptation and/or implementation?</strong></td>
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<td><strong>¿Qué estrategias de enseñanza utiliza el personal docente para promover la efectividad del programa bilingüe o de idiomas?</strong></td>
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<td><strong>What teaching strategies does the teaching personnel use to promote bilingual/language program effectiveness?</strong></td>
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<td><strong>¿Qué áreas de oportunidad tiene el personal docente para mejorar el currículo bilingüe o de idiomas y garantizar la efectividad del programa?</strong></td>
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<td><strong>What areas of opportunity does the school teaching personnel have to improve bilingual/language curriculum and</strong></td>
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<td>ensure program effectiveness?</td>
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<td>5. ¿Cómo asegura el personal docente la participación de los miembros de la comunidad en el proceso de tomar decisiones relacionado con la efectividad del programa?</td>
<td>How does the teaching personnel ensure participation of school community members in decision-making processes related to program effectiveness?</td>
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<td>6. ¿Qué oportunidades fuera de la escuela hay disponibles para el desarrollo profesional del personal docente? (ej. conferencias o talleres)</td>
<td>What opportunities outside of the school are teaching personnel members given for professional development? (i.e. conferences, workshops, etc.)</td>
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<td>7. ¿Cuáles otros miembros del personal administrativo apoyan a este currículo especial y su efectividad?</td>
<td>What other administrative personnel does this school have to support its special</td>
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<td><strong>curriculum and program effectiveness?</strong></td>
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<td><strong>8. ¿Cómo provee el personal docente un ambiente inclusivo efectivo para los estudiantes de educación especial?</strong></td>
<td><strong>How does the teaching personnel provide an inclusive environment that is effective for special education students?</strong></td>
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<tr>
<td><strong>9. ¿Qué limitaciones confronta el personal docente a la hora de implementar el currículo bilingüe o de idiomas y asegurar efectividad?</strong></td>
<td><strong>Which limitations does the teaching personnel face to implement bilingual/language curriculum and ensure program effectiveness?</strong></td>
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<tr>
<td><strong>10. ¿Cuáles son las fortalezas del personal docente de la escuela al implementar el currículo bilingüe o de idiomas para asegurar efectividad del programa?</strong></td>
<td><strong>What are some significant strengths of the school teaching personnel upon implementing bilingual/language curriculum and</strong></td>
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</table>
Ensuring program effectiveness?

<table>
<thead>
<tr>
<th>Estándar 3. Rendimiento académico estudiantil</th>
<th>Standard 3. Student Performance</th>
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<tbody>
<tr>
<td>Preguntas relacionadas con el rendimiento estudiantil y procedimientos relevantes enfocados en asegurar la efectividad del programa bilingüe o de idiomas. Questions related to student performance and procedures relevant geared towards ensuring bilingual/language program effectiveness.</td>
<td>Puede responder en un texto breve. Si tienes documentación que apoya su respuestas, guardalo para la visita del comité evaluator. Answers could be provided in short narratives. Please keep any supporting documentation in a folder for the on-site visit.</td>
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</table>

1. ¿Cómo se evalúa el **rendimiento académico estudiantil** durante el año académico? How is **student performance** evaluated throughout the school year?

2. ¿El **rendimiento académico estudiantil** muestra correlación con la implementación efectiva de los estándares de currículo? ¿En qué áreas? (Proveedor evidencia.) Does **student performance** show correlation with effective implementation of curriculum standards? In what areas? (Provide evidence.)
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Translation</th>
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<tbody>
<tr>
<td>3.</td>
<td>¿Cómo los resultados de los estudiantes en las pruebas muestran efectividad en el uso de estrategias de enseñanza?</td>
<td>How do the students' test scores reflect effective use of teaching strategies?</td>
</tr>
<tr>
<td>4.</td>
<td>¿Cuál fueron las notas de los estudiantes el año pasado? ¿Qué promedio tuvieron? (Provea evidencia en un apéndice separado.)</td>
<td>What were the students' final grades last year? What averages did they have? (Provide evidence in a separate appendix.)</td>
</tr>
<tr>
<td>5.</td>
<td>¿Los resultados de los estudiantes cumplen con las expectativas requeridas en las pruebas estándares como META, CEEB y APE? (Provea evidencia en un apéndice separado.)</td>
<td>Do the students' scores meet the expectations required in standardized tests like META, EEB, or APE? (Provide evidence in a separate appendix)</td>
</tr>
<tr>
<td>6.</td>
<td>¿Cuáles materias reflejan mayor y menor aprovechamiento académico estudiantil? (Provea evidencia de los resultados.)</td>
<td>What subject areas are the highest and lowest in student performance? (Provide evidence of scores.)</td>
</tr>
<tr>
<td>N°</td>
<td>Pregunta</td>
<td>Traducción</td>
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<tr>
<td>7.</td>
<td>¿Cómo se refleja la efectividad del programa a través de las notas y los resultados de los estudiantes en las pruebas estandarizadas?</td>
<td>How do the students' final grades and results in standardized tests reflect program effectiveness?</td>
</tr>
<tr>
<td>8.</td>
<td>¿Qué participación han tenido los estudiantes en competencias dentro o fuera de la escuela? ¿En qué área han obtenido reconocimientos? ¿Qué distinciones han recibido los estudiantes? (Provea evidencia de su participación en competencias.)</td>
<td>Do students participate in competitions in or outside the school? Have they won in competitions related to the subject area? What distinctions have the students received? (Provide evidence of participation in competitions.)</td>
</tr>
<tr>
<td>9.</td>
<td>¿Cómo cumple la escuela con los estándares designados para la evaluación del aprovechamiento académico estudiantil?</td>
<td>How does the school comply with the standards designated in student performance evaluation?</td>
</tr>
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</table>
10. ¿Qué áreas de oportunidad pueden verse en el aprovechamiento académico estudiantil relacionadas con la habilidad bilingüe de los estudiantes? ¿Qué limitaciones se enfrentan para alcanzar el aprovechamiento académico estudiantil deseado o requerido?

What areas of opportunity can be seen in student performance regarding their bilingual ability? What limitations are faced to achieve the desired/required student performance?

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<tbody>
<tr>
<td>Preguntas relacionadas con el avalúo para asegurar la efectividad del programa bilingüe o de idioma.</td>
<td>Questions related to assessment geared towards ensuring the effectiveness of bilingual or language programs.</td>
</tr>
<tr>
<td>Puede responder en un texto breve. Si tienes documentación que apoya su respuestas, guardalo para la visita del comité evaluador. Answers could be provided in short narratives. Please keep any supporting documentation in a folder for the on-site visit.</td>
<td>Logrado Met</td>
</tr>
<tr>
<td>1. ¿Qué procesos de admisión específicos han sido implementados en esta escuela de acuerdo con su currículum bilingüe o de idiomas? Describa cómo estos procesos de admisión se diferencian de los de escuelas regulares del DEPR. Provea</td>
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evidencia en apéndices separados.

What **specific admission processes** have been implemented in this school in accordance with its bilingual/language curriculum? Describe how these admission processes are different from regular PRDE schools. Provide any evidence in separate appendixes.

2. ¿Qué **recursos** (libros de texto y materiales) provee la escuela para asegurar el éxito de las metas educativas de acuerdo con su currículo bilingüe o de idiomas? Describa cómo estos recursos se diferencian de los de las escuelas regulares del DEPR.

What **resources** (textbooks and materials) does the school provide to ensure success of educational goals in accordance with its bilingual/language curriculum? Describe how these resources are different from regular PRDE schools.
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<tr>
<td>3. ¿Cuáles son los <strong>procedimientos de evaluación</strong> para determinar la efectividad del programa bilingüe o de idiomas? Provea evidencia en apéndices separados (ej. exámenes especiales, actividades, proyectos, proyectos extracurriculares, exámenes estandarizados, cursos avanzados).</td>
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<td></td>
<td>What are the required <strong>assessment procedures</strong> to evaluate the bilingual/language program's effectiveness? Provide evidence on separate appendixes (Ex. special exams, activities, projects, extracurricular projects, standardized tests, AP courses).</td>
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<tr>
<td>4. ¿Existen <strong>requisitos de graduación</strong> exclusivos a su programa bilingüe o de idiomas? (ej. créditos adicionales en inglés) ¿Cuál es la <strong>tasa de graduación</strong>? Provea evidencia en apéndices separados.</td>
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<td></td>
<td>Are there any <strong>requisites for graduation</strong> that are exclusive to the bilingual/language program? (ex. extra English credits) What is</td>
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the **graduation rate**? Provide any evidence in separate appendixes.

5. ¿Qué **servicios** ofrece la escuela a sus estudiantes? (ej. educación especial, biblioteca, trabajador/a social, consejero/a, otros)

What **services** does the school offer its students? (ex. special ed., library, social worker, counselor, others)

6. ¿Qué **iniciativas académicas extracurriculares** la escuela promueve para sus estudiantes?

What are the **academic extracurricular initiatives** the school promotes for its students?

7. ¿Qué **fortalezas** relacionadas con los procesos de evaluación posee la escuela?

What are the school’s **strengths** regarding assessment?

8. ¿Qué **limitaciones** encara la escuela con relación a sus procesos de evaluación?

What **limitations** does the school face
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<tr>
<th><strong>Estándar 5. Administración</strong></th>
<th><strong>Standard 5. Administration</strong></th>
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<tr>
<td><strong>Preguntas relacionadas con los procesos administrativos para asegurar la efectividad del programa bilingüe o de idiomas.</strong></td>
<td><strong>Questions related to administration procedures geared towards ensuring bilingual/language program effectiveness.</strong></td>
</tr>
<tr>
<td>Puede responder en un texto breve. Si tienes documentación que apoya su respuestas, guardalo para la visita del comité evaluador.</td>
<td>Answers could be provided in short narratives. Please keep any supporting documentation in a folder for the on-site visit.</td>
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<tr>
<td>Logrado</td>
<td>Logrado parcialmente</td>
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<td>Met</td>
<td>Partially met</td>
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<tr>
<td><strong>1. ¿Qué decisiones administrativas de la escuela se han tomado en los últimos años para asegurar que la escuela implemente su currículo bilingüe o de idiomas, según las regulaciones del Departamento de Educación?</strong></td>
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<td><strong>Which administrative school decisions</strong> have been made in recent years that ensure the school is implementing its bilingual/language curriculum as expected by PRDE’s regulations?</td>
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<tr>
<td><strong>2. ¿Qué informes administrativos evidencian la efectividad del programa? Provea evidencia en apéndices separados. (ej. informes de fin de año, planes de acción o planes de evaluación o alineación con las expectativas del DEPR)</strong></td>
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<tr>
<td><strong>What administrative records can evidence compliance with program effectiveness? Provide any evidence on separate appendixes. (e.g. end-of-the-year reports, action plans or assessment plans submitted in compliance/alignment with PRDE’s expectations)</strong></td>
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3. ¿Cómo la administración provee tiempo para reuniones de la facultad, orientaciones o talleres para mejorar la efectividad de los programas bilingües o de idiomas?

How does the administration provide time for faculty meetings, orientations, and/or workshops geared towards improving bilingual/language program effectiveness?

4. ¿Qué decisiones administrativas, a nivel del DEPR, se han tomado en los últimos años para apoyar a la escuela en la implementación de su plan de estudios bilingüe o de idiomas como ha de esperarse por las regulaciones del Departamento de Educación?

Which administrative decisions at the PRDE level have been made in recent years to support the school in implementing its bilingual/language curriculum as expected by
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<td>5. ¿Cómo la administración de la escuela garantiza la participación de los miembros de la comunidad escolar en los procesos de toma de decisiones relacionados con la efectividad del programa?</td>
<td>How does the school administration ensure participation of school community members in decision-making processes related to program effectiveness?</td>
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<tr>
<td>6. ¿Cuáles son las cualificaciones especiales del director de la escuela para administrar esta escuela? (Provea evidencia en un apéndice por separado.)</td>
<td>What are the school director's special qualifications to administer this school? (Provide evidence in a separate appendix.)</td>
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<td>7.</td>
<td>¿Qué otro personal administrativo tiene esta escuela para apoyar su currículo especial y la efectividad del programa? Provea evidencia de sus cualificaciones especiales en un apéndice por separado.)</td>
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<td>What other administrative personnel does this school have to support its special curriculum and program effectiveness? (Provide evidence of their special qualifications in a separate appendix.)</td>
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<td>8.</td>
<td>¿Cuáles son las fortalezas más importantes de la administración de la escuela al implementar un plan de estudios bilingüe o de idioma y garantizar la efectividad del programa?</td>
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<td>What are the significant strengths of the school administration upon implementing bilingual/language curriculum and ensuring program effectiveness?</td>
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</table>
9. ¿Qué limitaciones enfrenta la administración para implementar el currículo bilingüe o de idiomas y garantizar la efectividad del programa?

Which limitations does the administration face to implement bilingual/language curriculum and ensure program effectiveness?

10. ¿Qué áreas de oportunidad tiene la administración de la escuela para implementar el currículo bilingüe o de idiomas y garantizar la efectividad del programa?

What areas of opportunity does the school administration have to implement bilingual/language curriculum and ensure program effectiveness?
Appendix 4. Teacher Interview Protocol

Alianza entre la Unidad de Escuelas Especializadas (UnEE) y el Programa de Enseñanza de Inglés como Segundo Idioma (TESL) de la Universidad de Puerto Rico para Evaluar las Escuelas Bilingües y de Idiomas del Departamento de Educación de Puerto Rico

Co-Pls: Kevin S. Carroll, PhD & Aníbal Muñoz Claudio, Ed.D.

Interview Protocol
Teacher Participants

The purpose of the individual interview with teachers is to get a clearer and individual understanding of what it is like to work and teach at the school. Before beginning the interview, turn on the recorder and ask the participant whether they consent to being audio recorded. If the participant does not consent to being recorded but consents to the interview, turn off the audio recorder and take notes of the interview. After attaining verbal consent to participate in the interview, remind participants that the interview will be audio recorded for transcription purposes and that the audio files will only be shared among the evaluation team and will not be shared with the Department of Education. Below is a sample of the open-ended guide questions.

Sample of open-ended guide questions for informal interviews with teachers:

1. How were you recruited to work in this school?
2. How would you describe the personnel recruitment process in this school?
3. What subject do you teach?
4. Do you teach your subject entirely in English? Please, elaborate to what extent.
5. Do you have a bilingual certificate from PRIDE or equivalent credentials? Where and how did you get such certificate from?
6. Do you receive ongoing training or continuing education to support your teaching tasks?
7. How satisfied do you feel with the overall functioning and organization of this specialized bilingual school?
8. Would you consider this bilingual school as a successful project? Why?
9. Do you feel comfortable working in this environment?
10. How satisfied do you feel with community support for this school?
11. How do you assess the student population (student profile) attending this school? How do you feel about the admission, retention, and graduation policies and protocols?
12. How do you evaluate the bilingual curriculum being implemented in this school?
13. Do you participate in the decision-making process of the school regarding curriculum revision or implementation? Please, explain.
14. What do you think about assessment procedures being conducted in this bilingual school?
15. How do you evaluate students’ academic achievement and overall performance in standardized tests?
16. What do you consider are some areas that need significant improvement in this school?

Updated April 13, 2018 KSC
17. How do you evaluate PRDE’s overall support and monitoring of this specialized bilingual school?
18. Do you agree/disagree with PRDE’s future plans of expanding the specialized bilingual program across the island of PR? Why?
19. What recommendations do you have for PRDE officials who visualize the opening of more bilingual schools in Puerto Rico?
20. Add any other additional questions you may deem necessary.

Things to remember:

- Interview members who ARE NOT on the self-evaluation committee
- Make sure you find a place that provides privacy for the interview
- Interviews should be audio recorded and transcribed verbatim.
- When transcribing, insert pseudonyms for any names that the participants use.
- Interview participants can stop the interview at any point.
- Interview participants should try not to use the names of other teachers or school administrators.
- When talking about the school, do not use its official name. You may use the name that we have assigned it (Ex. School 1, School 2).

Updated April 11, 2018 KSC
Appendix 5. Classroom Observation Protocol

Alianza entre la Unidad de Escuelas Especializadas (UnEE) y el Programa de Enseñanza de Inglés como Segundo Idioma (TESL) de la Universidad de Puerto Rico para Evaluar las Escuelas Bilingües y de Idiomas del Departamento de Educación de Puerto Rico
Co-PIs: Kevin S. Carroll, PhD & Anibal Muñoz Claudio, Ed.D.

General School Observation Protocol

The purpose of the General School Observation is to document the overall aesthetic of the school and to see how languages are used in the every day running of the school. These observations should be documented in a notebook that is brought by the evaluation team to the research site and will be written up into detailed field notes upon returning home from the school. Given that the focus of the research is on the bilingual or language school itself, we are looking at aspects of the general school environment that might help or distract from the school’s goal implementing.

Below are the types of things that you should be documenting in your field notes that directly come from the site observation.

1. Linguistic Landscape:
   a. What is the linguistic landscape like?
   b. Are all the signs in English or in Spanish or in both languages?
   c. Are important signs in one language or another (like the bathroom, directions, etc.).
   d. When announcements are made to the whole school, are they done in Spanish or in English?

2. School’s infrastructure
   a. Is there space for the students to run and play, organize and socialize, what are the languages that you hear as you walk around the campus?
   b. Are the rooms well organized and does the school look well kept, groomed?
   c. Is there a library? Does it have books? What languages are the books in? Are the books that are there at the appropriate reading level?
   d. Does the school have any classrooms with technology? (Computers, projectors, etc.)
   e. Does the space seem adequate or does the school seem to be a bit over crowded?
   f. Is there are working photocopier machine and is there a place for teachers to prep-for classes?

3. Classrooms

Updated April 11, 2018 KSC
a. How are the classrooms organized (in single file rows, horseshoe, large tables, circle etc.)?
b. How many students are in the classrooms that you see?
c. Are their books in the classroom?
d. Does the teacher use a textbook?
e. What languages are used on the classroom walls? (This is particularly important for the content area classrooms like Science, Math, and History etc.).

4. Overall language use among those in the school
a. What is the language you primarily hear among colleagues at the school?
b. What language(s) are the cooks, security, secretaries and other support staff using?
c. What language(s) do teachers use among one another?

Things to remember:

Do not take pictures of the school.
Jot down as many notes as you can throughout the visit.
Write-up your field notes as soon as possible after the school visit.

Updated April 11, 2018 KSC
Appendix 6. School Grounds Observation Protocol

Alianza entre la Unidad de Escuelas Especializadas (UnEE) y el Programa de Enseñanza de Inglés como Segundo Idioma (TESLI) de la Universidad de Puerto Rico para Evaluar las Escuelas Bilingües y de Idiomas del Departamento de Educación de Puerto Rico

Co-PIs: Kevin S. Carroll, PhD & Anibal Muñoz Claudio, Ed.D.

General School Observation Protocol

The purpose of the General School Observation is to document the overall aesthetic of the school and to see how languages are used in the everyday running of the school. These observations should be documented in a notebook that is brought by the evaluation team to the research site and will be written up into detailed field notes upon returning home from the school. Given that the focus of the research is on the bilingual or language school itself, we are looking at aspects of the general school environment that might help or distract from the school’s goal implementing.

Below are the types of things that you should be documenting in your field notes that directly come from the site observation.

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   a. What is the linguistic landscape like?
   b. Are all the signs in English or in Spanish or in both languages?
   c. Are important signs in one language or another (like the bathroom, directions, etc.).
   d. When announcements are made to the whole school, are they done in Spanish or in English?

2. **School’s infrastructure**
   a. Is there space for the students to run and play, organize and socialize, what are the languages that you here as you walk around the campus?
   b. Are the rooms well organized and does the school look well kept, groomed?
   c. Is there a library? Does it have books? What languages are the books in? Are the books that are there at the appropriate reading level?
   d. Does the school have any classrooms with technology? (Computers, projectors, etc.)
   e. Does the space seem adequate or does the school seem to be a bit overcrowded?
   f. Is there are working photocopy machine and is there a place for teachers to prep-for classes?
3. **Classrooms**
   a. How are the classrooms organized (in single file rows, horseshoe, large tables, circle etc.)?
   b. How many students are in the classrooms that you see?
   c. Are their books in the classroom?
   d. Does the teacher use a textbook?
   e. What languages are used on the classroom walls? (This is particularly important for the content area classrooms like Science, Math, and History etc.).

4. **Overall language use among those in the school**
   a. What is the language you primarily hear among colleagues at the school?
   b. What language(s) are the cooks, security, secretaries and other support staff using?
   c. What language(s) to teachers use among one another?

**Things to remember:**

Do not take pictures of the school.
Jot down as many notes as you can throughout the visit.
Write-up your field notes as soon as possible after the school visit.
REFERENCES


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