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AN EVALUATION OF TEACHERS' PERCEPTIONS OF PREPAREDNESS TO TEACH IN DUAL LANGUAGE PROGRAMS

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AN EVALUATION OF TEACHERS' PERCEPTIONS OF PREPAREDNESS TO TEACH IN
DUAL LANGUAGE PROGRAMS

By

CARI ANDREANI

A doctoral dissertation submitted to the
College of Education
in partial fulfillment of the requirements
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DUAL LANGUAGE PROGRAMS

by

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DEDICATION

I dedicate this work to all teachers and administrators in the education field. It is dedicated to all of you who seek and work to improve yourselves to be better for your students every day. Education has been my passion my entire career. I have had the privilege of working with amazing teachers and for some incredible educational leaders. They have all inspired me to always put students first and to go above and beyond in my career because every student matters. Education is not just a profession; it is a calling. To all the teachers in dual education who have answered the call to reach your students, I applaud you. Thank you. We need you. I hope this study helps you become a better teacher because I know you care deeply about your calling. Administrators and educational leaders, I hope this study helps you support your teachers and reminds you of your important role. We need you, too. This work is dedicated to educators. May you be encouraged and equipped in your calling to educate our children.

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I would also like to thank my husband. He has been my biggest cheerleader and would not let me give up. He gave up office space and listened to many hours of me processing information I am sure he had little interest in, but he didn't show it. He truly is my best friend and biggest fan. I would also like to thank my children. They supported me and gave up many things in order for me to pursue my dream of finishing my study and getting my doctorate. I hope they are inspired to go as far as their dreams will take them and that they know that I will be right there cheering them on too.

I would like to thank my dad and my sister who would send encouragement every step of the way. It helped more than they will ever know. Thank you to my mom as well who was so happy to talk about my studies with me. I hope I make you proud. To my classmates and friends, you know the level of work this entailed. Thank you for the prayers, the texts, and the messages encouraging me to never give up and finish strong. I couldn't have done it without any of you.

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ABSTRACT

Students whose first language is not English (English language learners or ELLs) make up the fastest growing demographic in public schools. School districts nationwide have implemented dual language programs as a way to help close the achievement gap between ELLs and native English speaking students, however, a main concern of implementing a dual language program is the shortage of prepared and qualified teachers. The purpose of this study was to assist school districts, dual language schools, and dual language teachers in determining what training and support teachers need to be successful in a dual language program. This study surveyed dual language teachers from five schools located in one school district in the state of Florida through an online survey using Likert-scale. The study's findings were favorable in that teachers indicated they were confident overall in their ability to teach in a dual language classroom setting, and were confident in their ability to teach first language (English) development skills with a slightly higher mean score than the confidence level in teaching second language (Spanish) skills. The study also found areas of improvement: utilizing paraprofessionals in the dual language classroom, and administrative support of dual language programs.

Key Words: dual language, dual language program, English Language Learners, language instruction, bilingual, biliteracy, professional development, teacher preparedness, teacher perceptions, constructivist, teacher efficacy

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I. INTRODUCTION

The United States has received substantial demographic changes in its school-age population. According to the U.S. Census Bureau, the foreign-born population in the United States in 2018 was at 13.7% and is expected to rise (U.S. Census Bureau, 2018a). Students whose first language is not English make up the fastest growing demographic in public schools (Thomas & Collier, 2017). As the country's population continues to transform, schools must adjust to cultural and linguistic changes in the classroom.

English language learners (ELLs) make up approximately 10% of the total kindergarten through 12th grade student enrollment in U.S. schools (Quezada & Alexandrowicz, 2019). In Florida, the largest immigrant population is the Hispanic or Latino population which was at 26.1% as of 2018 (U.S. Census Bureau, 2018b). With the increase in immigration, school district administrators are seeking new ways to meet the needs of the ELL population.

At the state level, Florida has had demographic changes in school populations due to the large Hispanic immigration that has occurred over the last century (Freeman, Freeman & Mercuri, 2018). The National Center for Educational Statistics predicts that language minority students will be 40% of the student population by 2025 (Thomas & Collier, 2017). However, most schools are under-serving the ELL population (Thomas & Collier, 2017). During the 2016-2017 school year, ELLs and non-ELLs in Florida saw a significant gap in passing scores for the English language arts and the Math Florida Standards Assessments (FSA) tests (Florida Department of Education, 2018). In 2017, 14.1% of ELL students successfully passed the

language arts FSA compared to 57.7% of native English speakers and 24.5% of eighth grade ELLs passed the Math FSA compared to 47.8% native English speakers (Florida Department of Education, 2018).

At the national level, the U.S. Department of Education data indicate that ELL graduation rates are among some of the lowest of any student sub-group in American schools (U.S. Department of Education, 2017). In 2017, the ELL graduation rate was 66%, and the overall student graduation rate was 85%, leaving a 19-point gap (U.S. Department of Education, 2017). With increasing immigration and low ELL performance outcomes, school district administrators have taken an active role to bridge this achievement gap.

School districts nationwide have implemented dual language programs as a way to help close the achievement gap between ELLs and native English speakers (Thomas & Collier, 2017). The emphasis of a dual language school is for ELLs to retain their native language while also allowing native English-speaking students the opportunity to learn a foreign language from native speakers (Quezada & Alexandrowicz, 2019). The goal of dual language programs is to reach complete bilingualism and biliteracy for ELL and non-ELL students (Gonzalez-Carriedo, Bustos & Ordoñez, 2016). Dual language programs not only implement teaching two languages but also help develop cross-cultural learning and perspectives (Quezada & Alexandrowicz, 2019). ELLs have opportunities to interact in a classroom with material and instruction in their own language and engage in ways that develop culturally, linguistically, and intellectually (Alvear, 2019). Dual language programs have positive outcomes for ELLs and have outcomes that demonstrate increases in academic achievement over time (Alvear, 2019). An appealing feature of dual language programs for school districts is that the implementation of the program can be modified to meet the language needs of the specific population makeup of the school.

Depending on the demographic of the school, a 90-10, 80-20, or 50-50 model can be implemented.

Dual language programs teach language and content congruently in the primary language (i.e., English) as well as a secondary language (for example, Spanish) throughout the school day and are compartmentalized to teach one language at a time (Gonzalez-Carriedo et al., 2016).

According to Li, Steele, Slater, Bacon, and Miller (2016), dual language programs offer classroom instruction in both primary and secondary languages (for 50% to 90% of the day) in order for students to achieve high levels of bilingualism and biliteracy. For example, in schools where there is a large Spanish-speaking population, a 90-10 model would be adopted- 90% of the day is taught in the students' primary language, Spanish, and 10% of the day is taught in English. Schools could then gradually move to an 80-20 model where 80% of the day is taught in the minority language and 20% taught in English with the goal of class instruction becoming a 50-50 model to teach both languages equally (Li et al., 2016). Dual language programs integrate ELLs from a common native language with native English speakers in the same classroom to help bridge the achievement gap between ELLs and non-ELL students and to create truly bilingual students (Oberge De La Garza, Mackinney, & Lavigne, 2015).

Dual language programs help bridge the achievement gap for ELLs and result in documented success rates for ELLs; however, dual language programs can also be used for native English speakers who wish to become bilingual and biliterate as well (Soltero, 2016). Students in dual language programs excel and outperform comparison groups in other educational programs and actually close the achievement gap for ELLs while providing an excellent education for native English speakers (Thomas & Collier, 2017). Furthermore, dual language programs promote cognitive benefits for both ELLs and native English speakers

including improved working memory and enhanced selective attention (Li et al., 2016).

According to Quezada and Alexandrowicz (2019), “[S]tudents with high levels of bilingual proficiency exhibit higher levels of academic and cognitive functioning than their monolingual counterparts, interact better with others, and have more employment opportunities” (p. 186).

As school districts consider implementing dual language programs, certain challenges must be considered. A main concern of implementing a dual language program is the shortage of prepared and qualified teachers (Lachance, 2018). According to Lachance (2018), “Teachers in dual language programs must understand the cognitive, linguistic, and cultural advantages of teaching language minority and language majority students together in a K-12 classroom” (p. 2). Teachers need to engage students in purposeful learning, implement challenging curriculum, use multiple teaching approaches unique to language acquisition, and demonstrate courage and collaboration with another co-teacher (Lachance, 2018). The need for specialized teachers is great and, as a result, the national need for qualified dual language teachers remains a concern (Lachance, 2018). Providing teachers and administrators with professional development opportunities about implementing dual language models in their schools can improve their chance of a successful implementation (Li et al., 2016).

As school districts seek to meet the needs of the growing diversity in schools, dual language programs have become the “program of choice” (Oberg De La Garza et al., 2015, p. 363) with benefits that are helping bridge the achievement gap for ELLs and native English learners. To implement dual language programs, understanding teacher preparedness is essential for success (Gonzalez et al., 2016). This study evaluated the need for professional development from teachers’ perspectives in order to implement successfully a dual language program.

Background

The first dual language program in the United States was created in 1963 at Coral Way Bilingual Elementary School in Miami in response to Cuban parents who wanted to provide their children with an education that gave them bilingual academic development (Baker & Wright, 2017). Although monolingualism in English was the societal norm, schools began to see the advantage of dual language education, and dual language programs became a popular choice for families in states with high immigration populations (Thomas & Collier, 2017). In the 1970s, court cases defining rights for ELLs' education, such as the requirement to provide proper personnel and necessary resources, brought more support for the bilingual education movement (Quezada & Alexandrowicz, 2019).

Civil Rights Act of 1964 and the Bilingual Education Act of 1968

The Civil Rights Act of 1964 gave access to all persons in the United States to federally funded programs such as education (National Archives, 1964). The act was a major accomplishment for immigrant families. The act stated there could be no discrimination in housing, employment, and education based on race, color, religion, sex, and national origin, and, the Civil Rights Act of 1964 opened new conversations on race and education among elected officials (Donato & Hanson, 2014). As Mexican immigration grew, the U.S. Office of Education created the Mexican American Affairs Unit during this time, and federal grants were awarded for teachers to receive training to teach Mexican Americans in school (Donato & Hanson, 2014).

In 1968, President Johnson signed the Bilingual Education Act (BEA) of 1968, which was the first piece of federal legislation to recognize the needs of students with limited English proficiency (Donato & Hanson, 2014). By 1968, bilingual programs started in the Southwest United States, mostly in Texas and Florida (De la Trinidad, 2015). Political movements gave

rise to bilingual programs and revealed a new shift in teaching philosophies, pedagogy, and the overall education system. The legislative acts of the Civil Rights Act of 1964 and the Bilingual Education Act of 1968 sought to provide equal educational opportunities for all people in the United States.

Quality Education for All Students

U.S. presidents in the twenty-first century enacted laws for student equality in education. The No Child Left Behind (NCLB) Act, signed into law by President George W. Bush in 2002, shifted education policy from state control to federal control and mandated that children take standardized tests each year to assess proficiency (Heise, 2017). The NCLB emphasis on testing was detrimental to ELLs since English was not their primary language. Although the NCLB reform set out to improve education, ELLs were at a great disadvantage.

The Race to the Top (RTTT, also referred to as RT3) program was signed by President Barack Obama in 2009 to replace NCLB (Baker & Wright, 2017). A major component of RTTT was merit pay for effective teachers and principals (U.S. Department of Education, 2016). Performance pay for teachers was a problem for some educators since educational performance is much more than simply teacher skill. Factors such as students' home life, family support, and language proficiency contribute to student success. ELLs were disadvantaged once again with the RTTT program since home life and limited language are common barriers to ELL academic success (Egalite, 2016).

In 2015, President Barack Obama signed the Every Student Succeeds Act (ESSA) (Baker & Wright, 2017). ESSA included standardized testing in English and math, but mastery of other subjects could be measured in other ways through projects or performance tasks (Darling-Hammond et al., 2016). School faculty and staff were also required to provide support for ELLs'

language acquisition; however, requiring a *percent proficient* incentivized some faculty to focus only on students who fell just below the English proficiency level or to reclassify students as proficient before they were ready, instead of addressing all ELL student needs (Darling-Hammond et al., 2016). Teachers that focused on only part of the population left ELLs in general at a disadvantage because faculty were only addressing a small portion of the overall population.

Bilingualism and Bilingual Schools

As the U.S. legislature passed many educational policies to be more inclusive, school districts across the nation attempted programs that were inclusive socially and promote and embrace cultures and languages by implementing dual language programs (Lachance, 2018). Researchers Wayne P. Thomas and Virginia P. Collier found that dual language programs can successfully close the achievement gap for ELLs as well as offer native English speakers an excellent education (Quezada & Alexandrowicz, 2019). Multiple dual language models are available to meet the specific needs of school districts and have proven great success when implemented over time (Thomas & Collier, 2017). As school districts move to create programs that benefit their communities, bilingual and biliterate programs benefit students academically, cognitively, socio-culturally, and economically (Lachance, 2018).

Problem Statement

As school districts implement dual language programs in their schools, a main problem administrators find is that teachers are not prepared. According to Lachance (2018), the United States has a “national shortage of dual language teachers... making it very difficult for states to expand or even sustain dual language programs” (p. 2). Dual language teachers not only must be qualified to teach their course content, but must also understand the unique cognitive, linguistic,

and cultural needs of teaching language minority and language majority students (Lachance, 2018). Competent dual language teachers must possess an understanding of second language acquisition and knowledge of language strategies, as well as hold the same credentials and core competencies as all teachers for their grade level and subject matter (Quezada & Alexandrowicz, 2019). School districts lack dual language teacher preparation programs resulting in a shortage of dual language teachers (Lachance, 2018).

Purpose Statement

The purpose of this study was to determine, from the teachers' perspectives, to what extent teachers feel prepared to teach in a dual language school. The results of this study can be applied to solving the problem of the lack of teacher preparedness in dual language programs by providing valuable insight from dual language teachers on what professional development is needed to successfully teach in a dual language school. The results of this study may be used to proactively implement professional development for teachers to prepare them to teach in a dual language school. The information from this study can also be used to help existing schools to determine if there is a training gap for teachers and what specifically they need to succeed in the dual language classroom.

Conceptual Framework

The conceptual framework for this study was based on Russian psychologist Lev Vygotsky's (1978) social constructivist theory. The constructivist theory is built around the idea that students construct their own learning by using background knowledge and skills along with the new knowledge and skills and then apply to their current experience for added learning (Gonzalez et al., 2016). The constructivist process promotes proactive learning, rather than passive absorption of information; and, students are actively engaged in internalizing new

information and shaping it into individual understanding rather than simply memorizing and repeating information (Aljohani, 2017). According to Gonzalez- Carriedo et al. (2016), student engagement is a key component in dual language classrooms in which teachers guide students to connect concepts and past experiences with their current world. Therefore, constructivist theory methods provide an important component to the language learning process and are necessary in the exploration for teacher training in dual language schools.

Data regarding constructivist pedagogy in the classroom have demonstrated excellent outcomes for the dual language classroom (Gonzalez-Carriedo et al., 2016). These pedagogical methods are especially helpful for teachers in dual language schools because the methods give teachers the opportunity to incorporate diverse student cultures and allow the student to use past experiences to construct new learning (Aljohani, 2017).

Significance of the Study

This study provides valuable information to school district administrators planning to implement dual language programming, to school districts expanding dual language programs in their districts, and to schools that have dual language programs. As school district administrators seek to increase student success and bridge the achievement gap between ELLs and native English speakers, dual language programs are a promising option for districts to meet the needs of the student population and achieve desired outcomes. The data from this study provide information about teachers' insight as to the professional development needed to teach in a dual language program. The data were gathered through a survey that provided information on dual language teachers' perspectives of their level of preparedness to teach in a dual language school.

Overview of Methodology

The study is considered quantitative, non-experimental, and survey research by specific research methodology. The sample consisted of dual language classroom teachers from five separate schools located in one large-sized school district in the state of Florida. Study participants were provided with an electronic survey. The survey included Likert-scale items to assist the researcher in addressing the five research questions. The research instrument was researcher-designed and was validated through formal reliability analysis (Cronbach's alpha).

The researcher sought permission from the school district through the district's institutional review board (IRB) process. The researcher also sought IRB approval from Southeastern University. Upon being granted permission from the school district and the university to send the survey via email, a link to the survey on Survey Monkey was distributed to teachers' work emails. The survey had a two-week return deadline with a reminder email sent to participants after one week to ensure maximum participation. Survey Monkey allowed responses to be anonymous and summarized responses for ease of analysis. Results of the survey were statistically analyzed for trends and patterns leading to overall study conclusions.

Participants' identities were strictly anonymous. In the survey, teachers were not asked to include any identifying factors such as name or grade level. The researcher also did not collect IP addresses or any other identifying factors from computers from the survey. The consent to participate was on page one of the survey where the participants clicked "next" to indicate consent and were allowed to move on to page two of the survey to begin answering the items. If participants did not click "next", they were not be able to see the survey. The average response rate for online surveys is typically below 50% (Selah & Bista, 2017). Therefore, for

this dissertation study, a response rate of at least 50% was desired. The potential sample pool for study purposes was approximately 56 teachers.

To establish the survey instrument's content, the researcher conducted a content analysis of the existing literature that characterized the dual language classroom. The prominent themes were then sorted into categories that became survey items. The prominent themes were: (a) language development in primary and secondary languages, (b) incorporating culture and parental support, (c) dual language curriculum and assessments, (d) administrative and community support, and (e) teachers' realistic expectations and advocacy for dual language education. The study's research instrument was a 23-item Likert-type survey utilizing a 5-point scale, with one indicating participants strongly disagree with the statement and five indicating participants strongly agree with the statement (See Appendix A).

Research Questions and Hypotheses

The following research questions were formally posed to address the study's research problem:

1. To what degree do study participants perceive that they are effective in their ability to teach in a dual language classroom setting?

H₀ 1

There will be no statistically significant finding for study participant perceptions of efficacy in teaching within a dual classroom setting.

2. To what degree do study participants perceive that they are confident in their ability to teach first language (English) development strategies in the dual language classroom setting?

H₀ 2

There will be no statistically significant finding for study participant perceptions of efficacy in teaching first language (English) strategies within a dual language classroom setting.

3. To what degree do study participants perceive that they are confident in their ability to teach second language (Spanish) development strategies in the dual language classroom setting?

H₀ 3

There will be no statistically significant finding for study participant perceptions of efficacy in teaching second language (Spanish) strategies within a dual language classroom setting.

4. Is there a difference in study participant perceptions of confidence in their ability to teach first language development strategies compared to second language development strategies in the dual language classroom setting?

H₀ 4

There will be no statistically significant difference in mean perceptions of study participants with regard to first and second language strategies as it pertains to confidence in teaching within a dual language classroom setting.

5. Considering the individual elements associated with teaching in a dual language classroom setting, which represents the most prominent correlate and predictor of study participant overall ability to teach in a dual language classroom setting?

H₀5

The element of “I am proficient in delivering quality instruction through a dual language curriculum platform” will represent the most viable correlate and predictor of study participant perceptions of overall ability to teach in a dual language classroom setting.

Analyses

Preliminary Analyses

Prior to the analysis of research questions presented in the study, preliminary analyses was conducted. Analysis was conducted on the following: missing data and essential demographic information, which was not personally identifying information, internal consistency (reliability) of participants’ responses, and dimension reduction of survey items.

Missing data in the survey was analyzed using descriptive and inferential statistical techniques. Specifically, frequency counts (n) and percentages (%) were utilized for illustrative purposes. The randomness of missing data was assessed using Little’s MCAR test statistic. An MCAR value of $p > .05$ was considered indicative of sufficient randomness of missing data.

Internal reliability of participants’ responses to the survey was evaluated using Cronbach’s Alpha (α). Cronbach’s alpha levels of .70 and beyond are considered acceptable for research-created instruments. The statistical significance of α was evaluated through the application of an *F* Test. *F* values of $p < .05$ are considered statistically significant.

Data Analysis by Research Question

The study’s research questions were addressed using a variety of descriptive, associative, predictive and inferential statistical techniques. Frequency counts (n), measures of central tendency (mean scores), and variability (standard deviation) represented the primary descriptive statistical techniques used in the five research questions.

In research questions one through three, the one-sample t-test was used to assess the statistical significance of participants' responses in the first portion of the question. The alpha level of $p < .05$ represented the threshold for statistical significance of finding. Cohen's d was used to assess the magnitude of effect (effect size). Cohen's parameters of interpretation of effect sizes were used for comparative purposes.

In research question four, the t-test of independent means was used to assess the statistical significance of difference in mean scores between the two groups being measured (primary language/secondary language). The alpha level of $p < .05$ represented the threshold for statistical significance of finding. The assumptions of "normality" and "homogeneity of variances" was assessed using the Shapiro-Wilk test and the Levene test respectively. Values of $p > .05$ were indicative of both assumptions having been satisfied. Cohen's d was used to assess the magnitude of effect (effect size). Cohen's parameters of interpretation of effect sizes were used for comparative purposes.

Research question five is associative and predictive in nature utilizing multiple independent predictor variables. The multiple linear regression test statistic was used to assess predictive strength of the respective independent variables in each question. Predictive model fitness was assessed through the interpretation of the ANOVA table F value. An F value of $p < .05$ is considered indicative of a viable predictive model. Variable slope (t) values represented the means by which the statistical significance of independent variables was interpreted. Values of $p < .05$ were considered statistically significant. R^2 values were utilized as the basis for effect size measurement and for comparative purposes. The R^2 statistic was interpreted for each predictor for comparative purposes and transformed to a Cohen's d value for ease of interpretation.

Limitations

The research design of this study presented limitations. First, using survey research itself may be viewed as a limitation in that the data collected is participants' perceptions. Although perceptions are important, and often considered reality for the participant, those perceptions may not truly depict reality with regard to the topic. Second, participants' perceptions may have been distorted by nature of experience and personal factors. Experienced teachers and new teachers may have different perceptions and may have been facing various personal factors at the time of taking the survey. Personal factors such as illnesses, family issues, and significant life events can cause stress and influence participants' desires and time to take a survey. Factors such as teacher burnout or personal life events were not measured by the survey. Third, the various levels of professional knowledge can influence teacher responses depending on teachers' specific background of training and were not measured in the survey. Fourth, the results were limited to a certain population, and data were collected from one school district in Florida.

Definition of Key Terms

Culture is a people group's shared attributes, values, beliefs, and traditions that influence behavior (Gill, 2013).

Constructivist theory outlines the pedagogical practice where students construct their own learning through using past experiences and skills and reflect on how the new knowledge fits into their current learning by providing student engagement opportunities in their own learning (Aljohani, 2017; Gonzalez et al., 2016).

A **dual language education** or **dual language program** is a long-term program instruction model of learning and communicating in two languages in order for students to develop high levels of bilingualism, biliteracy, and cross-cultural competencies (Soltero, 2016).

English as a second language (ESL) instruction is an educational approach or program designed to teach English to ELL students to develop and enhance their English language skills (Baker & Wright, 2017).

FSA (Florida Standards Assessments) are standardized tests that serve Florida students by measuring education gains in English language arts (ELA), mathematics, and end-of-course (EOC) subjects (Algebra 1 and Geometry) (Florida Department of Education, 2019).

The one-way dual language model is a dual language model in which only ELLs are enrolled, and the native language is used for instructional purposes (Murphy, 2014).

The 90-10 model refers to dual language immersion programs in which 90% of the instructional day is taught in the students' secondary language, and 10% is taught in the students' primary language. A 90-10 model is used in schools with a high population of ELLs (Freeman et al., 2018).

The 80-20 model refers to a dual language immersion program in which 80% of the day is taught in the students' primary language and 20% of the day is taught in the students' secondary language (Freeman et al., 2018).

The 50-50 model refers to 50% of class instruction in the minority language and 50% in the native language. The 50-50 model is implemented when the student population is 50% ELL, and 50% native English speakers (Freeman et al., 2018).

Professional development refers to the concept of ensuring faculty members are involved in professional growth and are being developed into more knowledgeable and productive educational professionals (Stabile & Ritchie, 2013).

The two-way dual language model is used when ELLs and native English speakers are enrolled and both primary and secondary languages are used for instruction (Murphy, 2014).

Primary language or **first language (L1)** is the student's home or native language, also known as their mother tongue (Baker & Wright, 2017).

Secondary language or **second language (L2)** is the student's target or non-native language that is usually learned at a later point in life (Baker & Wright, 2017).

Language of instruction (LOI) is the main language the teacher utilizes as the platform of instruction in the classroom. It may be the native language of the students, or the official national language (Peyton, 2015). Dual language programs are made up of a dual language team, one dual language teacher utilizes the primary language as the LOI, and another teacher uses the secondary language as the LOI.

Summary

Dual language schools have been a viable options for districts seeking to meet the needs of their diverse populations. From the Civil Rights Act of 1964 to the legislative movements of No Child Left Behind, RTTT, and ESSA, government legislation has helped education move forward to include all people in the United States.

Vygotsky's (1978) constructivist theoretical framework provides an important teaching method for teacher professional development to engage ELLs and native English speakers in dual language classrooms to be actively involved in their learning. The constructivist theory provides an important component to the language learning process. Administrators can implement constructivist teacher professional development to develop effective dual language teachers.

The methodology of this study is considered quantitative, non-experimental, and survey research by specific research methodology. The sampling consisted of dual language classroom teachers from five schools in a Florida school district. Participants were surveyed in twenty-

three areas of teacher preparedness for teaching in dual language schools. Data was validated through formal reliability analysis (Cronbach's alpha). Limitations in the study included the following: (a) using survey research as a measurement because perceptions may or may not indicate reality, (b) participants' experiences and personal life events can cause unmeasurable stress on participants and therefore limit responses, (c) participants' various levels of prior professional knowledge, and (d) the limited population because the data were collected from only one school district in Florida.

As the population in the United States changes, the educational system must change with it. Dual language programs are being implemented in schools across the United States to meet the needs of multilingual students. Understanding the professional development needs of teachers in dual language schools is of utmost importance for student success. The purpose of this study was to assist school districts, dual language schools, and dual language teachers in determining what training and support teachers need to be successful in a dual language program.

II. REVIEW OF LITERATURE

The purpose of this study is to determine teachers' needs to teach in a dual language school. This literature review examines the history of dual language education in America; the definition, goals, and models of dual language programs; the benefits of dual language programs; dual language program needs; the constructivist theory in dual language education; dual language teacher needs; and, professional development for teachers to teach in a dual language school.

History of Dual Language Education in America

Bilingualism and multilingualism have been controversial issues in the educational system in the United States since the country was founded. Indigenous tribes inhabited the United States with their own cultures and multiple languages that were different than the immigrants. As Europeans migrated to the United States, they implemented their languages and cultures. In the 1600s, nearly eighteen tongues were spoken on Manhattan Island, not including Native American tribal languages (Freeman et al., 2018). As Italian, German, Dutch, French, Polish, English, Irish, and other people groups arrived in the United States, the groups demonstrated linguistic tolerance because of their multicultural backgrounds (Baker & Wright, 2017). European immigrants and indigenous groups had to communicate and accept one another's languages to flourish.

A great influx of immigration occurred in the 1800s in America. Although American schools were mostly English-only, some schools provided instruction in other languages such as German, Dutch, Polish, Italian, French, and Spanish (Freeman et al., 2018). Schools in Baltimore, Cincinnati, Cleveland, Indianapolis, Denver, and San Francisco had German-English schools (Baker & Wright, 2017). However, by the mid-1800s, non-native English speakers, including Native Americans, experienced difficulties in school when policies were passed banning the use of foreign languages in the classroom (Boyle, August, Tabaku, Cole, & Simpson-Baird, 2015). Negative attitudes toward bilingualism and multilingualism grew with the rise of immigration, and people who did not speak English were often criticized (Freeman et al., 2018).

In the early twentieth century, foreign language intolerance spread. Beliefs and reactions to conflicts with other countries during the early 1900s influenced educational policies (Boyle et al., 2015). An extreme rise in the number of people entering the United States caused concern in many Americans and caused a call for the integration and assimilation of all immigrants. Socially, it became *un-American*, to speak anything other than English (Freeman, et al., 2018). Un-American described disloyalty to America, and proficiency in English language skills became equal with loyalty to America; therefore, schools focused mostly on an English-only instructional model to Americanize immigrants and eliminated the teaching of other languages and cultures (Freeman et al., 2018).

In 1906, Congress passed the Nationality Act, the first federal law requiring English for naturalization (Baker & Wright, 2017; Freeman et al., 2018). Immigrants coming into the United States had to learn English to become citizens. In 1919, the Americanization Department of the United States Bureau of Education recommended that all private and public schools in America

teach in the English language; and, by 1923, “34 states had decreed that English must be the sole language of instruction in all elementary schools, public and private” (Baker & Wright, 2017, p. 174).

During the 1950s, English language learners (ELLs) were viewed as students who had a handicap, and teaching English to ELLs, even at the cost of losing their first language, became the objective of school programs (Freeman et al., 2018). Incorporating foreign culture to connect students to the curriculum was not an educational concern in the classroom (De La Trinidad, 2015). Educators’ perceptions that ELLs must transition to English as quickly as possible resulted in ESL and transitional programs for ELLs in the American school system to Americanize immigrants (Freeman et al., 2018).

Although many school districts focused on teaching English-only initiatives, legislation was passed to change the law to include awarding rights to all students. In the 1960s, the Civil Rights Movement called for equal rights and equal opportunity for all people irrespective of race, color, or national origin (Baker & Wright, 2017). The Civil Rights Movement created discussions regarding underserved student groups who were not receiving equal rights and brought attention back to bilingual education (Baker & Wright, 2017). The Civil Rights Act in 1964, which prohibited discrimination based on color, race, or national origin, also indicated a shift in the attitude of educators and the community members to more open attitudes toward speakers of languages other than English (Baker & Wright, 2017).

In 1963, the first bilingual school made its official appearance in Dade County, Florida. The Cuban immigrant community set up a Spanish-English bilingual school to give their children access to a bilingual education (Boyle et al., 2015). However, as Cuban immigrant families in Miami established their own private schools, public schools lost enrollment. Miami

had over 18,000 Cuban students in Miami Dade County public schools by 1960 and enrolled over 3,000 non-English speaking students per year (Freeman et al., 2018). For public schools to attract students, the Miami Dade County public school district developed a bilingual school for English and Spanish speakers (Baker & Wright, 2017). Coral Way Elementary School, the first bilingual school, opened in 1963 in Miami, and by 1975, eight more bilingual schools were established with bilingual curriculum offered in eighteen secondary schools (Freeman et al., 2018).

In 1965, funding for public schools and the promise of quality and equal education were ensured through the Elementary and Secondary Education Act (ESEA; Acosta, Williams, & Hunt, 2019). ESEA “holds states accountable for closing the achievement gap and ensuring English language learners meet the same challenging academic content and student achievement standards that all students are expected to meet” (Boyle et al., 2015, p. 2). ESEA was a development from the Civil Rights Movement and granted federal funds to ELLs (Baker & Wright, 2017).

The Title VII Bilingual Education Act (BEA) in 1968 was a significant step toward bilingual education by allowing educators to utilize students’ home languages in the classroom and required that ELLs have access to the necessary support services for English language acquisition (Acosta et al., 2019; Baker & Wright, 2017). Even though BEA did not define bilingual education and did not require schools to use a student’s home language, the reauthorization of the ESEA Title VII in 1974 provided clearer definitions of requirements for schools receiving government grants to include students’ home language in the educational curriculum to allow the student equal opportunity to progress successfully (Baker & Wright, 2017).

In the 1970s, multiple court cases supported parents of ELL students seeking equal educational rights. The *Lau vs. Nichols* (1974) case in San Francisco was a case in which parents of Chinese students claimed the school district was denying their children equal opportunity to education under the Civil Rights Act of 1964. Parents claimed the school district was only providing their students educational materials in English, a language they did not understand, thereby leaving the students at a disadvantage (Freeman et al., 2018). The case went to the Supreme Court and resulted in the Lau remedies, which called for schools to identify students with limited English proficiency (LEP) and to provide those students special services that would assist them in English language acquisition including ESL programs (Freeman et al., 2018; Polanco & Baker, 2018).

In 1981, a civil rights case for bilingual education in Texas claimed schools were not providing equal education opportunities for ELLs. *Castañeda v. Packard* ruled that the school district had not provided an acceptable program for ELL students, therefore did not give students equal opportunity to an education (Freeman et al., 2018). The *Castañeda v. Packard* case was important in the bilingual movement because it established criteria for ESL and bilingual programs. The criteria helped enhance language skills for students, eased tension between minority and majority groups, and highlighted the importance of cooperative language planning among teachers (Freeman et al., 2018).

In the early 1990s, bilingual education gained legislative support through the Clinton administration. Under President Clinton, Congress reformed education through legislation called Goals 2000: Educate America Act (Baker & Wright, 2017). ESEA was reauthorized into the Improving America's Schools Act in 1994 and provided funds for enriched educational programs

that specifically met the needs of ELL students in order to achieve high academic standards through improving instructional strategies and challenging curriculum (Baker & Wright, 2017).

Legislation for equal educational opportunities for all students became more important as immigration continued to increase during the new millennium. Legislation such as the No Child Left Behind (NCLB) Act in 2001, Race to the Top (RTTT) in 2008, and ESEA flexibility in 2011 aimed to provide ELLs more support towards gaining English language proficiency (Baker & Wright, 2017; Polanco & Baker, 2018).

The No Child Left Behind Act was signed into law by President George W. Bush in 2002 (No Child Left Behind Act [NCLB], 2002). Congress passed the act by a vote of 381 to 41, and President Bush signed the act into effect January 8, 2002 (Baker & Wright, 2017). The NCLB reauthorized ESEA and the Title VII Bilingual Education Act was eliminated (Baker & Wright, 2017). ELL concerns were addressed under Title III “Language Instruction for Limited English Proficient and Immigrant Students” (Baker & Wright, 2017).

The NCLB Act was the first national law to implement sanctions for schools based on student standardized test scores (Whitney & Candelaria, 2017). School districts were required to demonstrate adequate yearly progress (AYP) in order to avoid sanctions (Baker & Wright, 2017). Therefore, teachers, administrators, and ELL students were under increased pressure to prove ELL’s academic achievement. Accountability-based systems can have negative effects on students; and, according to Whitney and Candelaria (2017), possible negative effects can include test anxiety, anxiety to protect one’s self image, a focusing on goals rather than processes, and decreased academic performance.

Under the NCLB Act, states were required to have highly qualified teachers for ELL students (Baker & Wright, 2017). Although the NCLB Act did not specify criteria to describe

highly qualified teachers, it held states accountable for ELL academic performance in the following areas: developing English language, assessing annual progress in English proficiency, testing all students in grades 3-8 in reading and math, making AYP in student subgroups (i.e. LEP) with the ultimate goal of 100% of the students passing standardized tests by 2014, ensuring LEP students make AYP in learning English language skills, and implementing a system of increased sanctions for schools who failed to meet AYP two or more years in a row (Baker & Wright, 2017).

The NCLB Act had some negative effects on bilingual education and implementation of dual language schools. School district administrators continued to test mainly in English and implemented English-only instruction models to meet the demand of high-stakes assessments (Whitney & Candelaria, 2017). The term limited English proficient was used to describe English language learners and brought a negative connotation to students because it focused on what ELLs lack rather than what ELLs sought to achieve—bilingualism (Baker & Wright, 2017). The term bilingualism was removed from the Office of Bilingual Education and Language Minority Affairs in Washington D.C. and was renamed to the Office of English Language Acquisition (Baker & Wright, 2017). Under the NCLB Act, bilingualism was deprioritized, and English acquisition became a main goal of schools.

In 2008, the Obama administration recognized the problems with NCLB and its high emphasis on testing (Baker & Wright, 2017). In 2009, President Obama announced a program that would allow states to receive grants to pursue educational reform to meet the needs of the students in public school districts. The RTTT program outlined four requirements for states to qualify for grants: (1) Adopt internationally benchmarked standards. (2) Recruit and develop effective teachers and administrators. (3) Build data systems that measure student success. (4)

Support intervention strategies for low performing schools (Baker & Wright, 2017). Because of RTTT, dual language programs could receive federal funding by meeting the criteria for federal grants.

RTTT helped to promote dual language education, and eleven states, including Washington, D.C. were awarded RTTT grants (Baker & Wright, 2017). RTTT led to more educational reforms, including dual language program initiatives, which benefited students and met the academic needs of the ELL demographic.

Every Student Succeeds Act (ESSA) was signed into law by President Obama on December 10, 2015 and replaced the NCLB Act of 2002 (Baker & Wright, 2017). Although under ESSA the testing of grades 3-8 remained the same, ESSA allowed factors to be considered other than testing alone and, therefore, alleviated the overreliance on high stakes standardized tests (Baker & Wright, 2017). Also, teacher evaluations were no longer tied to student test scores, which alleviated pressure on teachers who had been held responsible for student outcomes. ESSA forbids the U.S. Secretary of Education from forcing states to adopt any set standards; instead, ESSA allows states to choose whether to adopt Common Core Standards or another set of curriculum and assessment (Baker & Wright, 2017).

ESSA called for evidence-based instructional strategies that produce academic growth (Herman, Gates, Chavez-Herrerarias, & Harris, 2016). Due to limited resources, school district administrators had to provide documented educational improvement plans in order to receive federal funds (Herman et al., 2016). Dual language programs had many documented benefits that helped school districts implement them in their schools; therefore, if school district administrators chose to implement dual language programs, they could receive federal funding (Herman et al., 2016).

Because English-only language models were not reaching levels of success through student achievement, academic instruction in two languages (i.e., dual language programs) became a viable solution. Dual language programs allowed schools to serve the needs of both ELLs and native English speakers by building on all students' cultural and linguistic diversity to create bilingual students (Acosta et al., 2019). Dual language programs raised the importance of teaching languages in America. Bilingual education is important because ELLs develop English language proficiency while maintaining their mother tongue and cultural identity. For native English speakers, bilingual education provides the opportunity to become bilingual while learning another culture with and from native speakers of that language. Dual language programs over the years have helped ease tensions among minority and majority culture groups and to build cross-cultural awareness in communities (Freeman et al., 2018).

Dual Language Definition, Goals, and Models

According to Li et al. (2016), dual language education can be defined as bilingual programming that provides consistent classroom instruction in two languages. Dual language programs teach through two languages, the students' first language and a second language, to promote total bilingualism and to build on students' primary language while teaching a secondary language (Li et al., 2016). Students typically enroll in dual language programs in kindergarten and ideally remain in the program a minimum of five or six years, which is "the amount of time it takes students to reach grade-level academics norms in a second language" (Oberg De La Garza et al., 2015, p. 364). In the United States, dual language programs offer English and usually Spanish due to the high Spanish-speaking population; however, Chinese, Arabic, and French are common in some areas as well (Soltero, 2016).

The goals of dual language programs are to promote high levels of academic development, to support linguistic proficiency in two languages, and to increase cross-cultural understanding (Boyle et al., 2015; Freeman et al., 2018; Soltero, 2016). A primary element of dual language goals is *additive bilingualism* (Boyle et al., 2015). Additive bilingualism occurs when students add a new language to their home language. Compared to English-only programs that teach English to ELLs without efforts to maintain the home language, additive bilingualism enables ELLs to add English language skills to their native language and native English speakers to add another language to their home language. Dual language programs are beneficial for all students but can assist especially the underserved group of ELL students to help keep their home language while learning English. As the number of ELL students in the United States rises, dual language programs have become promising options of closing the achievement gap between ELLs and native English speakers (Li et al., 2016).

Dual language programs are comprised of varying dual language models based on the needs of the school. There are two main dual language models: one-way and two-way. One-way dual language models are implemented in schools in which the demographic of students is mainly ELLs proficient in their native language but not English. Instructors use one-way models mainly in the home language (i.e. Spanish) and add the target language (i.e. English) as the second language (Murphy, 2014). One-way dual language models are also called developmental programs because they are focused on developing students' English language skills as their second language while also developing the students' first language (Boyle et al., 2015).

Two-way dual language program models include student groups from two language groups and have a balanced number of students who are proficient in their native language. Two-way models combine ELLs and native English speakers and use both the home language

and English for instruction (Murphy, 2014). Although students who are proficient in both languages may be present in a two-way dual language program, the general rule is that “no less than one third and no more than two thirds of the student population should be monolingual or dominant in either English or the partner language at the time of enrollment” (Howard et al., 2018, p. 3).

Daily class time allocated in the one-way or two-way dual language models depends on the student demographic but are usually categorized as a 90-10 or 50-50 model (Freeman et al., 2018). The 90-10 model, sometimes referred to as a full immersion model, occurs when students are immersed in the students’ native language 90% of the day and in the secondary language 10% of the day (Freeman et al., 2018). The model is used with a student demographic typically made up of ELLs who are not proficient in the secondary language. In a 90-10 model, students are grouped together because they speak the same language, and they progressively learn English together. The 90-10 model starts in the early years of education; and, as students matriculate through grade levels, the allocated time dedicated to English language instruction increases until the instructional time in both the primary and secondary languages are equally distributed through the grades (Acosta et al., 2019). In a 90-10 model, students typically learn to read in the home language and gradually transition to learning to read in English (Oberg De La Garza et al., 2015). Students may then transition to an 80-20 model with 80% of the day in the primary language and 20% in the secondary language; and the transition continues until eventually achieving a 50-50 balance (Oberg De La Garza et al., 2015).

In the 50-50 dual language program model, students receive 50% of instruction in the primary language and 50% in the secondary language typically beginning in kindergarten or first grade with the intention of adding one grade level each academic year (Mehisto & Genesee,

2013). ELLs and native English speakers are grouped together in the 50-50 model and serve as examples for each other in becoming bilingual and biliterate. Students begin reading in both the home language and target language simultaneously, or students can be separated by language in order to learn to read in their native language first (Oberg De La Garza et al., 2015). The 50-50 program model is implemented through a division of classroom time based on class period, subject, instructor, day, week, unit, or semester (Acosta et al., 2019). Class instruction is in the selected language; however, teachers may allow students to interchange languages (translanguaging) in peer communication during activities to balance the needs of both language groups, but then resume instruction in the formal language of instruction (Lachance, 2018).

A unique variation of the 50-50 program model, the Gómez and Gómez dual language model, was developed by Leo and Richard Gómez and differs from the regular 50-50 dual language model in that the instruction model is divided by subject rather than student language. The Gómez and Gómez model divides the school day by subject and requires all learners, regardless of language background, to learn certain subjects in Language 2 (L2) and other subjects only in Language 1 (L1; Whitacre, 2015). For example, all students may receive Language Arts in English (L1), and Science and social studies in Spanish (L2). Students are not segregated by their home language but instead are heterogeneously grouped and put into bilingual pairs or groups for all subjects (Whitacre, 2015). The Gómez and Gómez dual language model fosters academic and linguistic support between ELLs and native English-speaking students. The Gómez and Gómez model also incorporates bilingual instructional materials such as learning and resource centers that allows students to use their L1 and L2 skills, collaborate with other language learners, and engage in a self-paced learning environment

(Whitacre, 2015). The Gómez and Gómez model is flexible and can be implemented to meet the specific needs of school, teachers, students, and communities as well (Freeman et al., 2018).

Benefits of Dual Language Programs for ELLs

Wayne Thomas and Virginia Collier (2017) analyzed the long-term academic achievement of 42,317 ELLs in dual language programs over the past 32 years and have found that dual language programs eventually close the achievement gap for ELLs. Furthermore, the studies of Collier and Thomas (2017) have been validated by additional analyses of over 7.5 million student records from 36 school districts in 16 states. Short-term dual language programs, approximately two to four years, close about half of the achievement gap between ELLs and native English speakers, whereas long-term dual language programs close the gap within five to six years of dual language instruction in the students' L1 and L2 (Thomas & Collier, 2017). Collier and Thomas found that the most predominant predictors of secondary language development are consistent learning and development of students' primary language.

Researchers also have documented improved academic outcomes such as higher scores on English, math, and reading achievement tests in both English and the partner language (Oberg De La Garza et al., 2015). A longitudinal study by Valentino and Reardon (2015) followed 13,750 ELL students across 10 years to determine if dual language programs were more beneficial over English-only programs. The results of the study showed there was growth in dual language students' language arts, math, and language tests by measuring learning through pre- and post-tests. Achievement of students in dual language programs increased faster or at least as fast as students in English-only classes (Valentino & Reardon, 2015). Overall, students in dual language classrooms scored higher and achieved faster than mainstream students in English mainstream classes (Alvear, 2019).

A study by Sandra Alvear (2019) revealed that the most additive dual language programs yielded high academic achievements, whereas subtractive dual language programs, such as English immersion programs, resulted in significantly lower achievement rates. Students in English-only immersion programs missed the opportunity to develop their native language and to build a deeper understanding of their home language and culture (Alvear, 2019). Dual language programs support learning both in the minority language and in the majority language at the same time; therefore, students learn content and language acquisition principles that result in academic proficiency in both languages (Lachance, 2018). ELLs who learn content in their home language while acquiring English language skills are less likely to fall behind their English-speaking peers in core subject areas (Boyle et al., 2015).

Dual language programs can be a source of empowerment for ELLs. As a minority group of students who do not speak the majority language, ELLs often suffer devaluation of identity and disempowerment (Baker & Wright, 2017). According to Baker and Wright (2017), bilingual education that aims to develop proficiency in the home language creates a sense of power; whereas, monolingual programs do not empower because the main goal of a monolingual program is to assimilate the student to mainstream English education as quickly as possible without any effort to develop the students' native language. Assimilation can be detrimental to students who have forgotten their first language completely in order to speak predominately in English (Baker & Wright, 2017). A complete transition to English-only is not the ideal outcome for ELLs and can cause loss of family relationships, personality development, and adaptation (Baker & Wright, 2017). Dual language programs, on the other hand, allow ELLs to become peer teachers and native language models for native English speakers, which can build ELLs' self-esteem, personal awareness, and pride in their native language.

Dual language programs sustain and strengthen native cultural pride for ELLs (Gonzalez-Carriedo et al., 2016). The role of a dual language program is to build upon, not replace, the students' primary language. Dual language teachers not only allow students to use their first language but encourage its use. Encouraging and validating students' native language and culture in the classroom result in cultural and linguistic pride and validation of their heritage (Gonzalez-Carriedo et al., 2016).

Cultural bias in the classroom can contribute to academic struggles for ELL students; therefore, dual language programs that teach the primary and secondary language give equal status to both languages and can eliminate bias as a barrier to learning (Lachance, 2018). According to Gonzalez-Carriedo et al. (2016), the self-esteem and confidence that students gain by valuing their culture permeates their relationships on the playground, in their homes, and in the overall community where students reside. Dual language programs must value students' cultures and encourage ELLs to maintain their native language, which reinforces their deep cultural identity (Rodriguez-Tamayo & Tenjo-Macias, 2019). Socializing in the ELLs' native language brings value and pride to their language and encourages the use of their native language in social transactions inside or outside of the classroom such as in the lunchroom, playground, and while socializing (Morales & Maravilla, 2019).

Benefits of Dual Language Programs for Native English Speakers

Native English-speaking students enrolled in dual language programs score higher on state tests compared to their native English-speaking peers in monolingual education classes (Oberge De La Garza et al., 2015). Results from a Lindholm-Leary (2013) study revealed that native English speaking students in dual language programs score higher in reading and math standardized tests, and high school students in dual language programs scored higher on high

school exit exams compared to their monolingual program counterparts. Dual language programs that are implemented in the preschool and elementary years prepare students for the cognitive demands necessary to learn two languages and to increase students' cognitive capacity in middle and high school years (Oberg De La Garza et al., 2015). A limitation for bilingualism for native English speakers is that they may not need to use the second language outside of school; therefore, students do not use and perfect their productive skills of speaking. However, most students, ELL and native English speakers alike, in an early dual language immersion program will approach native-like language skills in listening and reading by age 11 (Baker & Wright, 2017).

Due to the segregated nature of society in America, dual language programs can help promote cultural awareness for native English speakers (Morales & Maravilla, 2019). Native English speakers and speakers of other languages can come together in a school setting and reciprocally teach one another their native languages and cultures. Carver Language School, a successful dual language immersion school in Los Angeles (L.A.), has a majority Latino population and serves families from various income levels, educational backgrounds, and cultures (Morales & Maravilla, 2019). Parents of native English speaking students, who recognized the benefits of learning a second language from a native teacher and achieving native-like fluency, highly supported the dual language program, and parent support was a large factor in the success of its implementation (Morales & Maravilla, 2019). Families in the L.A. community recognized the benefits for their children to learn a second language. For native English-speaking families, the dual language immersion school was a cost effective option for their children to learn a second language compared to the cost of a private school. For Spanish-speaking families in the community, the dual language immersion school was beneficial for their

children to maintain their native language, as well as to mix with students from other cultural groups (Morales & Maravilla, 2019).

Simultaneous exposure of two cultures on a daily basis improves cultural preservation of foreign students and aids in cross-cultural transfer for native English speakers (Polanco, 2018). In a study by Rodriguez-Tamayo and Tenjo-Macias (2019), seventeen students in a 50-50 dual language immersion program were followed and interviewed to document students' experiences within a multicultural context. The study results indicated that the dual language program experience contributed to students' cultural identity and to their context as individual members of society (Rodriguez-Tamayo & Tenjo-Macias, 2019). Furthermore, because a child's cultural identity is in constant transformation, the dual language program experience can help students in finding their unique identity and exploring their culture while sharing who they are (Rodriguez-Tamayo & Tenjo-Macias, 2019). Students in dual language programs value diversity and not only learn about another culture but also learn more about their native culture.

Benefits of Bilingualism for All Students

Considerable research has shown the cognitive benefits of bilingualism for all students. Bilingualism has many cognitive benefits such as better memory, executive control, and selective attention (Li et al., 2016). Students who are learning an additional language process two mental dictionaries; and, depending on the primary or secondary language being learned, the students' vocabulary will grow at varying rates (Sousa, 2017). For example, Spanish speakers may have an easier time learning English rather than Chinese because the alphabets are similar; therefore, Spanish speakers are able to learn English faster than they can learn Chinese. Bilingual individuals also demonstrate greater multitasking, problem solving, attention control, and metalinguistic and metacognitive awareness compared to monolinguals (Alvear, 2019). People

who use two languages on a consistent basis use the executive control system in their brains to solve problems and exhibit lower incidences of disease such as dementia and Alzheimer's disease (Freeman et al., 2018). Bilinguals also have increased cognitive dexterity, more complex cognitive skills, and better short-term memory compared to monolinguals (Gándara, 2018). Therefore, the cognitive benefits of dual language education provide superior benefits over monolingual education models.

Bilingualism can enhance career and economic opportunities (Boyle et al., 2015). Many parents pursue dual language education for their children to help them to be more marketable in a global economy (Mehisto & Genesee, 2015). Gándara (2018) interviewed 300 employers in companies from all sectors of business including healthcare, transportation, and warehousing; and, results of the interviews showed that at least two-thirds of employers had a preference for hiring bilinguals. Not only did employers say they desired employees who speak another language but they also considered that employees who spoke other languages would be more accepting and sensitive to diverse clientele as a plus (Gándara, 2018). Bilingual employees were given promotions and job security because of the connections and trust built between the employee and clients (Gándara, 2018).

Bilinguals are more likely to attend a four-year college, to have higher academic achievement, and to demonstrate greater employment marketability than monolinguals (Freeman et al., 2018). States such as Utah and Delaware have allocated state dollars to successfully fund dual language initiatives (Li et al., 2018). The Seal of Biliteracy, first established in California in 2011 and available in 38 states and Washington D.C. as of 2020 (Seal of Biliteracy, 2020), is a way schools recognize students' bilingualism upon graduation. The Seal of Biliteracy is awarded by a school or school district to indicate students' proficiency to read and write in two

languages (Baker & Wright, 2017). Both ELL and native English-speaking students can receive the Seal of Biliteracy. ELLs obtain the seal by passing proficiency tests in English as well as their state's English language arts exam. Native English speaking students can demonstrate bilingualism through successful completion of advanced levels of foreign language courses or pre-determined scores on Advanced Placement tests (Florida Department of Education, 2020).

According to the California Department of Education, 55,000 Seals of Biliteracy were issued to high school students in 2018, which is more than five times the number of seals (approximately 10,000) given in 2011-2012 when the program began (California Department of Education, 2020). In 2016, Florida recognized students' bilingual ability by issuing the Seal of Biliteracy

to recognize a high school graduate who has attained a high level of competency in listening, speaking, reading, and writing in one or more foreign languages in addition to English which is signified on a high school graduate's diploma and transcript as either a Gold Seal of Biliteracy or a Silver Seal of Biliteracy (Florida Department of Education, 2020).

Dual Language Program Needs

Dual language programs need state legislative support for success because legislation can require school districts to implement new dual language programs and allocate the funds necessary to support the educational programs (Mehisto & Genesee, 2015). State legislators who support dual language education seek to implement educational programs that benefit their constituents and to create a multilingual workforce that is globally competitive to foster an economically prosperous state (Mehisto & Genesee, 2015). In 2007, Senator Howard Stephenson from Utah helped pass two bills for funding the implementation of dual language

programs throughout the state totaling \$330,000, thus creating dual language and multilanguage programs in 20 secondary schools across Utah (Mehisto & Genesee, 2015). In Utah, a typically conservative state, approximately one-third of their population is bilingual; and, the multi-lingual and well-educated workforce has been credited as the reasons Utah recovered from the recent recession faster than other states (Mehisto & Genesee, 2015). Utah Governor Jon Huntsman and community businesses leaders assembled three summits to construct a plan for long-term language programs for the state: (a) the Governor’s Language Summit, which focused on the link between language education and Utah’s ability to compete in a global economy; (b) the Utah International Education Summit, which brought influential secondary education and university educators together to discuss the logistics of dual language implementation; and (c) the Salt Lake City Language Summit, which concentrated on discussing the need for multilanguage skills among the workforce (Mehisto & Genesee, 2015). The three state summits resulted in a language education plan called the Utah Language Roadmap that “established an ambitious language education plan to prepare Utah students to enter a changing global economy for the benefit of Utah’s businesses, education system, government agencies, and citizens” (Mehisto & Genesee, 2015, p.87). Utah led the dual language program movement by implementing state-wide language proficiency benchmarks in all dual language schools. The state-wide dual language guidelines direct instruction at all levels of education and provide teacher training on language proficiency as well as the use of standardized reports and assessments (Mehisto & Genesee, 2015). Other states followed Utah’s lead, and Delaware became the second state to implement a state-wide immersion initiative and then Georgia and Wyoming following suit (Mehisto & Genesee, 2015).

Support from school administration is essential to dual language program success, and administrators should demonstrate a belief in their dual language education model by fostering an environment in which multilingualism and multiculturalism are promoted (Whitacre, 2015). According to Freeman et al. (2018), school administrators who create a dual language vision statement or mission statement are vital to the success of the program. A school-wide dual language vision statement with support from the administration provides a foundation for a cohesive program that defines expectations and goals for achievement (Howard et al., 2018). School administrators who build a vision that develops attitudes and practices to achieve the identified goals for dual language programs utilize a vital strategy to create a new school culture and direction (Neufeld, 2014). Thus, according to Baker and Wright (2017), an agreed upon vision statement implemented consistently among school leaders, staff, and teachers is essential for a successful dual language school.

Dual language schools that promote a multilingual and multicultural environment by creating and supporting visual representations of the primary languages of all students, such as displaying signs in multiple languages outside, in the hallways, and in the cafeteria, are essential to student success (Freeman et al., 2018). Encouragement to use all languages in and out of the classroom promotes a multilingual and multicultural environment on campus to help promote an equal social status for all language learners thus accomplishing the goal of producing multilingual and multicultural students (Freeman et al., 2018). Students hear and experience both languages used in and out of the classroom, which reinforces full bilingualism and biliteracy.

Dual language school administrators' role to create a positive school environment also extends to positive environments for teachers. Positive working conditions for teachers are

important to student success; improved working conditions for teachers cause increased staff engagement, student engagement, and student achievement (Neufeld, 2014). Administrators who set high expectations, empower teachers, and motivate and support faculty with financial and material resources are key to dual language program success (Baker & Wright, 2018). Administrators providing professional training opportunities to develop teachers of all subject areas to become more sensitive to language and cultural backgrounds, to increase knowledge of language acquisition skills, and to implement effective teaching approaches are vital for dual language program success (Baker & Wright, 2018). Administrators must also support dual language teachers by providing time and resources for lesson planning and curriculum development (Freeman et al., 2018). Administrative leadership is vital to the dual language program success because they provide the needed resources, leadership, and support for teacher needs.

Parental support from home is a vital component to dual language program success (Freeman et al., 2018; Mehisto & Genesee, 2013). ELL parents can support dual language program efforts by encouraging a sense of community in the home, using their native language, and creating ways to reinforce their cultural identity through food and tradition (Howard et al., 2018). Families can also support student success from home by implementing home language literacy activities that are linked to higher academic achievement for dual language students (Wood, Fitton, & Rodriguez, 2019). Attending cultural celebrations as a family also helps children gain knowledge of and pride for their culture, which they bring into the classroom to share their cultural identity with their classmates (Howard et al., 2018). Parental involvement and assistance with school activities such as sponsoring fundraisers, volunteering in the classroom, and providing needed supplies for teachers not only provides practical support for the

program, but also creates a community of multicultural parents (Morales & Maravilla, 2019). Parental engagement is an important factor in dual language program success because parents reinforce the importance of language and culture in the life of the child, help with student literacy and academic outcomes, and provide much needed support for teachers.

ELLs from low socioeconomic backgrounds are particularly at-risk of having low achievement in school (Wood et al., 2019). According to Wood et al. (2019), Spanish-speaking ELLs are at a greater learning disadvantage than native English-speakers due to the disproportionate level of poverty, which places them at an increased risk for delayed language acquisition and biliteracy skills (Wood et al., 2019). Because many ELL families may not be English-proficient, and knowledge of the American school system may be inadequate, ELL families may be hesitant to be involved in their students' academic affairs (Baker & Wright, 2018). Successful dual language educators collaborate with students' families and intentionally seek ways to overcome the cultural and language barriers by including families in teacher, counselor, and neighborhood meetings. Because they value bilingualism and biculturalism, dual language educators recognize the importance of family support and display a welcoming environment and a sense of belonging for all represented culture groups (Baker & Wright, 2018; Howard et al., 2018).

Dual language teachers must understand the cultural, cognitive, and linguistic advantages for teaching multilingual students; and, dual language teachers are a foundational component of a successful dual language program (Lachance, 2018). Teachers in the dual language classroom must also develop students' second language skills while preventing the loss of students' home language (Oberge De La Garza et al., 2015). Consequences of losing students' home language include: (a) difficulty communicating with their parents and family, (b) shame about their

language and culture resulting in identity issues, (c) academic difficulties, and (d) fewer employment opportunities because they are not proficient in both languages (Baker & Wright, 2017). Therefore, dual language teachers must adjust their instruction to scaffold students' understanding from present knowledge to new knowledge. *Scaffolding* is a language support practice in which the teacher supports the student by breaking the task into smaller segments, enable the student to create and build new knowledge, and then leads the student to solve problems independently (Kelly, 2015). Scaffolding is an effective teaching practice that can help dual language students maintain their first language while learning a second language because scaffolding allows the teacher to create challenging activities that utilize students' background knowledge and provides contextual support on a topic, which enables students to build and create new knowledge (Baker & Wright, 2017).

Dual language teachers encourage multilingualism in the classroom and encourage students from both languages to develop relationships with students from other ethnicities and races to understand culture in a meaningful way (Oberg De La Garza et al., 2015). Dual language teachers must have positive attitudes regarding students' culture, and multilingualism, and must recognize and celebrate students' diversity (Baker & Wright, 2018). The dual language teacher who works with administration to encourage positive relationships in the dual language classroom can contribute positively to the multicultural environment of the school (Neufeld, 2014).

Dual language teachers are required to be certified in their state. In Florida, dual language teachers are required to have an ESOL endorsement in addition to the requirement of having at least a bachelor's degree or higher with a certification in a content area. The ESOL endorsement is obtained through completing 15 semester hours of college credit in ESOL, which

permits the teacher to teach in a dual language school (Florida Department of Education, 2009). At the time of this research, there is no dual language or bilingual education certification program for teachers in Florida. Other states, such as Texas, require teachers to demonstrate bilingualism and biliteracy through the ability to speak, read, and write in the second language; and, teachers must complete specific required coursework and take exams on general subject content area, professional responsibilities, and pedagogy to receive certification to teach in a dual language school (Alvear, 2019). Many school districts recruit educators from other countries to come to the United States to teach in the dual language program. However, when teachers do not have a background in bilingual theory or bilingual education, they risk making poor choices in program structure, curriculum, and instructional strategy, which can lead to low student performance and the perception that bilingual education does not work (Howard et al., 2018).

Dual language teachers must also implement effective ways to foster a positive home-school relationship that leads to positive collaboration and improved achievement and behavior for students. Teachers can use strategies such as providing parents guidance on how to navigate the school system, translating material and information into the home language of ELL families, and communicating with parents through text and email to inform and provide resources for ELL families (Howard et al., 2018). Dual language teachers who encourage a positive relationship between family and school lead students to higher levels of engagement and higher literacy success rates (Howard et al., 2018).

A positive school environment that promotes equality among students is essential for the dual language program to succeed (Howard et al., 2018). According to Howard et al. (2018), to facilitate learning, students must be supported in a culturally, linguistically, and socioeconomically diverse environment that integrates multicultural themes in the classroom

instruction. Successful dual language programs also support socioeconomic diversity in the school population and promote a focus on multicultural equality among students (Howard et al., 2018). Schools must intentionally work to unify segregated groups and to provide opportunities for students of different backgrounds to socialize in the school setting (Morales & Maravilla, 2019). To provide balanced opportunities to language learners, achieving a balanced number of English-proficient students and ELLs is an important aim for effective dual language programs (Oberg De La Garza et al., 2015). Therefore, equal treatment of both language groups and equal representation of both language groups are important aspects of the dual language programs' success.

Curriculum in a dual language school must be meaningful and must align with the standards and assessments of the school district (Howard et al., 2018). Teachers must incorporate not only a curriculum that meets the districts standards, but also one that encourages exploration and questioning, uses students' backgrounds to build on learning, and establishes routine to create a predictable environment (Freeman et al., 2018). Students do not have time to learn a second language first before learning the required academic content; instead, students must learn language and content simultaneously (Freeman et al., 2018). Learning academic content in a multilingual environment is beneficial so students learn the vocabulary necessary to discuss and process the academic text fully in the new language, which is an important factor in full bilingualism (Freeman et al., 2018).

Constructivism in Dual Language Education

Constructivist theory (constructivism) is a student-centered approach to learning where students *construct* their own learning, and higher learning is developed through student interaction (Lachance, 2018). The main emphasis of constructivism is that students learn

actively by doing, rather than passively by listening. Constructivist learning takes place through students interacting with teachers and the world around them (Aljohani, 2017). The roots of constructivism can be traced to the sociocultural theory of Russian psychologist Lev Vygotsky whose research repeatedly concluded that a child's learning is greater when speaking and doing converge (Vygotsky, 1978). Vygotsky's sociocultural theory is the idea that social factors contribute to learning, and students working together is considered essential for cognitive, metacognitive, and linguistic advancements (Lachance, 2018). Constructivism is essential to effective language learning and teaching practices because it encourages peer collaboration, emphasizes students owning their understanding, connects past experiences with current learning, links language and culture in learning, and employs additive techniques to provide an equitable and effective learning environment for all students (Gonzalez-Carriedo et al., 2016).

Peer collaboration allows students to draw from each other's strengths and experiences and is an effective teaching tool in dual language classrooms (Gonzalez-Carriedo et al., 2016). A study by Gonzalez-Carriedo et al. (2016) used a constructivist approach by pairing a native English speaker with a Spanish native speaker to collaborate during activities in a dual language classroom. The constructivist strategy of the peer learning activity shifted teaching from the teachers to the students and allowed them freedom to ask questions and to partake in their learning (Gonzalez-Carriedo, 2016). Teachers with a constructivist approach encourage students to discover learning for themselves, utilize strategies that incite dialogue among peers, and allow students to explore beyond the information given (Aljohani, 2017).

Collaborative constructivism activities also emphasize oral language development by grouping students and using group work strategically to help students learn content and language. Thus, students utilize their peer partner as a resource for learning (Freeman et al.,

2018). Collaborative constructivism activities include performing or presenting a play; designing a poster, a map or model; interviewing; role playing; writing and performing songs; and multimedia presentations (Aljohani, 2017).

The constructivist approach also allows dual language students to connect past learning with current learning by encouraging students to bring their history, culture, and traditions into the classroom (Gonzalez-Carriedo et al., 2016). According to Freeman et al. (2018), dual language learners do not learn content through memorization, but instead they are active learners who work together, answer one another's questions, and problem solve using their full linguistic repertoire. As dual language students actively engage in learning meaningful academic content through activities such as investigations, presentations, and projects, they also learn a secondary language (Freeman et al., 2018).

Teachers who employ constructivist pedagogy make meaning of the content by using previous knowledge and experiences to build new knowledge and assume the role as a facilitator to allow students to build their own learning (Gonzalez-Carriedo et al., 2016). According to Gonzalez-Carriedo et al. (2016), teachers who utilize constructivist pedagogy in the dual language classroom see higher academic achievement. Constructive teaching methods include encouraging students to work collaboratively such as small groups where students can externally process ideas and draw conclusions from each other (Gonzalez-Carriedo et al., 2016). Student groups with bilingual native students allow students to assist each other at the peer level with their language skills and work together to achieve their mutual goals (Gonzalez-Carriedo et al., 2016).

Constructivism in the dual language classroom uses additive teaching techniques to teach a second language by adding or building on the students' first language (Alvear, 2019). Additive

programs are a more effective way for students to achieve bilingualism faster and more efficiently and are associated with the highest student achievement (Baker & Wright, 2017). A study by Sandra Alvear (2019) examined reading scores of students in dual language programs that implemented additive techniques (i.e., two-way bilingual program) and compared the scores from subtractive programs (i.e., English-only immersion) and found that students in the most subtractive program had the lowest student achievement, and students in two-way bilingual programs had the highest average of English reading performance. Alvear (2019) used the term *additive advantage*, which is the theory that additive language acquisition approaches promote successful bilingual outcomes over subtractive language approaches (Alvear, 2019).

An example of an additive instruction technique used in dual language classrooms is scaffolding. Scaffolding is important in language learning and includes peer interaction with structured language concepts from the teacher (Lachance, 2018). In scaffolding, teachers act as a guide for students to help them build new knowledge on their previous knowledge (Gonzalez-Carriedo et al., 2016). Scaffolding is an important additive teaching method because it meets the needs of children to have teacher support and to process peer learning to achieve overall successful language learning (Lachance, 2018). Organizing lessons with strategic scaffolding techniques can enhance curriculum implementation by presenting content in a spiraling manner so students can easily grasp and connect old concepts to new concepts; thus, students continually build on previous knowledge by adding new learning (Aljohani, 2017).

Professional Development for Dual Language Teachers

A prominent obstacle in dual language programs is lack of qualified teachers (Oberge De La Garza et al., 2015). Dual language teachers must have specific skills such as a deep understanding of second language acquisition strategies, high levels of fluency in the second

language, ability to communicate and coordinate with parents, and an understanding of students' cultural background (Quezada & Alexandrowicz, 2019). To meet the demand of dual language teachers, regular professional development opportunities are important components of a dual language program. The following section presents professional development for dual language teachers based on the literature.

The main function of professional development is to increase teachers' levels of knowledge of topics in a professional field and then to embed the new knowledge until the new knowledge becomes a daily practice for teachers that results in increased outcomes (Nishimura, 2014). Professional development can be delivered in many ways. The *sit-and-get* method relies on an expert in an area to disseminate information to an audience with little to no active engagement from the audience members (Nishimura, 2014). Professional development can also involve trainings that provide opportunities for peer collaboration, for self-reflection, and for creating excitement and commitment for the school, classroom, and students (Stabile & Ritchie, 2013). Teachers who are fully credentialed and who continually seek professional development opportunities regarding best practices in dual language instruction have a more positive self-assessment, an encouraging classroom environment, and greater teaching efficacy (Howard et al., 2018).

There is a general consensus in the literature that dual language teachers should have high levels of knowledge on subject matter, effective teaching strategies, and native or native-like language skills in both languages (Howard et al., 2018). In a case study of a dual language science class, Lachance (2018) studied two dual language middle level science teachers in North Carolina. The case included two teachers who worked in dual language programs with English and Spanish speaking students; one teacher was a native Spanish speaker, and one was a native

English speaker. The study revealed a prominent theme: the need to prepare teachers to teach in a dual language classroom. Both study participants expressed the need to address teacher preparation to teach academic content and the need to be trained in complex, contextual, and specialized language teaching methods to dual language learners (Lachance, 2018).

Some states now require teachers to have extra credentials, such as an ESOL endorsement, along with their state teaching certificate to teach in a dual language program (Kelly, 2015). Effective dual language programs recruit or develop teachers who have good content knowledge, bilingual education theory, appropriate teaching certificates and credentials, and specific training with respect to language education and instructional strategies (Howard et al., 2018). A conclusion based on this study's extensive literature review is effective dual language teachers should receive professional development in the following areas: (a) teaching language acquisition skills, (b) additive teaching strategies, (c) cross cultural awareness, (d) dual language curriculum and assessments, (e) teacher attitude, (f) collaboration with other teachers, (g) use of paraprofessionals, (h) dual language special needs students, and (i) technology in the classroom.

Dual language teachers should have a solid understanding of the cognitive and sociolinguistic needs of students' language-learning ability to teach language acquisition skills. According to Quezada & Alexandrowicz (2019), native dual language teachers must help utilize students' language proficiency and background knowledge to access core content. Cognitively, dual language students process two languages at the same time, and over time, the brain changes as a result of using two languages consistently to process the new knowledge (Freeman et al., 2018). According to Freeman et al. (2018), fluency is developed through use, and over time the neural structures in the brain change to accommodate the use of two languages. Research of

bilinguals has demonstrated a plasticity of cognitive systems. As a result of living in a world of two languages, the cognitive systems of bilinguals have developed differently than their monolingual counterparts (Freeman et al., 2018). Dual language students have a heavy mental burden with cross-language transfer, the transferring of subject content matter in two languages, from the students' native language lexicon to their secondary language lexicon (Sousa, 2017). According to Sousa (2017), cross-language transfer may help or hinder comprehension, and teachers should be aware of cross-language transfer problems and adapt curriculum, activities, and lesson plans accordingly.

Dual language students are not only developing skills cognitively in two languages, but they are also developing sociolinguistically by using different languages with different people, in different settings, and on different subjects (Freeman et al., 2018). The sociolinguistic phenomenon called the *complimentary principle* is a holistic view of bilingualism that states bilinguals learn two languages at different levels, and the rate of fluency will depend on the environment and the need for that language to be used (Grosjean, 2016). For example, it is common for emerging bilingual students, ELLs, and native English speakers to be able to read, write, speak, and use vocabulary about familiar subjects (e.g., home, family, etc.) in their first language and can be concurrently fluent in other subjects (e.g., science, math, etc.) in their second language. Therefore, true assessments to determine bilingual ability in the dual language classroom should consider students' total language repertoire and the environments in which the languages are spoken (Grosjean, 2016).

Dual language teachers must understand how long it takes for ELLs and native English speakers to achieve and maintain grade level achievement in their second language. Based on the evidence from their longitudinal research, Thomas and Collier's (2017) determined that it

takes an average of six years for students to be able to use both languages at grade level achievement across the curriculum if they began dual language instruction in kindergarten. Thomas and Collier's research also indicated that it takes longer, approximately seven to 10 years of dual language education, for students who have not had the opportunity to be schooled in their L1 to be at grade-level achievement. Baker and Wright (2017) confirmed through their research that the minimum time for students to achieve customary achievement levels in a second language is four to six years; and, around the end of elementary school, dual language immersion students show equal or higher grade-level performance compared with their monolingual education peers.

Understanding dual language acquisition and theory is important for dual language teachers. Results of a short-term study, which was conducted over a two to four-year period, revealed that learning another language could hinder the native English speakers' first language progress (Baker & Wright, 2017). Although students may lag in the initial years, dual language immersion students catch up by fifth or sixth grade (Baker & Wright, 2017). Thomas and Collier's (2017) studies have shown the importance of developing a student's L1 at the same time as the L2 and found that the most powerful predictor of student achievement in a second language was the nonstop development of the student's first language. Researchers from Portland Public Schools in Portland, Oregon, studied seven cohorts of students entering kindergarten in the district's 19 dual-language immersion schools, which included 14 schools with Spanish programs, three schools with Japanese programs, three schools with Russian programs, and two schools Mandarin with programs. The results of the three-year, quantitative study used an ordinary least squares regression analysis to reveal that dual language immersion programs improve student success in English literacy without sacrificing performance in other

subjects, all while still promoting bilingualism (Steele, Slater, Li, Zamarro & Miller, 2015).

Educating dual language teachers about language acquisition development and theory is vital for dual language teacher success.

Professional development on topics of additive teaching strategies, such as constructivism, scaffolding, and translanguaging, is essential for building dual language teacher efficacy. Constructivism teaching strategies in dual language classrooms have been found to increase English reading comprehension and foreign language mastery (Aljohani, 2017). According to Aljohani (2017), a constructivist-minded teacher (a) encourages questions and discussions among students by asking open-ended questions; (b) engages students in experiences that challenge previous conceptions of their existing knowledge; (c) serves as one of many resources, not the only resource, of information for students; (d) encourages and accepts student autonomy and initiative by being willing to let go of classroom control; and (e) makes manipulative and interactive physical materials, raw data, and primary resources available for student use. A mixed methods study by Page and Mede (2018) compared task-based instruction and traditional instruction in an English as a foreign language program in a private school in Istanbul, Turkey. The study results revealed that task-based instruction, a constructivist teaching strategy, increased student reading comprehension and positive vocabulary development more effectively than traditional language teaching methods. The study also revealed, from the teachers' perspectives, that task-based instruction is more effective than traditional instruction in the language classroom (Page & Mede, 2018). The results of Page and Mede's study were similar to the results of the study by Talib and Cheung (2017) who discovered that using collaborative writing tasks in the language classroom led to noticeable student progress compared to traditional methods of teaching English. Based on the evidence of the studies,

additive teaching strategies appear to be effective in the classroom; therefore, teachers need professional training on how to implement additive learning activities in the dual language classroom to achieve student success.

According to Kelly (2015), language-support practices (LSPs) are commonly implemented additive language teaching strategies used in the dual language classroom. LSPs are developmentally appropriate techniques that enhance language acquisition through responsive teacher-child relationships (Kelly, 2015). Examples of LSPs include activities that are child-oriented, interaction-promoting, and language-modeling. Child-oriented LSPs are activities, such as playing a game, that students complete with the teacher, and allow the student opportunities to lead and explore, to guide the conversation, and to ask questions (Kelly, 2015). Interaction-provoking LSPs are used by teachers to intentionally instigate interaction between students by pairing students together for activities and projects. To implement interaction-provoking LSPs, teachers actively ask open-ended questions to facilitate discussions between the students (Kelly, 2015). Language-modeling, another effective LSP, provides a mean for teachers to linguistically correct and model students' language for content and pronunciation. According to Kelly (2015), language-modeling is an effective technique because students can hear language in a native context from their native or near-native teacher. This modeling can improve language pronunciation and students' overall proficiency. Professional development for dual language teachers in LSPs is beneficial because training promotes a supportive language environment and enhances the language acquisition of dual language learners (Kelly, 2015).

Teachers' use of encouraging words, using translanguaging and codeswitching, are effective teaching techniques in the dual language classroom. The terms *translanguaging* and *codeswitching* have been used interchangeably in the past; however, dual language experts

emphasize a difference in these terms. Codeswitching refers to events when a bilingual speaker switches from one language to the other within a sentence or within a conversation (Baker & Wright, 2017). For example, *Spanglish* is the colloquial term used to name the codeswitching between English and Spanish. A student may say, “I need a làpiz.” *Làpiz* is Spanish for *pencil*. Students may use codeswitching in the dual language classroom for various reasons such as to emphasize a word or to clarify an idea or term. Students may also codeswitch when an unknown term is needed in either language, forcing a student to access the term in the familiar language to complete the sentence (Baker & Wright, 2017).

Translanguaging is similar to codeswitching in that it can mix vocabulary from two languages externally, but it is a more complex language choice. Translanguaging allows students to access fluidly two languages internally and to engage externally in classroom interactions, to make sense of the content, and to communicate meaning to others (Baker & Wright, 2017). For example, the dual language teacher may conduct a lesson in English but allow students to ask questions in both English and Spanish to foster understanding.

Translanguaging teaching strategies encourage dual language students to utilize both languages freely in the classroom and to use their full language repertoire to engage fully in the content by utilizing all their language resources to increase understanding (Cole, 2019).

Teachers must receive professional development training on embracing and implementing translanguaging and codeswitching techniques in the classroom. Translanguaging is a valuable tool that dual language teachers can use to build effective relationships among teachers and students, to relay messages to parents, and to express cultural norms, values, and roles in the classroom (Baker & Wright, 2017). The implementation of translanguaging

highlights how languages work together in the minds of bilinguals and enables students to utilize all their linguistic resources to learn in fluid and dynamic ways (Cole, 2019).

Dual language teachers must identify and strengthen their cultural knowledge and awareness to achieve cultural proficiency. Quezada and Alexandrowicz (2019) proposed that cultural proficiency occurs on a continuum. Quezada and Alexandrowicz's continuum has six points ranging from culturally proficient (highest) to culturally destructive (lowest). A culturally proficient teacher is an educator who constantly serves the educational needs of culturally and socioeconomically diverse student groups, gathers research and resources to learn how to teach to various cultural groups, and involves a variety of educational professionals from various backgrounds to make educational decisions (Quezada & Alexandrowicz, 2019). A culturally destructive teacher is one who eliminates references to other languages and cultures, implements English-only policies, or prohibits students to use their native language in school (Quezada & Alexandrowicz, 2019). Training opportunities for educators to become culturally proficient enable teachers to meet the goals of improving the lives of their students by fostering a global perspective and to witness overall increased academic achievement in the classroom.

Dual language teachers not only need to meet the demand for cultural proficiency but also to implement curriculum in meaningful ways (Quezada & Alexandrowicz, 2019). Because standardized testing has become the measure of student success, dual language teachers may be tempted to teach to standardized tests; however, the standardized measurement approach is ineffective for students to learn two languages effectively at the same time. Effectual dual language school curriculum not only aligns with school district standards but also fosters active student engagement, is academically challenging, and utilizes supplemental dual language resources to engage students in their learning (Howard et al., 2018). According to Freeman et al.

(2018), dual language teachers must develop students' everyday language skills for basic communication as well as to develop the necessary vocabulary to read, write, and discuss academic texts. Teachers must allow dual language students to draw on their strengths by allowing students to actively explore and question while they develop their academic language.

Successful dual language programs promote bilingualism and biliteracy by immersing students in lessons that are challenging and reflective of cultural values (Acosta et al., 2019). According to Baker and Wright (2017), dual language teachers must be aware of each students' academic level and not only must implement curricula at a level they understand but also slightly push the student ahead of their current level of competence. Teachers should take into account that although grade-level standards may take longer to achieve in a dual language program, the trajectories of success reach higher, and by implementing an academically challenging curriculum, schools produce fully bilingual students in the long run (Oberg De La Garza et al., 2015).

Including supplemental bilingual resources is an essential addition to develop proficient language skills in both languages fully (Howard et al., 2018). Teachers must provide curricular resources in both languages to enhance language skill acquisition and cultural identity. According to Howard et al. (2018), sociocultural development is as critical as language development in dual language programs. Bilingual resources connect ELL families to the school, allowing parents and other family members to be more involved in their child's learning because families identify with culturally relevant literature in their home language (Baker & Wright, 2017). Utilizing resources in both languages is important to the academic and sociocultural development of all dual language students.

Positive attitudes toward linguistically and culturally diverse students and families are imperative teacher characteristics for a dual language program's success (Quezada & Alexandrowicz, 2019). Also, according to Oberg De La Garza et al. (2015), an educator's engagement with students and supportive, positive relationships with students and families are key characteristics of a successful dual language program. The absence of positive communication from the teacher causes a lack of trust between teachers and parents and disempowers teachers as leaders in the classroom. According to Whitacre (2015), ownership from teachers and all parties is necessary for program implementation and success. Thus, professional development opportunities to train teachers about the importance of positive attitudes and about ways to embrace linguistically and culturally diverse students with supportive communication must be offered to help teachers provide equitable education and positive outcomes for students.

Teacher collaboration is also an effective component of dual language schools (Freeman et al., 2018). New teachers can learn from seasoned teachers in a peer/mentor-type relationship. Many administrators have successfully used a peer mentoring program to train new teachers teaching in dual language programs (Whitacre, 2015). Dual language teachers should meet together regularly to develop solutions, share resources, and collaborate on lesson plans (Freeman et al., 2018). Regular peer collaboration throughout the school year also facilitates opportunities for teachers to create consistent curricula that can be built on from one year to the next seamlessly (Freeman et al., 2018).

On-site dual language specialists or paraprofessionals can be excellent resources for dual language programs. On-site dual language specialists can provide the day-to-day implementation of dual language program goals for which administrators may be unable to

dedicate time (Freeman et al., 2018). A dual language specialist usually holds a specialized degree in bilingual or dual language education and can provide teachers with linguistic strategies for teaching second language acquisition, can help create challenging lesson plans in both languages, can implement engaging curriculum and effective activities, and can monitor the dual language program (Freeman et al., 2018). Districts can employ a specialist in a number of ways, such as assigning one specialist per school or assigning one specialist to many schools, to guide and implement dual language efforts and to give the attention and service needed by dual language teachers.

Paraprofessionals are teacher aids, teaching assistants, paraeducators, language assistants, and classroom assistants who usually do not hold a specialized degree but can provide valuable support in classrooms with students with specific needs such as ELLs (Stacey, Harvey, & Richards, 2013). Dual language support specialists and paraprofessionals can help dual language teachers avoid feeling isolated and unsupported and can collaborate with other professionals to implement teaching practices consistent with the school program (Freeman et al., 2018). On-site specialists and paraprofessionals also need to participate in professional development opportunities related to coaching and supporting dual language teachers.

Teacher training related to dual language students with exceptionalities, such as disabilities and giftedness, is also necessary. According to Baker and Wright (2017), descriptors of *students with disabilities* varies but can include handicapped, impaired, special education students, and students with learning or physical disabilities. Students with giftedness may present with high IQ; outstanding musical, artistic, or mathematical talent; or, excellence in other areas such as leadership or sports (Baker & Wright, 2017). One of the main goals of dual language education is to serve all levels of students including students with disabilities and

students with giftedness; therefore, professional development opportunities for dual language educators who teach students with exceptionalities are especially important.

According to the National Center for Education Statistics (2016), approximately 13% of students in the United States are in programs serving students with special needs, and of these, 21% were identified as having a speech or language impairment. A concern for accurate representation exists because ELL students can be wrongly identified in educational statistics as students with a learning or speech impairment when they are simply language deficient in English (Baker & Wright, 2017). Dual language teachers must seek an accurate diagnosis of ELL students so students may be allocated an appropriate accommodation regimen.

Educators can incorrectly assume that dual language programs cause language delay and speech impairment; however, according to Baker & Wright (2017), language delay occurs when a child fails to achieve age appropriate milestones with oral communication or is behind in language development as compared to their peers. In their study, Marinova-Todd et al. (2016) surveyed 361 dual language educators and speech language pathologists from four countries and found that students with speech impairments can learn a second language. Professionals surveyed in the study supported dual language education opportunities for the speech impaired population. Dual language students can have language or speech impairments and may need special education opportunities just as they would in a monolingual educational model; however, dual language education is not the cause of the impairment (Baker & Wright, 2017).

Students with disabilities, including those diagnosed with special needs such as autism, are capable of learning two languages. Dai, Burke, Naigles, Eigsti, and Fein (2018) studied 388 children with autism spectrum disorder and other developmental disorders ($n = 282$ monolingual children; $n = 106$ bilingual-exposed children). Dai et al. compared the two groups of children to

assess their verbal and nonverbal abilities. The results of the study revealed no main effect on language learning for monolingual children compared to bilingual-exposed children, which suggests that bilingual parents can communicate in two languages without causing language delays in their children's language progress (Dai et al., 2018). Although students on the autism spectrum are highly intelligent and gifted, they can lack appropriate social behavior and the ability to interpret emotions. However, these students are fully capable of learning two languages and becoming bilingual (Baker & Wright, 2017).

Dual language education can also maximize the creative talents of gifted students. Dual language programs can provide a complex challenge that gifted students require for learning. According to Van Tassel-Baska, MacFarlane, and Baska (2017), students with gifted abilities have advanced vocabularies, complex thinking abilities, and the capacity to make connections between diverse ideas. Dual language programs provide the opportunity to learn new words, promote the study of the complexities of language, and deepen appreciation of languages and global cultures (Van Tassel-Baska et al., 2017). A dual language program benefits gifted students by developing bilingualism and biliteracy. Additionally, having gifted students participate in a dual language program raises the prestige and public perception of dual language education.

Dual language learners may have additional factors other than developmental delays or disabilities that may cause learning difficulties. Adverse learning factors include poverty, abuse, parental neglect, culturally unfamiliar classroom environments, assessments given only in the weaker language, learning expectations misaligned to a student's learning ability, emotional struggles, and negative interactions among peers in the classroom (Baker & Wright, 2017). Dual

language teachers must be aware of the influence of each learning factor to know how to provide the appropriate resources for student success.

Teacher training related to technology implementation is another vital element necessary for dual language program success. Dual language students can utilize computers to work on projects, to find helpful resources quickly, and to use applications with interactive activities (Gonzalez-Carriedo & Harrell, 2018). One of the positive effects of technology integration in the dual language classroom is assistance with a socio-collaborative model of teaching to support the constructivist approach to learning (Gonzalez-Carriedo & Harrell, 2018). Students benefit from technology through the use of videos, interactive games, and engaging in listening activities. The use of visual media plays a major role in students' second-language acquisition, reading comprehension, vocabulary building, and increased achievement scores (Gonzalez-Carriedo & Harrell, 2018). Walker, Adams, Restrepo, Fialko, and Glenberg (2017) found that reading comprehension skills, especially for ELLs, were increased through the use of multimedia student learning interactive devices with simulation and Spanish language support. Reading comprehension is a critical skill, and multimedia technology can be used to close the achievement gap for ELLs (Walker et al., 2017). Furthermore, in a study by Gonzalez-Carriedo and Harrell (2018), ELLs exposed to computer-assisted instruction in the dual language classroom earned higher scores on post-test scores than students not exposed to computers. Teacher training on effective implementation of technology in the dual language classroom can advance the bilingual and biliteracy skills of dual language students.

Although technology has the potential to enhance students' learning, it can also have negative effects on student success. Excessive use of social media outlets inside and outside of class shows detrimental results on overall student achievement as a result of students spend less

time studying and more time on social media (Gonzalez-Carriedo & Harrell, 2018). A teacher's attitude toward and application of specific websites and applications can help students use technology for academic purposes rather than social purposes. Teacher training, administrative support, and appropriate resources must be utilized in order to use technology effectively in the dual language classroom. Teachers who do not know how to properly use and implement technology, or who are resistant to using technology in the classroom fail to take advantage of a beneficial tool in the dual language classroom.

An informed teacher who has a positive attitude towards the use of technology in the classroom is an important asset in the dual language classroom. Teachers who are open to change and who believe they have the ability and resources to use technology effectively in the classroom will likely use technology in the classroom (Gonzalez-Carriedo & Harrell, 2018). Technology in the dual language classroom can be used to provide support for teachers to teach in an interactive way and to deliver successful results for dual language students (Walker et al., 2017).

Conclusion

In conclusion, dual language education in the United States has been a part of the narrative of education since the country was founded. Indigenous tribes and immigrants had to communicate with each other and to accept one another's cultures to thrive amicably together in the new world (Baker & Wright, 2017). Attitudes toward foreign language education waxed and waned over the decades as attitudes toward diverse cultures changed; Americans embraced diverse cultures in the early 1800s before they became intolerant of foreign languages in the 1900s (Boyle et al., 2015). Although English-only education initiatives were the norm during the beginning of the twentieth century, legislation awarding equal rights to all students was

passed in the second half of the twentieth century and continues to apply education programs into the new millennium. In 1964, the Civil Rights Act was passed, thus ensuring equal educational rights for all students (Baker & Wright, 2017). The ESEA, Title VII Bilingual Education Act in 1968, and the reauthorization of the ESEA Title VII in 1974 were significant milestones in bilingual education legislation (Acosta et al., 2019). Under Presidents Clinton, Bush, and Obama, the NCLB, RTTT, and ESSA raised awareness of ELLs and the importance of teaching languages in America (Baker & Wright, 2017; Herman et al., 2016). As dual language programs began to increase in number and popularity, different types of dual language programs, such as the one-way, two-way, 90-10, and 50-50 dual language models, were implemented to meet the needs of ELL students and native English speakers (Freeman et al., 2018).

The benefits of dual language programs have been well documented. Benefits of ELLs include decreased achievement gap between ELL and native English learners, increased student empowerment, and preserved cultural pride (Baker & Wright, 2017; Gonzalez-Carriedo et al., 2016; Lachance, 2018; Oberg De La Garza et al., 2015; Thomas & Collier, 2017). Benefits of dual language programs for native English speakers include higher test scores compared to monolingual students, increased cultural awareness through reciprocal teaching of students' native languages and cultures, and preservation of students' cultural identity (Lindholm-Leary, 2013; Morales & Maravilla, 2019; Oberg De La Garza et al., 2015; Polanco, 2018). Dual language programs are additive for both ELL and native English speakers and include cognitive benefits, increased career opportunities, and high overall academic achievement (Boyle et al., 2015; Freeman et al., 2018; Li et al., 2016; Sousa, 2017).

To be successful, dual language programs must have support from key stakeholders such as state legislators, school administrators, parents, teachers, and students (Freeman et al., 2018; Mehisto & Genesee, 2015; Neufeld, 2014; Whitacre, 2015). Dual language programs that are built on constructivist learning and teaching practices provide an equitable and effective learning environment for all students (Gonzalez-Carriedo et al., 2016). Two of the greatest needs of dual language programs are qualified teachers and a professional development component, both of which provide valuable benefits to meet the needs for teachers in dual language schools. A conclusion based on this comprehensive literature review is that dual language teachers should receive professional development in the following areas: (a) teaching language acquisition skills, (b) using additive teaching strategies, (c) increasing cross cultural awareness, (d) implementing dual language curriculum and assessments, (e) improving teacher attitude, (f) collaborating with other teachers, (g) working with paraprofessionals, (h) identifying and teaching dual language special needs students, and (i) utilizing technology in the classroom. Because dual language education continues to serve a growing diverse population in the United States, this study's purpose is to measure dual language teachers' perceptions of their professional development needs. The result of the study may be able to assist administrators and school districts by determining needed professional development specifically related to teaching in a dual language program.

III. METHODOLOGY

Introduction

This chapter explains the methods used in completing the study. The purpose of the study was to determine teacher perceptions of preparedness to teach in a dual language classroom. The study was conducted to provide information that may be used to proactively implement professional development for teachers to prepare them to teach in a dual language school, and to help existing schools to determine if there is a training gap for teachers and what specifically they need to succeed in the dual language classroom.

The study was considered quantitative, non-experimental, and survey research by specific research methodology. A convenient, purposive sample consisting of dual language classroom teachers from five schools located in one large-sized school district in the state of Florida represented the study's data source. Five distinct research questions and accompanying hypotheses were posed to address the study's topic. Chapter III contains a presentation of the essential elements of the study's research methodology.

Sample/Sample Selection

A non-probability sampling approach was adopted for study purposes (Frankel, Wallen, & Hyun, 2019). The specific sampling methodology was conveniently accessed and purposive in nature. The sample pool comprised of 56 dual language classroom teachers from five schools located in one large-sized school district in the Southeastern United States.

Statistical Power Analysis

Statistical power analyses were conducted using G*Power software (3.1.9.2, Universität Düsseldorf, Germany) in advance of the study to determine the sample size parameters necessary to detect a statistically significant finding with respect to statistical procedures and anticipated study participant response within the study's five research questions. The analysis parameters used were power ($1 - \beta$) of .80, an alpha (p) of .05, and anticipated medium to large effects.

Research questions one through three featured the use of the one-sample t test. A sample size range of 12 (anticipated large effect $d = .80$) to 27 (anticipated medium effect $d = .50$) was determined to be sufficient in detecting a statistically significant finding ($p \leq .05$). In research question four, a t test of independent means was used for comparative purposes. A sample size range of 42 (anticipated large effect $d = .80$) to 102 (anticipated medium effect $d = .50$) was considered sufficient in detecting a statistically significant finding ($p \leq .05$). In research question five, the multiple linear regression statistical technique (with three covariates) was used for predictive purposes. A sample size range of 36 (anticipated large effect $f^2 = .35$) to 77 (anticipated medium effect $f^2 = .15$) was considered sufficient in detecting a statistically significant finding ($p \leq .05$).

Study Procedures

Study participants were provided with an electronic version of the research instrument (survey). The survey included Likert-type scaled items aligned with the intent of addressing the study's research questions. Permission to conduct the study was sought and granted from the research site (school district) through the school district's IRB process. IRB approval from Southeastern University was sought and granted as well. The survey was then distributed to participant teachers' work emails through the Survey Monkey platform. Response to the survey

was delimited to a two-week response timeframe, with a follow-up reminder email sent to participants after one week to ensure maximum participation. The Survey Monkey platform was selected for study purposes for its efficiency, ease of use, and ability to ensure the anonymity of study participants. Results of the survey were analyzed and are presented in Chapter IV of the study.

Great care was taken to ensure participant identities were anonymized. In the survey, teachers were not asked to include any identifying factors such as name or grade level. IP addresses or any other identifying factors from computers from the survey were not required to participate in the study. The consent to participate was located on page one of the survey where the participants clicked “next” to indicate consent. If participants did not click “next”, they were not be able to continue with the survey.

Research Instrumentation

The research instrument validation process was conducted in three distinct phases. The a priori phase of establishing the survey instrument’s content validity was addressed through an exhaustive content analysis of the existing literature characterizing the dual language classroom in order to establish the prominent themes associated with the study’s topic. The prominent themes were then sorted into categories that became survey items. The prominent themes that were established in the review of literature included (a) language development in primary and secondary languages, (b) incorporating culture and parental support, (c) dual language curriculum and assessments, (d) administrative and community support, and (e) teachers’ realistic expectations and advocacy for dual language education.

The second phase of the instrument validation process was characterized by a formal piloting of study’s subsequent research instrument a 23-item, Likert-type survey utilizing a 5-

point scale approach (See Appendix A). The internal reliability of study participant response to the pilot survey administration was assessed using the Cronbach's alpha statistical technique. As a result, the internal reliability of study participant response to the pilot administration of the study's research instrument was considered "good to excellent" ($\alpha = .85$).

The third phase (posteriori) of research instrument was addressed once study data were collected using the Cronbach's alpha (α) statistical technique. As a result, the internal reliability of study participant response to the administration of the study's research instrument was considered "good to excellent" ($\alpha = .84$).

Research Questions and Hypotheses

The following research questions were formally posed to address the study's research problem:

1. To what degree do study participants perceive that they are effective in their ability to teach in a dual language classroom setting?

H₀ 1

There will be no statistically significant finding for study participant perceptions of efficacy in teaching within a dual classroom setting.

2. To what degree do study participants perceive that they are confident in their ability to teach first language (English) development strategies in the dual language classroom setting?

H₀ 2

There will be no statistically significant finding for study participant perceptions of efficacy in teaching first language (English) strategies within a dual language classroom setting.

3. To what degree do study participants perceive that they are confident in their ability to teach second language (Spanish) development strategies in the dual language classroom setting?

H₀ 3

There will be no statistically significant finding for study participant perceptions of efficacy in teaching second language (Spanish) strategies within a dual language classroom setting.

4. Is there a difference in study participant perceptions of confidence in their ability to teach first language development strategies compared to second language development strategies in the dual language classroom setting?

H₀ 4

There will be no statistically significant difference in mean perceptions of study participants with regard to first and second language strategies as it pertains to confidence in teaching within a dual language classroom setting.

5. Considering the individual elements associated with teaching in a dual language classroom setting, which represents the most prominent correlate and predictor of study participant overall ability to teach in a dual language classroom setting?

H₀ 5

The element of “I am proficient in delivering quality instruction through a dual language curriculum platform” will represent the most viable correlate and predictor of study participant perceptions of overall ability to teach in a dual language classroom setting.

Data Analysis

Prior to the analysis of research questions posed in the study, foundational analyses of a segue nature were conducted. Specifically, the foundational analyses included missing data and internal consistency (reliability) of participant response preliminary descriptions of participant response to survey items on the research instrument. Missing data were analyzed using descriptive and inferential statistical techniques. Specifically, frequency counts (n) and percentages (%) were utilized for illustrative purposes. The randomness of missing data was foreseen to be assessed using Little's MCAR test statistic. However, in light of the minimal extent of missing data, no consideration was afforded to the use of MCAR nor missing value imputation procedures. Internal reliability of participant response to the survey instrument was assessed using Cronbach's alpha (α). The statistical significance of α was evaluated through the application of an F-Test. F values of $p < .05$ were considered statistically significant.

Analysis by Research Question

The study's research questions were addressed broadly using a variety of descriptive, associative, predictive, and inferential statistical techniques. Frequency counts (n) and measures of central tendency (mean scores) and variability (standard deviation) represented the primary descriptive statistical techniques used to address the five research questions.

In research questions one through three, the one-sample t test was used to assess the statistical significance of participant response in each question. The alpha level of $p \leq .05$ represented the threshold for statistical significance of finding. Cohen's d was used to assess the magnitude of effect (effect size). Sawilowsky's (2009) parameters of interpretation of effect sizes were employed for comparative purposes.

In research question four, the t test of independent means was used to assess the statistical significance of difference in means scores between the two groups being measured (first language/second language) in the research question. The alpha level of $p \leq .05$ represented the threshold adopted for statistical significance of finding. The assumptions of normality and homogeneity of variances were assessed using the Shapiro-Wilk test and the Levene test respectively. Values of $p > .05$ were indicative of both assumptions having been satisfied. Cohen's d was used to assess the magnitude of effect (effect size). Sawilowsky's (2009) parameters of interpretation of effect sizes were employed for comparative purposes.

Research question five was associative and predictive in nature utilizing multiple independent predictor variables within the modeling process. As such, the MLR test statistic was employed to assess predictive robustness of the respective independent variables in each question. Predictive model fitness was assessed through the interpretation of the ANOVA table F value. An F value of $p < .05$ was considered indicative of a viable predictive model. Variable slope (t) values represented the means by which the statistical significance of independent variables was interpreted. Values of $p \leq .05$ were considered statistically significant. Standardized β values were utilized as the basis for effect size measurement and for comparative purposes.

Summary

Chapter III contained a description of the essential features of the study's research methodology. Elements of research design, sampling, statistical power analysis for sample size purposes, research instrumentation, study procedures, and the techniques employed to analyze study data were presented. Quantitative, non-experimental approaches were used in the study's research design and sampling procedures. Study participant perceptions were sought relative to closed structure survey items represented on the research instrument. The research instrument, a

5-point, Likert scale-type instrument was researcher-created and validated through both a priori and posteriori methods in a three-phase approach. Study data were compiled and coded in Excel Spreadsheet format and subsequently analyzed using the 27th version of IBM's Statistical Package for the Social Sciences (SPSS). Chapter IV of the study contains the findings achieved through the statistical techniques associated with the research questions and hypotheses presented in Chapter III.

IV. RESULTS

Introduction

This chapter presents results of the data analysis conducted to determine teacher perceptions of preparedness to teach in a dual language school. The study's topic and research problem were addressed through a quantitative, non-experimental research approach that featured a survey research methodology (Fraenkel, Wallen, & Hyun, 2015). The study's sample was accessed in a non-probability, purposive manner from one large school district located in the state of Florida.

The study's instrument was researcher-created, utilizing subject matter expert opinion through a content analysis approach of the existing literature. Themes achieved through the content analysis process provided the foundation for survey items used in the study's research instrument. A 5-point Likert scale represented the instrument's response set for reliability (Diamantopoulos et al, 2012) and analytical purposes in addressing the study's research questions (Willits, Gene, & Luloff, 2016).

Five research questions were posed to address the study's topic and research problem. Descriptive, inferential, and associative/predictive statistical techniques were used to address the research questions. The analysis of study data was conducted using the 27th version of IBM's Statistical Package for the Social Sciences (SPSS). A discussion of the results will be presented in Chapter V.

Response Rate

A response rate of at least 50% was desired at the outset of the study. A total of 28 out of 56 respondents completed the study's survey, representing a response rate of 50%. The response rate of 50% exceeds the customary rate of 30% to 40% generally achieved through internal surveying, and the 25% generally achieved through electronic surveying (Fluid Surveys, 2014).

Missing Data/Completion Rate

The study's data set was nearly intact with only two missing data points (0.13%). The minimal nature of missing data reflected in the study's data set was well below the 5% level noted as "inconsequential" by Schafer and Graham (2002). Moreover, the participant completion rate of items on the study's survey (99.87%) was well beyond the customary completion rate of 78.6% for surveying (Fluid Surveys, 2014) and the 85% to 87% value for surveys with 20 to 30 items (Survey Monkey, 2020).

Internal Reliability

The internal reliability of study participant response to survey items on the research instrument was evaluated using the Cronbach's alpha (α) statistical technique. Cronbach's alpha is used primarily as a means of describing the reliability of multi-item scales (DeVellis, 2012). Cronbach's alpha represents a means of assessing reliability by comparing the amount of shared variance, or covariance, among the items within a research instrument to the amount of overall variance. Therefore, if a research instrument is reliable, there should be a great deal of covariance among the items relative to the variance among the items (Collins, 2007). The alpha level of $\alpha = .84$ achieved in the current study was considered "good" to "excellent" (George & Mallery, 2003).

Preliminary Descriptive Finding by Survey Item

Within the study's 23 survey items, it was noteworthy that eight items (34.8%) reflected a level of complete agreement (strongly agree and agree). The item reflecting the greatest level of effect for response agreement by study participants was for the item "My enthusiasm, attitude, and dedication contribute greatly to the well-being and success of students in my dual language classroom" at $d = 7.35$.

Table 1 contains a summary of finding for survey items on the research instrument reflecting complete agreement (strongly agree and agree):

Table 1

Survey Items Reflecting Complete Agreement

Item	Mean	SD	<i>t</i>	<i>d</i>
I am confident in my ability to teach students' primary language development in the dual language classroom setting.	4.71	0.46	19.72***	3.73 ^a
My enthusiasm, attitude, and dedication contribute greatly to the well-being and success of students in my dual language classroom.	4.93	0.26	39.91***	7.35 ^a
I consistently promote an inclusive dual language classroom environment regardless of the degree of demographic diversity.	4.82	0.39	24.71***	4.67 ^a
My dual language teaching experience has been adequate in promoting my efficacy as a teacher of dual language students.	4.61	0.50	17.10***	3.23 ^a
I consider myself an advocate at promoting dual language education in the school and community.	4.71	0.46	19.72***	3.73 ^a
My expectations for dual language students are realistic yet challenge my students appropriately.	4.46	0.51	15.26***	2.88 ^a
I am confident in my ability to effectively use technology in the dual language classroom.	4.46	0.51	15.26***	2.88 ^a
Overall, I am effective in my ability to teach in a dual language classroom setting.	4.61	0/50	17.10***	3.23 ^a

*** $p < .001$ ^a Huge Effect ($d \geq 2.00$)

Data Analysis by Research Question

The study's five research questions were addressed using descriptive, inferential, and associative/predictive statistical techniques. The probability level of $p \leq .05$ represented the threshold of finding considered statistically significant. The interpretative conventions of

Sawilowsky (2009) were used in the transformation of numeric effect size values into qualitative descriptors (small; medium, large, very large, and huge).

The following represents the findings achieved within in each of the studies five research questions.

1. To what degree do study participants perceive that they are effective in their ability to teach in a dual language classroom setting?

The one-sample t test was used to assess the statistical significance of study participant mean score response to perceptions of efficacy in teaching within a dual language classroom setting. As a result, study participant mean score response of 4.61 ($SD = 0.50$) was manifested at a statistically significant level ($t_{(27)} = 17.10; p < .001$).

The magnitude of response effect in research question one was assessed using the Cohen's d statistical technique. The magnitude of study participant response effect to the notion that they perceive themselves as effective in their ability to teach within a dual language classroom setting was considered "huge" ($d = 3.23$).

$H_0 1$

There will be no statistically significant finding for study participant perceptions of efficacy in teaching within a dual classroom setting.

In light of the statistically significant finding in research question one, the null hypothesis ($H_0 1$) was rejected.

2. To what degree do study participants perceive that they are confident in their ability to teach first language (English) development strategies in the dual language classroom setting?

The one-sample t test was used to assess the statistical significance of study participant mean score response to perceptions of efficacy in teaching first language development (English) strategies within a dual language classroom setting. As a result, study participant mean score response of 4.71 ($SD = 0.46$) was manifested at a statistically significant level ($t_{(27)} = 19.72; p < .001$).

The magnitude of response effect in research question two was assessed using the Cohen's d statistical technique. The magnitude of study participant response effect to the notion that they perceive themselves as effective in their ability to teach first language (English) strategies within a dual language classroom setting was considered "huge" ($d = 3.73$).

H₀ 2

There will be no statistically significant finding for study participant perceptions of efficacy in teaching first language (English) strategies within a dual classroom setting.

In light of the statistically significant finding in research question two, the null hypothesis (H₀ 2) was rejected.

3. To what degree do study participants perceive that they are confident in their ability to teach second language (Spanish) development strategies in the dual language classroom setting?

The one-sample t test was used to assess the statistical significance of study participant mean score response to perceptions of efficacy in teaching second language development (Spanish) strategies within a dual language classroom setting. As a result, study participant mean score response of 4.36 ($SD = 0.62$) was manifested at a statistically significant level ($t_{(27)} = 11.56; p < .001$).

The magnitude of response effect in research question three was assessed using the Cohen's d statistical technique. The magnitude of study participant response effect to the notion that they perceive themselves as effective in their ability to teach second language (Spanish) strategies within a dual language classroom setting was considered "huge" ($d = 2.18$).

H₀ 3

There will be no statistically significant finding for study participant perceptions of efficacy in teaching first language (English) strategies within a dual classroom setting.

In light of the statistically significant finding in research question three, the null hypothesis (H₀ 3) was rejected.

4. Is there a difference in study participant perceptions of confidence in their ability to teach first language development strategies compared to second language development strategies in the dual language classroom setting?

The t test of independent means was used to assess the statistical significance of difference in study participant mean score response to perceptions of efficacy in teaching second language development (Spanish) strategies within a dual language classroom setting and in teaching first language development (English) strategies within a dual language classroom setting. As a result, study participant mean score difference of 0.35 favoring confidence levels in the first language (English) strategies was manifested at a statistically significant level ($t_{(54)} = 2.40; p = .02$).

The magnitude of response effect difference in the comparison in research question four was assessed using the Cohen's d statistical technique. The magnitude of

study participant response effect for the mean score comparison difference in research question four was considered between medium and large ($d = .64$).

Table 2 contains a summary of information in the comparison featured in research question four.

Table 2

Perceptions of Efficacy of Teaching in Dual Language Classrooms by Language Strategy

Platform

Strategy Format	n	Mean	SD	<i>t</i>	<i>d</i>
First Language (English)	28	4.71	0.46	2.40*	.64
Second Language (Spanish)	28	4.36	0.62		

* $p = .02$

H₀ 4

There will be no statistically significant difference in mean perceptions of study participants with regard to first and second language strategies as it pertains to confidence in teaching within a dual language classroom.

In light of the statistically significant difference in mean perceptions favoring first language strategies, the null hypothesis for research question four was rejected.

5. Considering the individual elements most associated with teaching in a dual language classroom setting, which represents the most prominent predictor of study participant perceptions of overall efficacy in teaching in a dual language classroom setting?

Research question five was addressed in two phases. In the first phase, the 22 elements of teaching were correlated with overall study participant perceptions of efficacy in teaching in a dual language classroom using a zero-order correlation

technique. As a result, three specific items reflected strong mathematical relationships ($r \geq .60$).

Table 3 contains the elements reflecting the greatest degree of mathematical relationship with overall study participant perceptions of efficacy in teaching in a dual language classroom.

Table 3

Elements Most Associated with Perceptions of Dual Language Teaching Efficacy

Element	<i>n</i>	<i>r</i>
I am proficient in delivering quality instruction through a dual language curriculum platform.	28	.64***
My understanding of dual language special needs is satisfactory.	28	.63***
My cross-cultural awareness is at a proficient level.	27	.63***

*** $p < .001$

In the second phase of research question five, the three correlates identified in the first phase of the analysis were utilized in a predictive model as independent variables. The multiple linear regression statistical technique was used to assess the predictive abilities of the three correlates. As a result, the elements of “I am proficient in delivering quality instruction through a dual language curriculum platform” and “My understanding of dual language special needs is satisfactory” represented equivocal predictive ability within the model considering statistical significance levels and Standardized β values. However, the regression weight (unstandardized β) for “I am proficient in delivering quality instruction through a dual language curriculum platform” was slightly greater in the comparison.

The predictive model used in research question five was viable ($F_{(3, 23)} = 14.32; p < .001$). The three correlates used as independent predictor variables accounted for 65.1% ($R^2 = .651$) of

the explained variance in the model’s dependent variable of study participant perceptions of efficacy in teaching within a dual classroom setting.

Table 4 contains a summary of the predictive model used to address research question five.

Table 4

Predicting Overall Efficacy in Teaching in a Dual Language Classroom Setting: Top Elements

Model	β	SE	Standardized β
Intercept	1.23	0.52	
I am proficient in delivering quality instruction through a dual language curriculum platform.	0.29	0.11	.38*
My understanding of dual language special needs is satisfactory	0.27	0.10	.38*
My cross-cultural awareness is at a proficient level.	0.21	0.13	.26

* $p = .02$

H₀ 5

The element of “I am proficient in delivering quality instruction through a dual language curriculum platform” will represent the most viable correlate and predictor of study participant perceptions of overall ability to teach in a dual language classroom setting.

In light of the statistically significant finding and superior unstandardized β value for the element of “I am proficient in delivering quality instruction through a dual language curriculum platform”, the alternate hypothesis for research question five was retained.

Summary

Chapter IV contained a formal reporting of study findings. Descriptive, inferential, and associative/predictive statistical techniques were used to analyze study data. Noteworthy levels

of response rate, survey completion rate, and internal reliability were achieved. Study participants perceived themselves as effective in teaching within dual language classrooms using both first and second language strategies. However, study participants expressed more confidence in the use of first language strategies when teaching in dual language classroom settings than second language strategies. Three elements of teaching in dual language classrooms reflected strong degrees of mathematical relationship with perceptions of overall efficacy in teaching within a dual language classroom. Proficiency in delivering quality instruction and understanding dual language special needs represented noteworthy, statistically significant predictors of study participant perceptions of teaching efficacy in dual language classroom settings. Chapter V contains a discussion of the findings presented in Chapter IV of the study.

V. DISCUSSION

Brief Summary and Statement of the Problem

Dual language programs have become a prevalent choice for school districts to meet the cognitive, linguistic, and cultural needs of the growing diverse population in the United States (Li et al., 2016). As school districts implement dual language programs, a main obstacle encountered by school administrators has been a lack of prepared teachers. The purpose of this study was to determine teachers' perceptions of preparedness to teach in a dual language school. The researcher sent an online survey to dual language teachers from five dual language schools in one school district in the state of Florida. The findings from this study can be used to provide information to school districts that plan on implementing dual language programs, to provide professional development opportunities for dual language teachers in schools with existing dual language programs, and to provide information to school districts that desire to expand and implement more dual language programs within their districts. Chapter V contains a discussion of the findings of this study.

Discussion of Foundational Analyses

The foundational analyses used in this study include response rate, completion rate, internal reliability, and descriptors. The desired response rate for this study of 50% was achieved. A total of 28 out of 56 dual language teachers responded to the online survey. This response rate is noteworthy because the survey was distributed during a time of unforeseen stress for teachers. The teachers eligible for participation in this study were returning to school with new sanitary regulations and mask mandates due to the COVID-19 pandemic. In addition to their regular teaching duties, these teachers also had to manage students in an online platform as well as provide face-to-face instruction. The 50% response rate of the survey exceeded expectations because, not only was the survey distributed during a demanding and unprecedented time for teachers, the response rate exceeded the rate of 30% to 40% generally achieved through internal surveying.

A completion rate of nearly 100% was achieved in this study. The participant completion rate of items on the survey (99.87%) demonstrates a low level of missing data and supports the trustworthiness of the data. The completion rate is important to note because the rate indicates that participants responded to all but two items on the survey even during a time where new classroom procedures were implemented in response to students' return to school during the COVID-19 pandemic.

A good to excellent level of internal reliability of study participant response to survey items on the research instrument was achieved. The level of internal reliability is noteworthy for two reasons. First, the exceptional internal reliability value achieved in the study validated the researcher-created instrument used in the study. Second, the exceptional level of internal

reliability of participant response provides support for the trustworthiness of study participant responses to items associated with the research questions.

The study's survey was researcher-created through a content analysis approach of the existing literature to identify themes of teachers' needs when teaching in a dual language school. Themes in the literature were turned into survey items which participants responding to using a 5-point, Likert scale with one indicating participants strongly disagree with the statement and five indicating participants strongly agree with the statement. In the preliminary descriptors, eight items received a strongly agree or agree status. The item reflecting the greatest level of effect for response agreement was "My enthusiasm, attitude, and dedication contribute greatly to the well-being and success of students in my dual language classroom." This finding is noteworthy because teacher enthusiasm, attitude, and dedication influence the success of educational programs (Nishimura, 2019). According to Baker and Wright (2017), teaching in a dual language context requires enthusiasm, commitment, and support. Positive attitudes toward dual language students and programs are fundamental teacher characteristics contributing to a dual language program's success (Quezada & Alexandrowicz, 2019).

The survey item with the lowest level of effect for response agreement by the study participants was the item "I am able to use paraprofessionals effectively in the dual language classroom to maximize instruction efforts on behalf of students." Paraprofessionals can provide valuable support in the dual language classroom (Stacey, Harvey, & Richards, 2013) by helping dual language teachers to feel less isolated and by assisting with teaching practices consistent with the school program (Freeman et al., 2018).

Discussion of Findings by Research Question

This section presents a discussion of the findings for each research question that was formally posed to address the study's research problem. Each question is followed by a discussion of the study's finding.

Research Question 1: To what degree do study participants perceive that they are effective in their ability to teach in a dual language classroom setting?

The findings related to dual language teachers' perceived efficacy in their ability to teach in a dual language classroom setting were statistically significant. The response effect for this item was considered "huge". Reflecting the greatest level of agreement on a survey item within the study, all participants either strongly agreed or agreed that they are effective in their ability to teach in a dual language classroom setting. The high level of agreement is an important finding because teachers' confidence in their effectiveness to teach in a dual language classroom setting is directly linked to dual language program success (Freeman et al., 2018).

Research Question 2: To what degree do study participants perceive that they are confident in their ability to teach first language (English) development strategies in the dual language classroom setting?

The dual language teachers surveyed for this study either strongly agreed or agreed that they are confident in their ability to teach first language development strategies. The mean score was 4.75 out of 5, and the response effect for the item was considered "huge". One of the main goals of dual language programs is to achieve English language acquisition for ELLs; therefore, teachers' high confidence in teaching English language development skills is an important finding.

Research Question 3: To what degree do study participants perceive that they are confident in their ability to teach second language (Spanish) development strategies in the dual language classroom setting?

The effect size related to teachers' perceptions of confidence in their ability to teach second language (Spanish) developmental strategies was considered "huge." Additionally, the mean score for this survey item at 4.36 out of a possible 5 was just below that reported for teachers' perceptions of confidence in teaching first language teaching skills. Given that dual language programs are implemented specifically to promote bilingualism by teaching secondary language development while building on students' primary language skills, teachers' high confidence in their ability to teach second language developmental strategies is crucial (Gonzalez-Carriedo et al., 2016; Li et al., 2016).

Research Question 4: Is there a difference in study participant perceptions of confidence in their ability to teach first language development strategies compared to second language development strategies in the dual language classroom setting?

The findings of this study indicated a difference between dual language teachers' perceptions of confidence in their ability to teach first language development strategies as compared to their perceived confidence in their ability to teach second language development strategies. The difference in reported perceptions favored teachers' self-reported confidence in teaching first language (English) development strategies over teaching second language (Spanish) development strategies, and the difference between the two effect sizes difference was considered medium to large. Dual language teachers with a deep understanding of second language acquisition strategies and high levels of fluency in the second language are better able to effectively communicate and coordinate with parents and understand students' cultural

background (Quezada & Alexandrowicz, 2019). According to Howard et al. (2018), dual language teachers ideally should have native or native-like language skills in both languages. Regular professional development opportunities in second language acquisition are necessary for training the dual language teacher. Also, employing paraprofessionals with native or native-like proficiency in both classroom languages can provide valuable curricular support to curriculum with students with second language needs acquisition needs.

Research Question 5: Considering the individual elements most associated with teaching in a dual language classroom setting, which represents the most prominent predictor of study participant perceptions of overall efficacy in teaching in a dual language classroom setting?

Considering the 22 individual elements of teaching included in the survey, the findings for research question five highlighted three prominent elements of teachers' overall efficacy in teaching in the dual language school. The three elements with the strongest mathematical relationship were "I am proficient in delivering quality instruction through a dual language curriculum platform," "My understanding of dual language special needs is satisfactory," and "My cross-cultural awareness is at a proficient level".

The item "I am proficient in delivering quality instruction through a dual language curriculum platform" had the strongest mathematical relationship to teachers' perceptions of efficacy as compared to the other prominent items. According to Quezada and Alexandrowicz (2019), dual language teachers must feel confident in implementing curriculum in meaningful ways. Curriculum that encourages exploration and questioning, uses students' backgrounds to build on learning, and establishes routine to create a predictable environment is key to dual language program success (Freeman et al., 2018).

“My understanding of dual language special needs is satisfactory.” was the teaching element with the second strongest mathematical relationship with teachers’ perceived efficacy. According to Baker and Wright (2017), dual language teachers must be aware of the influence of special needs learning factors on students and know how to provide appropriate resources for student success. Therefore, teachers’ responses to this survey item was encouraging as dual language teachers’ confidence in their knowledge of special needs is important for dual language success.

The item with the third closest mathematical relationship with perceived efficacy was “My cross-cultural awareness is at a proficient level.” Dual language programs are implemented to sustain and strengthen native cultural pride for all students (Gonzalez-Carriedo et al., 2016). According to Morales and Maravilla (2019), an emphasis on cross-cultural awareness can help students who are from diverse cultural backgrounds to come together in a school setting and teach each other their native languages and cultures. Teachers must be confident when emphasizing cultural awareness because students’ cross-cultural awareness instills respect for diversity and other cultures as well as cultural pride for one’s own native culture (Rodriguez-Tamayo & Tenjo-Macias, 2019). Teachers who are culturally aware and emphasize a cross-cultural classroom also can help ease tensions among minority and majority culture groups and build cross-cultural awareness in not only the classroom but in their communities (Freeman et al., 2018).

Study Limitations

The study presented some limitations. First, the use of a survey design may be viewed as a limitation in that the data collected is participants’ perceptions. Perceptions are important but do not always express the reality of the situation. Second, participants’ perceptions may have

been distorted by extra school policies and classroom sanitizing procedures related to the COVID-19 pandemic such as social distancing, mask mandates, and sanitary precautions. Thirdly, teachers may have been experiencing disruptions in their personal lives at the time of taking the survey. Disruptions to teachers' personal lives such as responses to COVID-19, illnesses, family issues, and significant life events can cause stress and influence participants' desires and time to take a survey. Disruptions to teachers' personal lives were not measured by the survey. Fourth, teachers' professional knowledge, background, and training may vary and could have influenced teachers' responses; professional knowledge, background, and training were not measured in the survey. Fifth, the results were limited to a certain population. The data were collected from one school district in Florida and may not be representative of other school districts in other demographic areas.

Implications for Professional Practice

The results of this study have substantial implications for professional practice. The study's findings were, in general, favorable but contained areas of opportunity. Although the results of this study were from one Florida school district, school administrators and teachers from other school districts may benefit from the implications for professional practice yielded by this study.

Favorable Findings

Overall, the study's findings were very favorable. First, a positive finding was teachers' general confidence in their ability to teach in a dual language classroom setting as indicated by the results related to research question one. All participants chose strongly agree or agree for their responses. Additionally, the dual language teachers surveyed in this study reported a slightly higher perception of their ability to teach first language (English) development skills

than of their ability to teach second language (Spanish) skills. School districts that have dual language programs can provide training and professional development opportunities to assist teachers' improvement of their second language development teaching skills so that their perceived confidence in their abilities can become equal to that of their first language development skills. School district administrators seeking to implement or expand dual language programs in their districts can be proactive by building the confidence of second language development teaching skills through hiring teachers with native or native-like second language proficiency or through providing bilingual paraprofessionals to assist teachers.

Areas of Opportunity

For this survey, an item rating of 4 or higher was indicative of agreement with the item. Teachers' mean score responses to survey items nine and 22 fell below the agreement threshold and indicate possible areas of opportunity.

Administrative support. Survey item nine stated, "Administrative support for all dual language education is satisfactory at my school," and responses to this item had a mean score of 3.57 out of a possible 5, falling behind the mean threshold for agreement with the survey item. Responses to item nine indicated that 60.7% of participants agreed or strongly agreed with the item while 39.3% of participants disagreed, strongly disagreed, or reported uncertainty with the item.

Administrative support is fundamental for dual language program success. According to Neufeld (2014), positive working conditions for teachers are important for student success and improved working conditions for teachers can lead to increased staff engagement, student engagement, and student achievement. Administrators who set high expectations; provide resources; and empower, motivate, and support teachers are key to dual language program

success (Baker & Wright, 2018). Administrators can provide support by ensuring teachers have support through on-site specialists; giving time to collaborate and work with other dual language teachers; and providing resources such as professional development opportunities, bilingual curriculum, books, and technology, as well as positive feedback to support teachers in the classroom.

Paraprofessionals. Survey item 22 stated, “I am able to use paraprofessionals effectively in the dual language classroom to maximize instruction efforts on behalf of students,” and responses to this item had a mean score of 3.39 out of a possible 5, also falling behind the mean threshold for agreement with the survey item. Responses to item 22 indicated that 46.4% of participants, or 4 out of 10 people, reported uncertainty or disagreed with the statement.

This finding provides an opportunity for school administrators. According to Baker and Wright (2017), paraprofessionals can be a solution to the lack of preparedness experienced by dual language teachers who are not proficient in the second language. Bilingual paraprofessionals can be an excellent resource for dual language teachers who need help translating and creating learning material in both languages and can serve as a liaison between the teacher and students’ home life, enabling parents to be more comfortable and involved in their children’s education.

Recommendations for Future Study

Further research should be conducted in other demographic areas within the United States as different states with different demographic makeup may have different needs. This study was conducted among five dual language schools in one school district in Florida. Conducting studies in other school districts can provide specific insight to dual language classroom needed in other communities.

Replication of this study can also be conducted once the COVID-19 environment has been normalized. The unexpected changes that COVID-19 brought to schools may have been a limitation. Although a 50% completion rate was achieved, conducting the study again when teachers are not worried about additional COVID-19- related policies and procedures could result in more teachers taking the survey.

Another recommendation for a future study is a mixed-method study approach. Adding a qualitative component like an open-ended question to the survey would allow teachers to describe from their own perspective the areas of teaching in a dual language setting about which they are most and least confident. By adding a qualitative component, teachers would not be limited by the items from the researcher-created survey. A qualitative study, such as a case study, could also be conducted to collect more specific data. A qualitative study would allow for a deeper conversation about dual language classroom needs and could identify more classroom- or program-specific items from the dual language teacher that the researcher did not include in this study.

Considering the items with the lowest level of agreement, a future study on paraprofessionals in the dual language classroom could provide specific insight to aspects of the teacher and paraprofessional relationship. Future studies could examine whether resources are needed such as mentorship programs and various ways to utilize paraprofessionals in the dual language classroom. Administrative support could be another area of focus for future studies. A study considering dual language school administrators' perceptions of successful dual language schools could be enlightening. Also, a study comparing the perceptions of dual language school administrators and teachers could provide valuable data for dual language program success.

Summary

The purpose of this quantitative study was to provide information to school districts that plan on implementing dual language programs, to provide professional development opportunities for dual language teachers in schools with existing dual language programs, and to provide data for school districts that desire to expand and implement more dual language programs within their districts. The study's foundational analyses resulted in a response rate of 50%, a completion rate of nearly 100%, and a good to excellent level of internal reliability.

Five research questions were discussed in this chapter. The findings from research question one were statistically significant regarding dual language teachers' perceived efficacy in their ability to teach in a dual language classroom setting, and all participants reported either strongly agreeing or agreeing with having confidence in their overall efficacy to teach in a dual language classroom setting. The findings for research question two indicated that the dual language teachers surveyed perceived that they are confident in their ability to teach first language development strategies. Research question three's findings indicated that teachers' perceptions of confidence in their ability to teach second language (Spanish) developmental strategies were also strong, and research question four compared the difference between dual language teachers' perceptions of confidence in their ability to teach first language development strategies as compared to second language development strategies. The results favored confidence levels in teaching first language (English) over second language (Spanish). The findings for research question five identified the three elements in the survey with the strongest mathematical relationship to teachers' perceptions of their confidence in the dual language classroom: "I am proficient in delivering quality instruction through a dual language curriculum

platform,” “My understanding of dual language special needs is satisfactory,” and “My cross-cultural awareness is at a proficient level”.

The survey item with the highest level of agreement was “My enthusiasm, attitude, and dedication contribute greatly to the well-being and success of students in my dual language classroom.” The items with the lowest mean scores were “I am able to use paraprofessionals effectively in the dual language classroom to maximize instruction efforts on behalf of students,” and “Administrative support for dual language education is satisfactory at my school.”

The favorable implications of the study were that teachers indicated they were confident in their ability to teach in a dual language classroom setting and were confident in many specific major goals of dual language programs such as teaching language development skills, delivering quality instruction through curriculum, understanding of special needs, and demonstrating cross-cultural awareness. According to the study’s results, areas of opportunity include use of paraprofessionals in the dual language classroom and administrative support of dual language programs.

Many recommendations for future studies came from this study. First, since this study was conducted in one school district in Florida, a recommendation for future research is that the study be replicated in other school districts for specific feedback that pertains to that specific demographic area’s needs. Second, the study was conducted during the COVID-19 pandemic. Replicating the study when school conditions are normalized is recommended. Third, a mixed-method or qualitative study can be conducted to obtain specific data and prompt a deeper conversation about dual language teacher needs that the researcher and the literature did not include in this study. Lastly, a study on the two items with the lowest confidence,

paraprofessionals in the dual language classroom and unsatisfactory administrative support, would also be helpful.

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APPENDICES

Appendix A

Dissertation Survey

1. I am confident in my ability to teach students' primary language development in the dual language classroom setting.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

2. I am confident in my ability to teach students' secondary language development in the dual language classroom setting.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

3. My cross-cultural awareness is at a proficient level.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

4. I am confident and competent in my bilingual (English and Spanish) abilities.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

5. My use of constructivist teaching methods, teaching strategies, pedagogy in the dual language classroom are adequate in promoting optimal student achievement in the classroom.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

6. I am proficient in delivering quality instruction through a dual language curriculum platform.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

7. I am proficient in the area of assessments associated with dual language classrooms.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

8. I devote considerable time and effort in securing parental support for dual language students.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

9. Administrative support for dual language education is satisfactory at my school.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

10. My enthusiasm, attitude, and dedication contribute greatly to the well-being and success of students in my dual language classroom.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

11. I consistently promote an inclusive dual language classroom environment regardless of the degree of demographic diversity.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

12. My awareness of the barriers and challenges to student learning in a dual language classroom is at a satisfactory level.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

13. I demonstrate an active interest in the extra-curricular activities of my dual language students.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

14. Professional development for dual language teachers is adequate.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

15. I devote proportionate amounts of class time to the languages represented in my classroom.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

16. My dual language teaching experience has been adequate in promoting my efficacy as a teacher of dual language students.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

17. I am effectual at securing the cooperation of other teachers in educating students in the dual language classroom.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

18. I consider myself an advocate at promoting dual language education in the school and community.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

19. My expectations for dual language students are realistic yet challenge my students appropriately.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

20. My understanding of dual language special needs is satisfactory.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

21. I am confident in my ability to effectively use technology in the dual language classroom.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

22. I am able to use paraprofessionals effectively in the dual language classroom to maximize instruction efforts on behalf of students.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree

23. Overall, I am effective in my ability to teach in a dual language classroom setting.

5- Strongly Agree 4- Agree 3- Uncertain 2- Disagree 1- Strongly Disagree