

STUDENT READING ACHIEVEMENT IN DUAL LANGUAGE AND  
TRANSITIONAL BILINGUAL PROGRAMS: AN EVALUATIVE STUDY

A Doctoral Thesis Presented to the  
Faculty of the College of Education  
University of Houston

In Partial Fulfillment  
of the Requirements for the Degree

Doctor of Education  
in Professional Leadership

by

Valerie Hernandez

May 2013

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## Dedication

For Ed and my children, Ashley, Brittany, and Isai

Ed, in so many ways you have been an inspiration to me through the love and support only you were able to give me throughout this journey. During the times I was at my wit's end, you encouraged me with love and laughter. You are my best friend and I love you more than you can ever imagine. For your love and patience with me during this long process, thank you. I love you...after all these days.

Ashley, Brittany, and Isai, you are my proudest measure of what I have contributed to the world. I hope that my model of what can be achieved through setting goals and working tirelessly to achieve them will be a benchmark for you in whatever you aspire to achieve. I love each of you to the moon and back.

## Acknowledgement

I owe a debt of gratitude to many who were an influence or support throughout the process of writing this piece of work. First, to my parents who instilled in me the love of learning, the value of it being a lifelong pursuit, and the faith to make it through anything. You paved a way for your children through your own hard work and perseverance in a system that did not make it easy. As I think about your own struggles in school acquiring a second language, I can only be proud of how you endured and were success stories without the benefit of a dual language program. The values of biliteracy and bilingualism were never lost on you and you are richer for it.

Starting a commitment to pursue this degree meant having to lean on those I work with at school and none more heavily than my closest colleague and confidant, Pamela Pennington. Pam, for all the ways you took on extra so that I could do this, I am so thankful. What I love most about our Gold Dust Twin friendship is the way you make me laugh almost every day. There won't ever be another magical pairing like ours!

I had the good fortune to be in a cohort of professionals who also became friends. On the evening of our very first class meeting, two of us realized we were sole representatives from our respective districts and instantly became not only partners for almost every assignment but more importantly, friends. Karen, this journey was a great deal more fun having you to experience it with.

Finally, to those who served as professional mentors and those were of great help to me. Dr. Jennifer Blaine, a role model of a strong educational leader, who mentored me both directly and indirectly. Dr. Wayne Emerson, my chair and guide along the way. Dr. Dan Houston, editor extraordinaire, who made the following pages look like I never

could have made them look myself. Michelle Gabriel and Jeff Post who endured my many questions about Dual Language and helped me find the data I needed and Joe Zerbe, the master of mining Eduphoria data.

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Hernandez, Valerie R. "Student Reading Achievement in Dual Language and Transitional Bilingual Programs: An Evaluative Study." Unpublished Doctoral Thesis, University of Houston, May 2013.

#### Abstract

With increasing demands imposed by state standards for students to show proficiency at high levels in reading and writing, instruction for the English language learner is critical. Dual language programs address English proficiency through instruction that first helps the ELL become proficient in a native language while simultaneously teaching English. Leaders responsible for supporting instructional programs that best achieve this goal will find it imperative to understand how and if dual language programs can be effective. This study examined three years of 5th grade reading TAKS results between the years 2009-2011 to compare the performance of students in a dual language program to students in a transitional bilingual program. Results showed that dual language students performed better than those in the transitional program. The study aimed to provide leaders with data to continue dialogue about how to improve the performance of a critical demographic group in schools today.

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## **Chapter I**

### **Introduction**

In today's increasingly global environment, borders and lines dividing countries and cultures are virtually non-existent. Moreover, within today's classrooms, more and more students represent increasingly diverse backgrounds, which create a tapestry woven of multiple cultures, faiths, languages and beliefs. Students now enter American schools with experiences that have impacted their learning and bring with them individual learning needs that educators must be able to address. With growing demands imposed by state standards emphasizing that students to be able to read, write and speak in English, reading instruction for the English Language Learner is critical.

#### **Brief Review**

According to the Texas State Data Center at the University of Texas at San Antonio, the population of Texas has demonstrated a population growth over the last century and a half that has outpaced that of the entire United States (Murdock et al., 2002). An ethnically diverse state, Texas is a fast growing state with growth trends that are likely to continue over the next 30 years. The US Census Bureau cites that, in 2010, an increase in the Hispanic population between 2000-2010 accounted for more than half of the nation's total population. The Texas Hispanic population represented 9.5 million (or 19%) of the total Hispanic population. In addition, Houston, Texas is ranked 3rd in the nation for having the largest number and percentage of Hispanic individuals (Ennis, Rios-Vargas, & Albert, 2011).

In a recent publication from the National Center for Education Statistics, the Hispanic enrollment in public schools exceeded 11 million students. Among children

ages 5-17 who did not speak the English language at home, the number increased by 6.5 million between 1980 and 2009 – or 21% of the population. And, during this same period, 2.7 million school-age children spoke English with difficulty and of those, 73% spoke Spanish (The Condition of Education 2011, 2011). A student with Limited English Proficiency (LEP) is also an English Language Learner (ELL) and as these students continue to fill classrooms across the nation and state, it is not surprising that the topic of language acquisition in school is of utmost importance. In addition, within this context, it is natural that bilingual education continues to be an instructional approach used to teach English Language Learners in Texas schools.

In his book, titled *Educating Citizens in a Multicultural Society*, Banks (2007) offered a focused goal and purpose for educating all students in a multicultural and global society. In particular, for the ELL, it is important to develop necessary and essential skills to be able to function within the mainstream, as well as within their community and with other cultures. To accomplish this goal effectively, Collier and Thomas (2004), along with others, such as Lessow-Hurley (1990) and Cummins (1996/1997), augmented the discussion with their assertion that, beyond socialization, the ELL must be academically prepared to be proficient in both Spanish and English.

Historically, bilingual education has garnered much attention in political arenas and been hotly debated. Even among various districts and teachers within schools, differing views and opinions are held about which particular methods are most effective for teaching students literacy in English. The reasons for these wide varieties of views are in themselves multifarious. Yet, a common reason is often relayed by educators who do not espouse a belief in the efficacy of bilingual education, which is that it actually

inhibits and delays students from becoming proficient in English. Among parents who fear placing their children in bilingual classrooms, or being designated as an ELL, fears of discrimination or a belief that immersion is the most effective means of language acquisition are held (Rhodes, 2005). However, Crawford (1998) addressed 10 fallacies associated with bilingual education; thus, refuting the reasons detractors often present to negate the benefits and success of bilingual instruction. The most common argument tends to be that only total immersion is effective in the acquisition of the English language. This is often the crux of differing views and approaches to teaching the ELL in schools and the debate over whether bilingual instruction or mainstream immersion is the best way to achieve academic literacy.

Educating the linguistically and culturally diverse student presents a significant gauntlet for teachers and administrators. There is no doubt that we are a more global society and our classrooms are a reflection of this. Our charge in educating all children includes the effective use of best instructional strategies in the classroom. Additionally, it requires meaningful interaction that is inclusive of all cultures, identities and languages while setting high expectations for all. Bouvier and Gardner (McKay, Sandra Lee, 1988) commented:

One thing is clear: The nation's ethnic composition is again changing dramatically. This is an opportunity and a challenge. As one writer puts it: "America is a country that endlessly reinvents itself, working the alchemy that turns 'them' into 'us'. That is the American secret: motion, new combinations, absorption. The process is wasteful, dangerous, messy, sometimes tragic. It is also inspiring. (p. 63)

English language instruction programs take various forms and differ slightly according to school district leadership and beliefs. However, there are two approaches to instructing the ELL that are either additive or subtractive in nature. An additive program aims to add a language and a subtractive one results in losing a language (usually the native language). Two examples that will be examined in this study are transitional bilingual, which is considered a subtractive program, and two-way dual language, which is an additive program. Although there are many other languages represented within schools, Spanish will be the focus of this study as it applies to dual language instruction.

This study will investigate the two instructional models – namely, transitional bilingual and two-way dual language – that are used in a suburban school district in southwest Texas. In addition, this study will compare the results on the 5<sup>th</sup> grade TAKS English Reading test in the spring terms of 2009, 2010, and 2011. The data will represent groups of students with limited English proficiency that received transitional bilingual or dual language instruction for 5 years.

A traditional bilingual approach, also called “transitional bilingual”, is an early exit program aimed at providing Spanish instruction during early primary school years (K-2) with the goal of transitioning the student to English-only instruction as soon as possible. Teachers may have received training on practices they can employ to assist students in accessing and understanding content. Such practices may include the use of graphic organizers, picture/word vocabulary banks, gestures or visuals and the use of a bilingual dictionary. Pull out support can vary tremendously in the amount of time students are given instructional and language help outside of the classroom from a few minutes a day or week to a few hours. Freeman (2005) noted, “While these strategies do



help students understand the content, there is much the students miss because they are learning the academic content through their second language” (p. 9).

Dual language instruction is designed at its foundation to provide instruction first in Spanish in order to develop a strong literacy foundation in the language. English literacy is added after 4-5 years of instruction in Spanish. It is an additive program because it includes the instruction of another language in addition to English – thus, placing equal value on both languages. The aim is for students to achieve proficiency in both languages (i.e., become bi-literate and bilingual). Even though they differ and vary in their implementation, dual language programs share common characteristics. Native English speakers and native Spanish speakers are integrated in the classroom and receive instruction in both languages with the ultimate goal of showing equal proficiency in the two languages.

This study will examine a 90/10 dual language model that begins with all students receiving Language Arts instruction in Spanish and receiving increasing instruction in English in all other content areas gradually each subsequent year through fifth grade. This model aims to support the ELL in developing a strong proficiency in the native language of Spanish (L1), while also gradually increasing proficiency in English (L2). Content and language instruction in both L1 and L2 is given separately beginning with larger amounts of L1 in the early years and L2 increasingly more over time.

### **Statement of the Problem**

Increasing numbers of students with a native language other than English are entering schools with little or no reading proficiency in either their native tongue or English. Furthermore, high stakes testing and expectations for students to perform at

high levels compels schools to have students reading proficiently in English. Federal accountability requires districts in Texas to achieve Annual Measurable Achievement Objectives as part of Title III subgrant qualification expectations as measured by the Texas English Proficiency Accountability System (TELPAS). State accountability further requires that all students pass the Texas Assessment of Knowledge and Skills Reading test in English in the 5th grade.

In 2006-2007, Hispanic students represented 42.8 % of the population in grades 7-12 and represented 57.5% of the total dropout rate. In 2007-2008, the dropout rate was three times as high as Anglo students (Texas Education Agency, 2009). With graduation rates of Hispanic and LEP students one of the lowest of all other demographic subgroups in the state, there is no time to waste in the effort of ensuring that ELLs are given the best instruction. Further, it is the responsibility of teachers, leaders and educators to ensure such instruction begins early in their educational careers. School administrators contemplating the choice of whether to implement a dual language program must consider several factors, especially since resources necessary to supporting a quality program will be required. This task calls on the principal to be transformative in leadership practices to affect the changes involved with implementing this type of program. The decision is best informed when the outcomes promise to produce a gainful return on the invested resources.

### **Purpose of the Study**

Whether the most effective instruction is accomplished when students are taught in their native language first and then transfer understanding into a second language, or whether it is best accomplished by teaching only the second language early and then

building on that will be a focal point in this study. In particular, this study will compare the reading assessment results in reading in relation to two separate approaches to instructing ELL students – namely, transitional bilingual instruction and two-way dual language instruction – in order to determine whether a dual language instructional model produces higher levels of reading proficiency on the Texas state assessment. The assessment used to compare the two groups will be the 5<sup>th</sup> grade English Reading Texas Assessment of Academic Knowledge and Skills (TAKS).

The growth of the Hispanic population in Texas increased 30% between 1999 and 2010; moreover, 91% of ELL students are Spanish speakers (NCELA, 2011). It is important to highlight the fact that school leaders will continue to encounter the challenge of ensuring that these students not only achieve at state minimums but also excel. Instructional leaders in education must also consider a number of factors when forming decisions that center on the implementation of programs offered which can impact and improve student learning. Such considerations include the allocation of financial and human resources to support teaching staff, students and community beliefs that will have direct influence on the efficacy and success of the program. Furthermore, leadership that is balanced in instructional and transformative approaches is critical in order to create the culture and climate of an inclusive and multicultural program that values bilingualism and biliteracy. Understanding the potential tangible and intangible benefits of a dual language program within a school servicing a population of ELLs will help the school leader to shape an important decision of whether implementation is worth pursuing. Additionally, continuation of a dual language model beyond elementary grades may be

considered when results prove that such support and programming is highly beneficial for both ELL and native English speakers.

### **Research Question**

The central question this study seeks to answer is as follows:

1. Is there a difference in academic achievement as measured by the Texas Assessment of Knowledge and Skills (TAKS) Reading test between 5<sup>th</sup> grade English Language Learners who received dual language instruction and students who received instruction in a classroom in a transitional bilingual program?

### **Definition of Terms**

**English Language Learners (ELLs):** This term refers to those students whose native language is not English. These students have varying degrees of English proficiency but are learning English as a second language in the school setting.

**Limited English Proficient (LEP):** A term also used to refer to students who are learning English in a school setting and whose first language is not English. Texas PEIMS coding uses this term to identify students in state documentation.

**English as a Second Language (ESL):** An instructional setting in which students receive accommodations to support their understanding of English in a monolingual classroom. Native language instruction is not provided.

**Language Proficiency Assessment Committee (LPAC):** Cited in the Texas Administrative Code, Chapter 101, Subchapter AA, Commissioner's Rules concerning the participation of ELLs in all state assessments, this requires language proficiency assessment committees (LPACs) to make assessment decisions on individual students

according to procedures established by the Texas Education Agency (TEA). LPACs are held at the campus level and files are housed on the campus the student attends.

**Transitional Bilingual Program:** An instructional model wherein a student receives some instruction in the native language in early elementary and then transitions to English-only instruction after a few years.

**Dual Language Program:** This term represents an additive instructional program in which students receive instruction in both Spanish and English with the goal of becoming bi-literate and bilingual.

**One Way Dual Language:** This term represents an instructional approach wherein students are instructed in both Spanish and English in a classroom of peers who are native Spanish speakers.

**Two-Way Dual Language:** This term represents an instructional approach wherein students are instructed in both Spanish and English in a classroom of peers who are both native Spanish speakers and native English speakers.

**At-Risk:** This term stands for a code on the Public Education Information Management System used in Texas to indicate whether a student is identified as being at-risk of dropping out of school based on 13 indicators. Limited English Proficiency is one criterion.

**Texas Assessment of Knowledge and Skills (TAKS):** The standards-based state assessment for Texas schools administered to students' grades 3-12. Assessments at the 5<sup>th</sup> grade level are given in the content areas of Math, Reading and Science.

**Confidential Student Report (CSR):** Issued to the campus and to the student, this report details the individual student's results of each TAKS test taken. It shows the

number of questions possible and correct for each objective, a raw and scaled score as well as whether the student met expectations for passing.

**Texas English Language Proficiency Assessment System (TELPAS):** This term denotes an assessment given to all ELLs attending school in Texas to assess the amount of progress made in learning the English language. Listening, speaking, reading and writing are assessed.

### **Limitations**

The campus from which the data for this study were retrieved was the only campus with a two-way dual language program in existence for the length of time necessary to provide at least three years of data. Other campuses in the district with two-way dual language programs did not have a 5<sup>th</sup> grade cohort of students who were instructed in this method since their Kindergarten year. Therefore, the group size for this study is limited to one campus making the comparison group numbers small.

It should also be noted that teacher experience, training level and fidelity to the two-way dual language instructional models was not controlled for in this study. While valuable and worthy factors to be considered, the factors extend beyond the scope of this study and would be its own research focus in another study.

## **Chapter II**

### **Literature Review**

To understand the historical context of bilingual education is to know that our nation's history directly influenced the creation of policy regarding bilingual instruction and the evolution to a dual language approach. The quest to provide a public education to all children has been wrought with controversy, particularly when language is the issue at hand.

Contrasting opinions on the value and need for a bilingual society were expressed by the founders of our country. In particular, Thomas Jefferson and Benjamin Franklin each held two opposing views on the issue. In a letter to his nephew, Thomas Jefferson wrote in favor of using the Spanish language (National Education Association of the United States, 1966):

Bestow great attention on Spanish and endeavor to acquire an accurate knowledge of it. Our future connections with Spain and Spanish America will render that language of valuable acquisition. The ancient history of that part of America, too, is written in that language (p.II).

As reflected in his statement regarding Germans, Benjamin Franklin held a more tentative, if not paranoid, opinion of those who spoke other languages. Once again in contrast to Jefferson, Crawford (Fralik, 2007) noted the following quote from Franklin:

...necessary in the Assembly, to tell one half of our Legislators what the other half say; In short unless the stream of their importation could be turned from this to other colonies [Germans] will soon so outnumber us,

that all the advantages we have will not, in my opinion, be able to preserve our language, and even our government will become precarious. (p.10)

Sentiments were generally negative toward foreign language and foreign language instruction through the period of World War I. The disfavor the public felt was in large part due to the increase in immigration at a time when the nation was at war with countries from which the immigrants derived. Hence, having a native language other than English was not regarded as a positive trait and was, in fact, regarded as a liability which entailed academic consequences. Ruiz (Crawford, 2000) frames this attitude toward language as *language as a problem* with regard to the social issues that played out in the classroom. As Freeman (2005) explains “he (Ruiz) defines an orientation as a ‘complex of dispositions toward language and its role, and toward languages and their role in society.’ Attitudes people hold about language come from their orientation” (p. 15).

It was not until World War II that the public began to see a new value to being bilingual when Navajo servicemen in the Marine Corps used an unbreakable code that confounded the Japanese. Subsequently, the National Defense Education Act of 1958 was passed, which fully supported the instruction of foreign languages. The government, therefore, realized that it was in the nation’s best interest and an issue of national defense to have servicemen who spoke another language (Lessow-Hurley, 1990).

The inception of the Civil Rights movement initiated another wave of battles in support of the rights of minority children. Although dual language was not a direct outcome of the movement, much of the case law and government action that resulted did influence dual language education. Title VII of the Elementary and Secondary Education



Act, also known as the Bilingual Education Act, was passed by Congress in 1968 and only a year later provided \$7.5 million that funded 76 projects to schools serving poverty stricken minority children (Castellanos, 1983). However, this development was not a definitive solution to the issue of language instruction at the time. Crawford (Ovando, 2000) stated:

Americans have spent the past thirty years debating what it [Bilingual Education Act] was meant to accomplish. Was this 1968 law intended primarily to assimilate limited-English-proficient (LEP) children more effectively, to teach them English as rapidly as possible, to encourage bilingualism and biliteracy, to remedy academic underachievement and high dropout rates, to raise the self-esteem of minority students, to promote social equality, or to pursue all of these goals simultaneously?

(p. 107)

The Act went through a few reauthorizations until 1978 when it was revised to include the stipulation that proficiency in English be included. This mandate essentially meant that students could no longer be exited from a program having only proven the ability to speak in English. Later, with the reauthorization in 1984 developmental (or two-way) bilingual programs were included (Lessow-Hurley, 1990). As cited in Freeman et al. (2005), Ruiz attributes the language orientation at this period as *language as a right*. Freeman further noted that Ruiz recognized a resentful attitude at the enforcement of these rights during this time period.

One particular landmark case heard in the US Supreme Court resulted in a significant impact on how the federal government directly affected state behavior. At its

root, *Lau v. Nichols* (1974) was a civil rights case involving a district in San Francisco. The plaintiffs involved had claimed, and the court upheld, the argument that language minority children's civil right to an equal educational opportunity were being denied when the school provided English-only instruction. Garcia (2005) further explains the decision saying, "Lau does not endorse the proposition that children must receive a particular educational service, but instead that some form of effective educational programming must be available to 'open the instruction' to language-minority students" (p. 78). In the following quote, Lessow-Hurley (1990) cites Justice William O. Douglas:

There is no equality of treatment merely by providing students with the same facilities, textbooks, teachers, and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education. Basic skills are at the very core of what these public schools teach. Imposition of a requirement that, before a child can effectively participate in the educational program he must already have acquired those basic skills is to make a mockery of public education. We know that those who do not understand English are certain to find their classroom experiences wholly incomprehensible and in no way meaningful. (p. 124)

Texas shortly followed the decision of the *Lau* case with legislation that mandated bilingual education. Currently, the Texas Education Code (§ 29.051) specifies that school districts shall provide every language minority student with the opportunity to participate in a bilingual or other special language program. Texas Education Code (§29.053) further requires districts to offer a bilingual program at the elementary grade levels to English Language Learners (ELL) whose home language is spoken by 20 or

more students in any single grade level across the entire district. If an ELL student's home language is spoken by fewer than 20 students in any single grade level across the district, elementary schools must provide an ESL program, regardless of the students' grade levels, home language, or the number of such students. In addition to these requirements, the state of Texas requires teachers to obtain ESL or bilingual certification and parent consent for students to be served in the program.

This most recent view of language orientation noted by Ruiz (as cited in Freeman et al., 2005) is *language as a resource*. She quoted Ruiz' comments on why this orientation is the better approach for the following reasons:

[I]t can have a direct impact on enhancing the language status of subordinate languages; it can help to ease tensions between majority and minority communities; it can serve as a more consistent way of viewing the role of non-English languages in U.S. society; and it highlights the importance of cooperative language planning. (p. 15)

### **Texas Hispanic Demographic Evolution**

Bilingual education has a storied past in the state of Texas that mirrors the national perspectives and pendulum swings with regard to public and political actions. To understand the state's current Hispanic population growth is to understand how the demographics have changed in the last century and a half. In terms of percentage of growth, Texas has shown a more rapid growth increase than that of the United States as a whole. Most notable was the growth in the 1990s when the state grew by 22% by the year 2000 placing Texas second in the nation behind California in population (Murdock et al., 2002). This growth was attributed to both natural births and net migration from

either other states or other countries. Between 1980-1990, Hispanics posted a 45.4% increase in population, more than four times that of Anglo growth. And between 1990-2000, Hispanic population change reflected 53.7% over 7.6% of the Anglo population and by 2000 had the second highest Hispanic population in the country (Murdock et al., 2002). If the rate at which this growth has occurred were to continue, the projected population of Hispanics will account for 77.6% of the growth. Even if only half of the growth between 1990-2000 were to continue through 2020, Hispanics will represent the majority population group in Texas.

In the mid-1800s to the turn of the next century, Tejanos, Germans, and Czechs were the minority populations that established early colonies in west, central and south regions of Texas. And, out of necessity and function, these very minority populations formed the earliest schools wherein daily instruction was bilingual. The earliest Mexican American and Czech American schools were primarily private schools of both secular and parochial nature whereas the German American population was primarily public. According to Blanton (2004), the German American community went so far as to establish the first free public school in the state and even included a third language of instruction – that is, Spanish.

Although the early efforts to provide children with a bilingual education were better than an English-only education; naturally, such efforts were not without their flaws. Blanton (2004) noted that the state's bilingual programming was “an informal and muddled phenomenon” but certainly the Czechs were ahead of their time in their understanding that a bilingual education was not only pedagogically sound but also

“meant a greater chance of learning English while preserving the language and culture of the home” (p. 41).

The next 50 years in Texas history ushered in an era of English-only pedagogy as the political tide changed. In the early 1900s, under the governance of state superintendent, Annie Webb Blanton, Texas underwent a series of reforms. In particular these reforms began with Blanton’s decree that bilingual education was against the law and English-Only instruction was to be administered with the goal of “Americanization”. Additionally, offenses punishable with threats of daily fines up to \$100 and certification revocation Texas Penal Code article 288 forbade teachers to teach using another language until the late 1960s (Blanton, 2004).

When Title VII of ESEA was enacted, Texas was reticent to pass the federally offered funds to schools; however, legal efforts were exercised to contest discrimination in cases such as *Cisneros v. Corpus Christi Independent School District*, which recognized Chicanos as its own identifiable minority group and, thus, provided an avenue for pursuing a civil rights issue. Up until Senate Bill 477 was signed in 1981, a series of failed attempts to pass and take action on Senate bills that would support bilingual education more fully took place. The period between the 1980s and the 1990s remained relatively stable in that neither a reversion to English-Only nor full support for bilingual education took place (Blanton, 2004). Ultimately, this meant that children in Texas would no longer be segregated, yet it also meant that a comprehensive bilingual program would not be delineated.

Chapter 89 of Texas Education Code addresses state policy with regard to the English language learner. Every student who has “a home language other than English

and who is identified as an English language learner shall be provided a full opportunity to participate in a bilingual education or English as a second language (ESL) program (TEC §89.1201, Texas Education Agency, 2012). Approximately 15% of the students in Texas in 2006-2007 were in a bilingual program and about 16% were ELL students (Murdock et al., 2002). The growth of the population will necessitate an increase of students requiring a bilingual education that prepares them to be successful and reduce the risk of dropping out of school. The work force is also at stake if there are no students who are prepared to enter into it and be successful.

The goal of bilingual education is to have ELLs become competent in the following four areas of English through the development of both their primary language and English: listening, speaking, reading and writing. ESL goals are to ensure that the ELL achieves the same literacy and academic skills in English by means of an integrated approach of using second language methods. ESL is not only a subtractive program in that the primary language is replaced by the second language as expeditiously as possible, it is also remedial in nature (Thomas & Collier, 1997).

In terms of similarities, each program is required to address three areas of need: affective, linguistic and cognitive. The affective needs are met when care is taken to “instill confidence, self-assurance, and a positive identity with their cultural heritages” (TEC, §89.1210, Texas Education Agency, 2012). Linguistic needs are met when ELLs are given instruction such that the student masters required skills in listening, speaking, reading and writing. Finally, cognitive skills are addressed through mastery of skills in the major content areas.

### **Language Acquisition: Theory**

Several researchers on the theory of language acquisition have attempted to interpret the effect of age on second language acquisition to support or refute Eric Lenneburg's (1967) hypothesis of a critical period. Lenneburg first postulated that the brain achieves lateralization at puberty; hence, making it difficult to learn a new language, especially since the brain no longer has plasticity. Subsequent researchers (Long, 1990; Slavoff, 1995) have contributed to the conversation of the critical period hypothesis with differences in opinion of the age at which a person achieves lateralization. However, Collier (1987) noted that the discussion in these studies focused primarily on pronunciation differences with regard to children and adults. In particular, Collier suggested that, for educational purposes, the focus should instead be "about differences of language acquisition of young children (4-7), older children (8-12), and adolescence (13-16), and...in more aspects of language to be mastered than just pronunciation" (p. 3).

Language proficiency involves multiple elements which are difficult to define due to the complexity of the concept but many researchers point to the level of language a learner possesses (Baker, 2001; Chamot & O'Malley, 1996; Collier, 1987; Ellis, 1986). Cognitive development has been linked in theory to language and culture by both Cummins (2000) and Vygotsky (Garcia, 2005).

Vygotsky believed that a child's mental representations, when converged with their external reality, created the recipe for language acquisition. This external reality was, in his view, a product of cultural background and experiences primarily since children construct meaning through their experiences. Thus, as cited by Garcia (2005),

language becomes a “tool of thought”. Garcia also states, “If language is a tool of thought, it follows that as children develop more complex thinking skills, the mental representations through which language and culture embody the child’s world play a significant role” (p. 32). In her comparative theory of language as a tool for cognitive development, Nelson (1996) said, “Learning words is thus learning to think in cultural forms...to learn the language means to think culturally” (p.150).

Cummins’ theory of developmental linguistic interdependence and threshold hypothesis further supports the importance of language on cognitive development. The developmental interdependence hypothesis holds that students’ competency with a second language is acquired to the degree that the first language is developed. Consequently, a student’s cognitive and academic functioning can reach a threshold that poses a possible shortcoming in the progression of the second language (Cummins, 1979). Studies conducted by Lemmon and Goggin (1984) and Ricciardelli (1992) showed similar results to support the threshold theory when they tested both college age and five-year-old students in areas requiring problem solving, creativity and geometric designs. Each study revealed that strongly bilingual students outperformed monolingual students, but those who were marginally bilingual performed no differently than their monolingual peers. Although the results may be attributable to other factors in methodology or subject differences, the results are arguably supportive of the case for the relationship between cognitive functioning and bilingualism.

These two hypotheses strengthen the importance of valuing the experiences and sociocultural backgrounds that have formed as schema for the ELL. Classrooms that



omit this perspective in the education of second language learners risk limiting the chance of academic achievement.

Collier (1987) also pointed to Cummins' work on the distinction of language skills needed for social situations as opposed to school environments. She referred to Cummins' intersecting lines of continuum from context-embedded to context-reduced language and cognitively demanding to cognitively undemanding language and points out that children are required to perform in all four quadrants of this model in various situations at school.

Cummins (2000) further added that students learning a new language typically encounter language situations within their school environments that fall into two categories: (a) Basic Interpersonal Communication Skills and (b) Cognitive Academic Language Proficiency. Firstly, Basic Interpersonal Communication Skills (or BICS) refers to when students pick up conversational language in social situations through informal verbal communication with peers. For example, a Spanish speaker who plays with an English speaker at recess will try communicating using words that are acquired and supported from within a social context. When children enter school at age five they come with a level of fluency in their language that is conceptually strong and they are able to apply sociolinguistic rules in the context of peer interactions (Cummins, 2000). Teachers may fall into a faulty assumption that students who are able to conduct a basic conversation with a successful degree of language proficiency are prepared to operate within the English instructional environment. However, Cummins explains that "it takes considerably longer for language minority students to develop certain aspects of age appropriate academic skills in English than it does to develop certain aspects of age

appropriate English face-to-face communicative skills.” This differs from the academic language that is learned through direct instruction and requires more demanding cognitive communication ability.

Secondly, Cognitive Academic Language Proficiency (or CALP) is the focus of instruction from the moment the student enrolls. This category involves a situation wherein the child will learn how to apply language in ways that will help him or her use language to adequately communicate in English in manners that are essential for academic success. In many cases, students can often verbalize their thoughts through speech more adequately than they can convey the same thoughts in writing or apply using the conventions of writing to present thoughts that reflect deeper application of writing conventions.

Researchers agree that, on average, it takes approximately five-to-seven years to develop a firm grasp of academic English, and even longer for students who are not literate in a native language (Collier & Thomas, 1989). Moreover, academic language is acquired later than conversational language skills. English fluency in general social conversation (i.e., BICS) is used in a different context than academic language (i.e., CALP). Academic language requires more abstract use of language and the cognitive demands for academic vocabulary use are greater than vocabulary used in general social language. When a native Spanish speaking child interacts with English speaking peers, for instance, he or she may be able to apply a level of social vocabulary taking cues from others in order to construct meaning, as well as gesturing to apply meaning.

Although the level of verbal communication is limited within this context, meaning can still be constructed in order to achieve successful communication between

the children because there are no real intellectual demands being made. In most situations, everyday speech requiring pronunciation and basic vocabulary is typically developed over a two-year span of interacting in an English speaking environment (Hill & Flynn, 2006). It is important to note that fluency in this capacity is mistaken for a solid foundation of English, particularly since the student may seem to have a strong command of English when speaking to others. However, the same expressed fluency is absent when required to complete academic assignments. The danger here is that this mismatch may be interpreted by teachers to be a sign of a learning disability, or lack of motivation, rather than simply a matter of minimal CALP ability.

Vocabulary development is essential to increasing an ELL student's ability to communicate both socially and academically. Two researchers in the area of vocabulary development, Hart and Risely (2003), projected grim statistics on the widening gap of vocabulary growth among four year of children from within professional, working class and poverty families. In particular, Hart and Risely (2003) state the following:

In four years of (language) experience, an average child in a professional family would have accumulated experience with almost 45 million words, an average child in a working class family would have accumulated experience with 26 million words, and an average child in a welfare family would have accumulated experience with 13 million words" (p. 8).

Bialystok (2001) claimed that studies conducted by Hakuta, Butler and Witt (2000) support the idea that, if educators simply recognize the need to inhibit the further exaggeration of the differences by responding to the special needs of the ELL, even

differences in experiences between middle and working class families need not hinder the education of students.

In his book, titled *Beneath the Surface*, Pransky (2008) stated, “These statistics should concern every educator. Every aspect of classroom learning and teaching—and certainly literacy—is strongly colored by vocabulary” (p. 63). The progression from BCIS to CALP aids educators in understanding the importance of social interaction and intentional instruction to increase the number of words accessible to students. Beck, McKeown and Kucan (2002) suggested a three-tiered vocabulary explanation beginning with everyday words in the first tier and ending with highly-sophisticated academic vocabulary of low frequency words. The first tier is equivalent to BCIS level words, such as *play, desk, lunch, paper*, and tier three words are those such as *photosynthesis* or *isosceles*, which are words highly specific to content area and are, therefore, considered CALP vocabulary. In the category sandwiched between tier one and three, tier two words, such as *clutching, enthusiastic, and clever*, represent more advanced synonyms of tier one words. The ELL, as well as any student, would benefit from vocabulary development in this tier and would require intentional instruction that provides authentic and meaningful opportunities to learn the words and the usage.

### **Stages of Language Acquisition**

Language has a natural progression of stages through which one learns to speak and understand a spoken language. For a second language learner, it is no different to expect that the individual would develop another language in stages as well. A classroom teacher who understands these stages and can identify them in both the English-speaking

student and the ELL can more effectively program instruction to match the level where the individual student is operating.

Krashen and Terrell (1983) are best known for the approach used most consistently; in particular, the natural approach. The natural approach is a digression from the more traditional direct approach, which holds that language is learned through isolated, grammar-based lessons (S. Krashen & Terrell, 1983). Conversely, the natural approach recognizes five stages of language acquisition used by teachers to help identify characteristics and time frames for each. The first stage, also known as “the silent period”, is preproduction during which a student is not verbalizing but will nod in the affirmative or negative to communicate as well as point or draw. During this six-month phase the teacher should prompt responses asking the student to show or circle or answer basic “where” and “who” questions. The next six months of development is the “early production stage” wherein the student has limited comprehension and is able to produce responses with one or two words. Within this stage, present tense verbs are often used and the student may employ key words or familiar phrases when responding to yes/no and either/or questions.

Within the subsequent three years of speech emergence, the student will have developed good comprehension and will be able to produce simple sentences. Typically, the student will make errors in pronunciation and grammar during this stage. Moreover, figurative language or nuances in humor are difficult to understand. The teacher can expect students to respond to question stems of why and how or to explain their thoughts in phrases or short sentences. Stage four is identified as “intermediate fluency” during which the student’s comprehension is proficient and few errors are made. Finally, in the

5th to 7th year of development the student can be identified as being in the “advanced fluency” stage. At this point the student can demonstrate a command of the language as if he or she were a native language speaker.

Cummins (2000) cited parallel stages outlined by Canale which distinguish stages as basic language proficiency, communicative language proficiency and autonomous language proficiency. Additionally, he referred to the theories by Vygotsky on the zone of proximal development as it relates to the stages. Certainly, there is something to be said for understanding a particular student’s position within the stages, especially if one hopes to be able to extend the student into the next level. This particular pedagogical process, also known as scaffolding, occurs when the teacher supports the student in extending her or his language use when attempting different tasks. As Hill and Flynn (2006) state:

Krashen’s hypothesis states that a speaker will move to the next level of acquisition when the experience of the target language (the input) includes some of the structures that are part of the next stage of acquisition, and the speaker is encouraged to use language that reflects that more advanced stage. (p. 16)

The significance of the stages involves a more appropriate understanding of where exactly the student is operating in order to ask appropriate questions, as well as to uphold appropriate expectations for pupils. With this in mind, when expectations are synced with a student’s abilities, a more accurate assessment of learning can be obtained and the student’s access to content knowledge is increased.

**Bilingual Models**

Program models vary slightly in their descriptions within the literature. As displayed in Table 1, the state of Texas has defined four programs in the Texas Education Code. Any Texas school with a population of 20 or more ELL students may offer one or more of the following four bilingual programs: transitional bilingual/early exit, transitional bilingual/late exit, dual language immersion/two-way or dual language immersion/one-way.

Table 1

*Bilingual Programs in Texas*

Model	Description	Exit Period
Transitional bilingual/ Early exit	Instruction in Spanish & English then transfer to English-only	Exit to all English instruction no earlier than end of 1 <sup>st</sup> grade or if student enrolls after grade 1, no earlier than two years or later than five years after enrollment
Transitional bilingual/late exit	Instruction in Spanish & English then transfer to English-only	Exit eligibility no earlier than six years or later than seven years after enrollment.
Dual language/ One Way	One language group receives instruction in Spanish & English with goal of full proficiency in both. Promotion of bilingualism, biliteracy, cross cultural awareness and high academic achievement	Exit eligibility no earlier than six years or later than seven years after enrollment.
Dual language/ Two-Way	Instruction in Spanish & English with goal of full proficiency in both. Integration of native English speakers. Promotion of bilingualism, biliteracy, cross cultural awareness and high academic achievement.	Exit eligibility no earlier than six years or later than seven years after enrollment.
ESL	Part of the regular educational program. Instruction in English commensurate with student's level of English proficiency.	Exit eligibility no earlier than six years or later than seven years after enrollment.



## **Dual Language**

Two-way dual language is a model intended to provide non-English speakers the opportunity to gain academic language proficiency in Spanish and English. This approach provides the possibility for students to maintain and enrich their native language while simultaneously adding another, thus deemed an additive program. In an ideal implementation of the model, equal numbers of native Spanish and English speaking students are in a classroom. Consequently, in a two-way DL approach, the bi-literacy benefit is extended to the native English speaker since the language of instruction is equally presented in Spanish and English. An important bi-product of the two-way approach is the sociocultural sensitivity and reduced segregation between two cultures. When students work in cooperative groups, there is an interdependence that is more balanced, especially since one group naturally relies on the other depending on the language being used at the time (Collier & Thomas, 2004).

In the elementary levels, dual language models can take on two forms – specifically, a 90/10 model and a 50/50 model. In the former model, all students begin with Language Arts instruction in Spanish and are gradually taught more often in English each year. In Kindergarten and 1st grade, 90% of the instruction is conducted in Spanish and 10% in English for all subjects except Social Studies – which is taught in English to all children. This instructional balance shifts in the 2nd grade, wherein the distribution of instruction is 80% in Spanish and 20% in English. More specifically, Spanish is used for Language Arts and Math instruction, English is used for Science, and, finally, Spanish is used for Social Studies. The progression continues to change in 3<sup>rd</sup> grade wherein the instructional ratios shift to 70% Spanish/30% English – specifically, Spanish and English

LA, Spanish Math, English Science and Social Studies. The 4<sup>th</sup> grade then transitions students to a model of 60% Spanish/40% English balance; and, finally, the 5<sup>th</sup> grade offers 50% instruction in Spanish and 50% in English.

Table 2

*90/10 Dual Language Instructional Model*

Grade Level	Spanish Content	English Content
Kindergarten & 1st Grade 90% Spanish – 10% English	Language Arts Math Science	Social Studies
2nd Grade 80% Spanish – 20% English	Language Arts Math	Science Social Studies
3rd Grade 70% Spanish – 30% English	Language Arts Math	Language Arts Science Social Studies
4th Grade 60% Spanish – 40% English	Language Arts Math	Language Arts Math Science Social Studies
5th Grade 50% Spanish – 50% English	Language Arts Math	Language Arts Math Science Social Studies

In schools using the 50/50 model, students receive Language Arts instruction in their native language through 1st grade. In addition, Math is taught in English for all students. Science and Social Studies is taught in Spanish for all students. In their 2nd grade, Language Arts instruction is taught in both languages and the model continues through 5<sup>th</sup> grade as it begins in 2nd grade. Both models of dual language instruction are

considered late exit models since students receive bilingual support through 5<sup>th</sup> grade and are not exited in elementary grades.

Two way programs studied thus far by Christian et al. (1997) and Lindholm-Leary (2001) have done comparisons on student achievement in both types of programs, 90/10 and 50/50. Students in the 90/10 model showed better results in becoming fully proficient in English and Spanish. Both researchers argue that increased exposure to a second language promotes higher levels of proficiency in that language. While the research does not conclusively refute or support the specific ratio of instructional time in English, through the studies conducted and programs evaluated, it is the strong agreement of field experts that a minimum of 10% and maximum of 50% of the instruction be dedicated to English. As Christian et al. (1997) stated, “These variations in program models reflect both differences in community needs as well as the distinctive populations served by the schools...Understanding the population to be served is certainly an important prerequisite for a site in determining which model may be most effective at a particular site” (p. 116).

Two way programs also aim to develop literacy in the native language first which is an issue that is raised when considering the development of a program. Whether confusion would be caused as a result of teaching Spanish first and then switching to English later has not been the direct focus of any empirical studies. However, there has been research done that can be used to draw conclusions on this issue. Research supports the idea that a language that holds less social status or holds less power within society is most at risk for being lost (Pease-Alvarez, 1993) (Portes & Hao, 1998). Attempts to elevate the use of Spanish and counterbalance the dominance of English are achieved

through an early focus on Spanish through the program. For a 90/10 program, it is critical that students begin literacy in Spanish. Bilingual education bodies of research demonstrate the success of students whose primary native language instruction resulted in English literacy scores that were higher than students who received English instruction only (Ramirez, et al., 1991). In studies done in Canada and the United States, the effect is no less significant for native English speakers who participate in a dual language program. Genessee (2006) and Lindholm-Leary (2001) showed that by fourth grade, native English speakers scored equally as well on standardized reading tests as their counterparts who were instructed in a monolingual classroom. Similarly, results of students in a French immersion and those in a Korean dual language program show that early literacy in a partner language are positive (Cloud, 2000; Genessee, 2006; Holobow, Genessee, & Lambert, 1991).

Although the improvement of academic achievement and the aim of producing bilingual and biliterate students is a targeted and measurable outcome of a dual language program, the bi-product of positive cross-cultural relationships is no less intentional in its design. Recognizing and valuing the individual sociolinguistic and social backgrounds students bring with them to the classroom is just as crucial to the development of the ELL.

### **Transitional Bilingual Model**

A transitional bilingual model of instruction is structured to provide the ELL student with instruction in literacy and content areas in the first language with the aim of exiting the student to English-only instruction as quickly as possible. Students in a transitional bilingual classroom share the same native language with varying abilities in

the native language as well as English. They are not grouped with students who are native Spanish speakers and thus have the teacher as the primary model for English. This bilingual model is a subtractive model in that it transitions students from instructional support in a native language to English only instruction without further development in the native language. The native language is left behind for the acquisition of English after a few years of schooling. Advocates of this model that include parents and educators hold the view that instruction in English is the most beneficial model to achieve English proficiency. Paulston (1982), an advocate of bilingual educations states,

The rationale for bilingual programs is that they are more efficient in teaching English although there [are] not much hard data to support such a view; it has however been the standard argument... The Canadians believe, with justification, that fluent proficiency in the target language only occurs when that language is used as a medium of instruction. (p. 47-48)

She further quotes another advocate of bilingual instruction, Toukoma, who stated,

... we wish to dissociate ourselves from those arguments, for teaching in the mother tongue, which attempt to frighten parents into choosing mother tongue-teaching by threatening emotional and intellectual under-development in those children who do not receive mother tongue-teaching. Teaching in the mother tongue does not seem to have the magical effect on the child's development, for good or for ill, which it has sometimes been ascribed, (cited in Paulston, 1982, p. 49).

In an early exit model the students may be exited no sooner than 1<sup>st</sup> grade and no later than five years after enrollment. Exit criteria were based on proficiency levels on

the Texas English Language Proficiency Assessment System (TELPAS) and passing standards on TAKS. Consequently, an elementary student who began school in Kindergarten in a transitional bilingual program may have exited as early as third grade; thus, deeming the student academically proficient in English after four years of instruction. Instruction typically includes sheltered instruction strategies that support the student in understanding English instruction through a variety of means ranging from cooperative grouping, visuals, graphic organizers, teacher materials, technology and, on occasion, teacher translation.

As is true with the dual language classroom, transitional bilingual instruction is tied to a specific curriculum and progress measures are determined by informal and formal assessment using English Language Proficiency Standards and Texas English Language Proficiency Assessment System indicators. The aim of a transitional bilingual program is to exit the student as soon as she or he meets the criteria set by the Texas Education Agency. TELPAS is an assessment given yearly to all ELLs (K-12) attending school in Texas to gauge the amount of progress made in learning the English language in four domains: listening, speaking, reading and writing. TELPAS assesses students in alignment with the ELPS which are part of the Texas Essential Knowledge and Skills. The performance of students on TELPAS is reported in terms of the four English language proficiency levels described as: beginning, intermediate, advanced, and advanced high. To show adequate progress each year, students are expected to move from one level to the next within a school year. A student who scores at the beginning level in kindergarten would be expected to score in the advanced high level in the 3<sup>rd</sup> grade. The timeline is accelerated if the first year score is higher than beginning. For

example, a student who received a score of intermediate would be expected to achieve advanced high level in 2<sup>nd</sup> grade and maintain that level through subsequent years until the student is eligible for exiting the bilingual program.

Students may acquire English proficiency in some of the language domains more quickly than others as a result of variances in instructional approaches as well as individual student characteristics. For instance, a student may progress from beginning level performance to intermediate easily and plateau as a result of ineffective instruction. This is particularly detrimental to students who receive English instruction in academic content areas and would necessitate targeted, specific support from the teacher in order to help the student emerge from that level and facilitate their language learning to show progress.

Additionally, results of TELPAS are used in accountability and performance based monitoring indicators. The student must have met passing standards on the Reading TAKS test. TAKS and TELPAS results reported to the campus and to the student detail the individual student's results of each test taken. Once these two criteria are met, the student may be exited from the bilingual program and instructed in an English-only classroom. It is also important to note that the campus continues to monitor students' progress for two consecutive years after the student is exited. LPAC files contain information regarding a student's history in a bilingual program. Within this file, it can be determined whether a student was exited from the program and when. This is of importance because each student in the bilingual program will be counted as a group in this study regardless of what year the student exited the program.

## **Features of Effective Programs**

**Assessment and accountability.** Title I of the Improving America's Schools Act (U.S. Department of Education, 1994) issues the mandate that yearly progress must be assessed for ELLs. No Child Left Behind gives additional mandates that address annual achievement objectives and includes specific requirements for accountability with the premise that ELLs are held to high standards that are equal for all students and that they not be ignored as a group (Coltrane, 2002).

Campus vision and goal statements of effective schools are addressed through the proper alignment of assessment measures with curriculum and instruction. Dual language programs necessitate assessment that uses multiple measures for both Spanish and English to determine the school's progress toward the established goals. Program accountability, evaluation and improvement can be achieved only through a careful analysis and interpretation of data that informs leaders on how to steer the campus to meet expected outcomes. While there exists a need for assessment practices to be developed so as to assess students on items that are the same in English and Spanish (Solano-Flores and Trumbull, 2003), it is important that data from established assessments be understood, analyzed and tracked over time. Curriculum and instruction must be clearly aligned with standards and assessments.

**Curriculum and instruction.** Curriculum and Instruction in a dual language program that is rigorous, embraces higher level thinking and is interdisciplinary will experience more successful outcomes than that which is remedial and basic skill oriented. In Texas students are expected to be instructed in objective and standards based instruction as prescribed by the Texas Essential Knowledge and Skills (TEKS) and ELLs



are supported in these additionally through linguistic accommodations provided by the English Language Proficiency Skills (ELPS).

Performance based listening, speaking, reading and writing activities are recommended to teachers to implement in their instruction as ways to gather information on how students are progressing in English language development. Student expectations in listening include distinguishing sounds, learning language structures, using visual, contextual and linguistic support to understand increasingly complex spoken language, derive meaning from a variety of media, understand implicit ideas and demonstrate listening comprehension. Speaking expectations include expanding and internalizing English vocabulary, use a variety of grammatical structures, sentence lengths and types, speak using grade-level content area vocabulary in context, share in cooperative groups, express opinions, and respond orally to information. Expectations for reading include using visual and contextual support from peers and teachers to read grade-appropriate content area text, demonstrate comprehension of increasingly complex English, expand reading skills such as making connections, predicting and drawing conclusions. Finally in the area of writing, students are expected to write using newly acquired vocabulary, edit for grammar and usage, employ increasingly complex grammatical structures, use a variety of grade-appropriate sentence lengths and patterns and explain with increasing specificity and detail to fulfill content area writing needs. Proficiency level descriptors that align with TELPAS range from beginning levels to advanced high and offer teachers ways to discern where students are within the respective ELPS.

Minicucci, et al. (1995) suggest that allowing students to work interdependently in an ethnically and linguistically diverse environment with congruent objectives

promotes positive attitudes and improved academic achievement. Therefore cooperative learning tasks that are designed to bring the two groups of students together with a carefully designed task can prove highly beneficial. Saunders and O'Brien (Genesee, 2006) caution, however, that this arrangement alone will not be productive unless teachers consider the varying levels of proficiency among English proficient students and ELLs. Opportunities to speak with students fluent in a language being learned are important to include so that students have the ability to practice discourse in ways that are coherent and sociolinguistically appropriate (Lindholm-Leary, 2001). Of equal importance is the need to require students to speak and use the language of instruction while discouraging the use of the non-instructional language (Lindholm-Leary & Molina, 2000). While code switching, or alternating between two languages, is valuable in some instances, focused periods of instruction in one language better promote language development. Consequently, this calls upon the teacher to be highly proficient in the language used in instruction and to resist the temptation of translating material during instruction. Of additional importance is the ability of teachers to have a deep understanding of language skills needed at each grade level so that students develop English language skills required for literacy.

**Teacher qualifications.** In accordance with NCLB, all teachers regardless of grade level or type of program should be highly qualified and exhibit high levels of understanding of content area curriculum and technology as well as instructional strategies and assessment practices. A reflective teacher is equipped to examine their teaching practices and make adjustments along the way (Darling-Hammond, 1998). Darling-Hammond (2000) found that the effectiveness of a teacher is directly correlated

with student success. A strong teacher with highly effective practices and pedagogical expertise will impact student achievement at high levels and a marginal or ineffective teacher will be detrimental to the achievement of students. An obligatory facet of effective dual language programs is that teachers have additional characteristics that must be considered when recruiting and hiring (Cloud et al., 2000).

Lindholm-Leary (2001) suggests that effective teachers who not only have the necessary certifications but who also are reflective of their practices were more positive in their self-assessment. These teachers actively sought professional development in best practices, valued the participation and inclusion of both language communities, and delivered multicultural instruction through an integrated approach. They also possessed a deep understanding of bilingual theory and second language development and have native or native-like proficiency in the languages they teach.

Professional development that is purposely selected and targeted for the bilingual teacher and is delivered in Spanish helps teachers expand their ability to, in turn, deliver instruction to students (Guerrero & Sloan, 2001). Targets for professional development should include pedagogy, standards based teaching strategies, literacy, high standards for all students and parent involvement. Both administrators and teachers need professional development specific to dual language models that includes theory and philosophy of the models. If this is missing or overlooked as a critical component, the program is not as likely to be successful. Reflective practices allow the teachers to analyze and reflect on data as well as how well they are achieving their intended goals within a lesson or unit to gauge areas of strengths and weaknesses. It is incumbent upon leaders to find appropriate professional development opportunities as well as support teachers where

they are in terms of their individual and collective needs within the program vision and goals.

### **Leadership of Dual Language Models**

**Instructional leadership.** The model of instructional leadership gained popular momentum in the 1980s and was the model most principal preparation programs espoused. With the focus primarily on the principal as the provider of authority and expertise, the instructional leadership model, as conceptualized by Hallinger, upheld the following three dimensions: (a) defining the school's mission, (b) managing the instructional program, and (c) promoting a positive school-learning climate (Hallinger, 2003).

Hallinger also noted that instructional leadership entails “first order change” elements that “seek to influence conditions that *directly impact the quality of curriculum and instruction* delivered to students in classrooms” (Hallinger, 2003, p. 338). This concept, which operates on a top-down model of leadership, places the principal in the role of one who is required to know and be involved in every aspect of curriculum and instruction. While this approach would be a significant challenge in any school, school size and socioeconomic status (SES) were two common features of campuses where instructional leadership practices were found to be successful. For instance, smaller elementary and low SES schools tended to have a more directly involved principal exercising closely-monitored instructional leadership. Schools with fewer classrooms or with specific needs such as meeting the needs of a large number of students at risk of failure would be those in which a principal may exercise a more direct approach to how and when things occur.

However, it is not necessary for a school principal to be as omniscient as this leadership model calls on one to be. Conversely, a principal can be highly knowledgeable about the curriculum and keenly aware of instructional techniques being used in classrooms but only enough to be able to have conversations that guide the learning community to transform into the model it aspires to be. As a result, Hallinger (2003) viewed transformational leadership as a more appropriate approach to the challenge of changing an organization's capacity to grow. Hallinger (2003) states, "Rather than focusing specifically on direct coordination, control, and supervision of curriculum and instruction, transformational leadership seeks to build the organization's capacity to select its purposes and to support the development of changes to practices of teaching and learning" (p. 330).

### **Transformational Leadership**

Building on the work conducted by Burns, Bennis and Bass, Kenneth Leithwood and his colleague, Doris Jantzi expanded the study of transformational leadership practices and its effects on the educational landscape. In their review of research conducted between 1996-2005, these researchers sought to answer the following four specific questions regarding transformational leadership and schools:

1. What is meant by "transformational" leadership in school contexts?
2. What gives rise to this form of leadership?
3. How do transformational leadership practices exercise their impact?
4. Do the actual outcomes of transformational leadership in schools warrant the attention it currently enjoys? (p. 178)

Although their results were mixed in relation to the effects on student achievement, Leithwood and Jantzi's analysis on ways that transformational leaders exercise their impact resulted in 41 "mediating variables", which were categorized into the following four areas: characteristics of leaders' colleagues, characteristics of students, organizational structures, and organizational processes or conditions. Organizational conditions are school culture, strategies for change, changed teacher practices, instructional quality, and collective teacher efficacy, all of which have a positive effect on student achievement. Leithwood and Jantzi also stated: "Transformational school leadership had uniformly positive effects on all of these mediators" (p. 188).

In a subsequent study, Leithwood and Jantzi established an impact on teacher motivation and efficacy through transformational leadership, yet still none with regard to student achievement. This occurrence prompted the following statement, which points more to the specific practices leaders implement, "There is a significant gulf between classroom practices that are 'changed' and practices that actually led to greater pupil learning; the potency of leadership for increasing student learning hinges on the specific classroom practices which leaders stimulate, encourage and promote" (Leithwood, 2006, p. 223). When applied to the leadership of change involving a dual language program, a strictly top-down mandate with regard to scheduling, curriculum and program features alone will not result in improved student achievement. Riehl (2008) also stated, "Like teachers, they (administrators) not only experience but also reproduce, sometimes unwittingly, conditions of hierarchy and oppression, in particular by fostering compliant thinking instead of critical reflection" (p. 185). This may lead to teacher dissatisfaction

with their environment and be unproductive in the end when it comes to changing a culture or making lasting and permanent changes to student achievement.

Leadership that is transformational flourishes with the fertile conditions of a school climate in which teachers and principals continuously engage in learning, and subsequently, share it with others in the community. Leithwood and Jantzi (2005) state, “Transformational leadership theory emphasizes emotions and values, attributes importance to symbolic behavior, and conceptualizes the role of the leader as helping making events meaningful for followers” (p. 178). This model is more closely related to a shared leadership approach wherein the focus is on aspects of “second-order change”, which is also referred to and described by Hallinger (2003) as the bottom up approach. With this notion in mind, Hallinger (2003) says, “Transformational leaders increase the capacity of others in the school to produce first-order effects on learning” (p. 338). In other words, through this approach, the principal creates the necessary conditions that help teachers see both *why* and *what* they are striving to accomplish; and, therefore, are self-motivated to achieve the goals of the campus. The motivation is more intrinsically driven as a result and is not dependent on a single person of authority.

### **Balanced Leadership**

One might contend that the best of each leadership style, Instructional and Transformational, would be an ideal model. Such may be found in research on balanced leadership, by Waters and Cameron (2007) who conducted a meta-analysis of 69 studies on teacher ratings related to principal leadership. The researcher identified 21 responsibilities that are required of leadership that affects student achievement. These

responsibilities include behaviors and actions that combine instructional leadership practices and moral and ethical leadership behaviors.

These 21 responsibilities were also used in a factor analysis in order to determine whether any one of them could be either combined or removed. Within this particular study, researchers at Mid-Continental Research in Education and Learning (McREL) surveyed 700 principals on 92 items in relation to (a) the inter-correlation between the 21 responsibilities, and (b) the extent to which principals understood change initiatives as either first-order or second-order change. Views on how change is perceived were then categorized as either first order or second order change. Change that is perceived as, “1) an extension of the past; 2) within existing paradigms; 3) consistent with prevailing values and norms; and, 4) implemented with existing knowledge and skills” are labeled as first order change. Second-order change initiatives are perceived as, “1) a break with the past; 2) outside of existing paradigms; 3) conflicted with prevailing values and norms; and, 4) requiring new knowledge and skills to implement” (Waters & Cameron, 2007, p. 28). And, as cited in Waters and Cameron (2007, p. 28), the following information displays the distinctions between the former and the latter approach:



<b>First Order Change</b> <b>When a change is perceived as:</b>	<b>Second Order Change</b> <b>When a change is perceived as:</b>
An extension of the past	A break with the past
Within existing paradigms	Outside of existing paradigms
Consistent with prevailing values & norms	Conflicted with prevailing values & norms
Implemented with existing knowledge & skills	Requiring new knowledge & skills to implement

The results of the survey indicated a strong correlation between responsibilities and change as first-order in nature. Yet, these results were quite different when the responses asked principals to reply to second-order change. For example, out of 11 surveys that were correlated with a statistical significance, seven were positively correlated to second-order change and four were negatively correlated. The four negatively correlated were culture, communication, input and order. Once again, as cited in Waters and Cameron (2007, p. 12), the following information displays the positively and negatively correlated principal item responses:

<b>Positively Correlated</b>	<b>Negatively Correlated</b>
<ul style="list-style-type: none"> <li>• Knowledge of curriculum instruction and assessment</li> <li>• Flexibility</li> <li>• Change Agent</li> <li>• Ideals and Beliefs</li> <li>• Monitor and Evaluate</li> <li>• Intellectual Stimulation</li> <li>• Optimize</li> </ul>	<ul style="list-style-type: none"> <li>• Culture</li> <li>• Communication</li> <li>• Input</li> <li>• Order</li> </ul>

Waters and Cameron did not believe that these results indicate that principals are not doing what they can to influence and work on the four negatively correlated responsibilities. On the contrary, it implies second-order implications are present when new initiatives are pursued which, for staff, may be interpreted as feelings of the system

being less cohesive as well as the vision lacking in clarity (*culture*). The principal may be perceived as less accessible or lacking in the willingness to acknowledge concerns (*communication*). Furthermore, staff may have a mistaken sense that, as a group, they have less influence on campus operations (*input*). Lastly, predictability in the patterns of behavior, communications, and decision making may be lacking (*order*). (Waters & Cameron, 2007, p. 13). Fullan (2007) explains these perceptions as an “implementation dip” wherein performance declines when new changes of second-order are being implemented. The dip described here is temporary provided the principal is able to persevere; subsequently, a rise will occur when such action takes place. The “unintended negative consequence”, therefore, is that teacher perceptions of the principal will become negatively affected by second-order change initially but will improve over time as a result of consistency on the part of the principal.

DuFour (2011), Marzano (2003) and Levine & Lezotte (1995) share the same consistent, research based conclusions on effective, high achieving schools and programs and the leaders who usher them forward effectively. These schools and programs have a shared mission and vision that is clearly communicated to everyone in the system and is focused on defined, measurable goals for student achievement. For dual language programs to be effective and high performing, the expectation is the same. Models that are grounded in solid theoretical frameworks and best practices that include enrichment as opposed to remediation also contribute to success and efficacy.

Of particular importance on a dual language campus is the clear understanding of and balanced treatment of culturally and linguistically diverse populations in addition to the inclusion of multicultural themes and materials in instruction (Cloud et al. 2000).

Leaders must view the integration of students of various ethnicities, languages and social backgrounds as vital and imperative, not merely important, to the success of a dual language program. Empathy and an eager willingness to understand the lives and experiences of individuals is demonstrated by the morally and ethically motivated leader. Fullan (2003) whose convictions about democratic public education are expressed in his writings insists, “schools must serve all children, not simply those with the loudest or most powerful advocates” (p. 3). Leaders must be vociferous advocates for the program as they provide guidance and direction and grow this advocacy and change through a shared leadership approach. Through shared leadership, a team of educators on campus assist in the implementation and execution of the program in a collaborative manner that eventually permeates through the system so that all is not reliant on the principal solely. Transformation occurs when these forces are solidly embedded in the systems present on a campus. Expressed in his seminal writing on transformation leadership, Burns (1978) declared, “The premise of this leadership is that, whatever the separate interests persons might hold, they are presently or potentially united in pursuit of ‘higher’ goals, the realization of which is tested by the achievement of significant change...” (p. 425-426).

Marzano (2003), Darling-Hammond (2000), and Reyes et al. (1999) along with several others, agree that effective leaders cultivate and establish high degrees of unity, collaboration and sense of collegiality among faculty and staff. Faculty and staff in a highly effective school with a dual language program would, therefore, behave in a manner that fosters achievement for all students in a united and integrated fashion. This would look like campus-wide planning and coordination through vertical as well as horizontal teams. Administrators support this approach by providing financial, time and

instructional resources that are aligned with the vision and goals and are specific in their selection of professional development for staff. Instead of a random mélange of unconnected trainings, the effective leader focuses teachers on topics necessary to advance their learning and training in dual language.

### **Summary**

The numbers of English language learners in the classroom are growing exponentially. The Hispanic population in Texas has grown more rapidly than the overall population growth in the United States. Since this has the potential to supply the state with a viable and strong work force, it is imperative that the strength of the workforce be a direct result of a strong, high quality education. As a demographic group, native Spanish speaking ELLs are performing well below that of their English speaking peers. As noted by Collier and Thomas (2009), the achievement gap between the two groups must be met with renewed attention. These researchers also state, “As a nation, we cannot afford continuation of current educational practices that have created this large gap, at the risk of under-preparing a large segment of our citizenry for the 21<sup>st</sup> century” (Collier & Thomas, 2009, p. 4).

The particular leadership lens chosen by a principal must be one that views the challenges of leading a school community through a transformation as an opportunity to truly affect the lives of many students. Effective leaders of dual language programs embody the vital role of spokesperson and advocate of the tenets of the program while clearly communicating the vision and goals for student achievement. To make key and appropriate decisions regarding curriculum, instruction, assessment and program planning, the administrator and leadership team must have a distinct and sharp

understanding of dual language theory and philosophy. Time, financial and instructional resources are unambiguously allocated to support teachers, staff and students. Moreover, understanding the construct and benefits of a dual language program as a means to improve student achievement, as well as cultivate a multicultural environment that respects and values its members, is essential to the success of a principal choosing to lead the endeavor.

## **Chapter III**

### **Methodology**

This study sought to evaluate the effects on reading performance as measured by Texas Assessment of Knowledge and Skills of 5<sup>th</sup> grade students participating in a dual language program and a transitional bilingual program. In particular, this study examined the differences in the results from two groups of students on the state reading test results for three years starting in 2009 and the comparative effects of their participation in one of the two instructional models.

This chapter describes the methodology used in the study and is divided into sections as follows: (1) description of the research design, (2) research questions, (3) setting, (4) subjects, (5) procedures and (6) instruments.

#### **Research Design**

Literacy and reading is strongly correlated to a students' academic success, as well as the future beyond high school, which also includes career opportunities and future earnings (Greenberg, Macias, Rhodes, & Chan, 2001). Research clearly demonstrates that students who graduate from high school with a strong English reading proficiency, and who developed critical thinking skills, have greater opportunities for success in higher education and, consequently, higher socio-economic status (President's Advisory Commission on Educational Excellence for Hispanic Americans, 2002). At the elementary level in Texas, students in the 5<sup>th</sup> grade during the years examined in this study were required to pass the Reading TAKS test in order to be promoted to the 6<sup>th</sup> grade. Reading proficiency, therefore, was important to elementary students and impacted the choices made in programming for instruction for all students – including

ELLs. Two language versions of the TAKS reading test were available to ELL students, an English and a Spanish version. Depending upon decisions made in an LPAC, students in a transitional bilingual program may have taken the Reading TAKS test in English beginning in the third grade. While students in the dual language program could take the Reading TAKS test in Spanish in the third and fourth grade, they were expected to take it in English in the fifth grade. For the direct purposes of this study, the 5<sup>th</sup> grade year allows for a direct comparison of results between students in a dual language program and those in a transitional bilingual program since by that time almost all of the students took the English version of the test. Only scores from who took the English test were used in this study.

This ex-post facto longitudinal study used descriptive statistics to explore causal relationships between two instructional models used in instructing ELL students and the reading test results on a standardized state assessment. In particular, two groups were compared through this study: (a) ELLs who were instructed in a transitional bilingual early exit program, and (b) ELLs who were instructed in a two-way dual language program. The 5<sup>th</sup> grade Reading TAKS raw scores from one campus between 2009-2011 were analyzed. The test results of three consecutive cohorts of students were compared based on their participation in one of the two models to examine what differences were exhibited. The dependent variable examined was reading achievement on the TAKS, and the independent variable was the participation in either a transitional bilingual program or a dual language program. The data for each of the three years were analyzed through two separate tests, a chi square and t-test. Dual language students who met expectations on the assessment were calculated and the percentage was compared to the percent of

students who met expectations and were instructed in a transitional bilingual program. This data was then put through a chi-square test to describe any differences. A t-test was then used to compare each of the raw, vertical and scale scores data for each testing year as well as an aggregate of the three years. The results were then examined to determine what differences were shown between the two groups of students in either program.

Once again, as measured by the 5<sup>th</sup> grade Texas Assessment of Knowledge and Skills (TAKS) Reading test, the intent of the study was to determine whether a difference was present in academic achievement between English Language Learners who received dual language instruction and students who received instruction in a transitional bilingual program.

### **Setting**

This study was conducted in a mid-sized suburban school district in the Gulf Coast region of Texas spanning 44 square miles and comprised of 180,000 residents. Given that the district utilizes a neighborhood school approach, attendance zones are established based on where students live and, due to the stability of the community, the zones rarely change. The Texas Education Agency (TEA) rated the district as a “Recognized” district, which represents the second highest rating achievement possible with respect to overall student performance on the Texas Academic Knowledge and Skills (TAKS) assessment. With just over 32,000 students, the district is comprised of 5 schools of early learning, 26 elementary schools (K-5), 7 regular middle schools (6-8), one charter middle school (6-8), one charter middle/high school (6-12), four comprehensive high schools (9-12), and one alternative high school. Attending these schools are students of diverse ethnicities. In particular, in terms of student



demographics, the district is comprised of Hispanic (56%), White (31%), African American (6.7%), and Asian (6.3%). Over half of the students (53.9%) in the district are considered economically disadvantaged, and a little more than one-third (33%) are students of Limited English Proficiency (LEP).

Analyzed in this study were data drawn from the TAKS test results of one elementary campus within this school district. This particular campus was chosen due to its length of an established two-way dual language program – a factor not present in the other campuses in the district. Other campuses with a dual language program had only been in existence for 5<sup>th</sup> years, thus TAKS data for 5<sup>th</sup> grade reading was not available. The two-way dual language program was established at the campus of study in 1997 with two Kindergarten classes. The United States Department of Education, Office of English Language Acquisition, awarded the campus a three-year \$450,000 Title VII Program Development and Implementation Grant beginning with the 2001-2002 school year. This campus-based project provided professional development training for classroom teachers and staff; implemented family literacy and outreach programs; purchased supplies and materials; and incorporated technology into the dual language classroom to enhance communication, learning, and instruction. Students entered this program in either pre-kindergarten or kindergarten. Students may have been admitted at other grade levels based on available space and individual assessment.

Demographics at this school were represented by a dominant Hispanic group of students (83%) within their population of nearly 900 students in grades preK-5. The LEP student population represents 61% of the total population, and 75% of the total population meets criteria for identification as Economically Disadvantaged and At-risk.

Student enrollment in a bilingual program is 78% and 60% of the teaching staff serves this population. Those teachers who taught in a bilingual setting are certified through the state of Texas and receive yearly staff development related to bilingual model strategies in either dual language or transitional bilingual instruction at both the campus and district level. Lastly, each grade level K-5 had at least two, two-way dual language teachers and two transitional bilingual teachers.

### **Participants**

Students who entered kindergarten between the years 2003 and 2005 and whose parents chose to enroll them into a bilingual program (either two-way dual language or transitional) were used in this study. Students who were in the two-way dual language program received instruction in Spanish in Language Arts for five to six consecutive years. Although the mobility percentage is 22%, students enrolling in the school must have been in a two-way dual language program in their previous school in order to enter into this campus' program. Thus, the number of years receiving this type of instruction was still five to six years total.

Students of limited English proficiency who entered pre-kindergarten or kindergarten in the aforementioned years whose parents chose not to pursue entry into the dual language program were considered to be in the transitional bilingual program. These students would have received Spanish only instruction in Language Arts through 1<sup>st</sup> grade and were then taught in English with linguistic support in Spanish. At their third grade year, the students would have been eligible for exit from the bilingual program into mainstream English-only classes. This study accounted for those students who began in the transitional bilingual program and their 5<sup>th</sup> grade TAKS Reading results

were used to compare to the dual language group regardless of their exiting grade level from bilingual education. Students' 5<sup>th</sup> grade TAKS Reading results from the selected campus between the years of 2009-2011 were used.

Those students identified and served by Special Education who also took a modified or alternate TAKS test were excluded from the study. Given that the modified and alternate versions of the TAKS did not match the regular Reading TAKS test in scoring or passing requirements, these results were not included. Another group excluded from the study was native English speakers who were in the dual language classes. Dual language classes are comprised of both native Spanish speakers and native English speakers to achieve the goals of biliteracy and bilingualism through an inclusive, mutually supportive, and multicultural environment. However, this study sought to compare the results of ELL students whose first language was Spanish but who received instruction in two different programs aimed at English proficiency.

The 5<sup>th</sup> grade Reading TAKS test was comprised of 42 questions over the following four objectives: Basic Understanding, Applying Knowledge of Literary Elements, Using Strategies to Analyze, and Applying Critical Thinking Skills. More specifically, the Basic Understanding were comprised of 13 questions that required students to use decoding, word meaning and main idea to create meaning from a given text. Next, eight questions covered the objective of Applying Knowledge of Literary Elements in which students use texts from different genres to apply understanding of character, plot and setting. Of the eight questions in the next objective (i.e., Using Strategies to Analyze), students demonstrate their reading comprehension through cause and effect strategies. And, finally, in the area of Applying Critical Thinking Skills,

students read texts from various different genres to make inferences, draw conclusions, and make generalizations by responding to 13 more questions.

According to Gall (2007), assessment instruments used which yield reliability scores of .80 or higher are considered acceptable for educational research. The TAKS yielded a .89 on the Kuder-Richardson Formula 20 for reliability, which suggests that it represents proficient internal consistency. Therefore, TAKS data for the purposes of this study were considered appropriate as a measure of reading proficiency in English.

### **Procedures**

During the first data collection phase, a request for TAKS Confidential Student Reports (CSR) from the campus was made. The CSR, which is issued to the campus and to the student in May of each testing year, detailed the individual student's results of each TAKS test taken. It showed the following information: (a) the number of questions possible and correct for each objective within a test, (b) a raw and scaled score, and (c) whether the student met expectations for passing. The student reports were categorized by those students who were in either the two-way dual language program or transitional bilingual classes. Given that this distinction is not shown on the CSR, the investigation extended to requesting the assistance of personnel at the campus and district level to determine in which program each student received instruction. The students on which the data were taken were no longer at the campus of study and may be at a high school, a middle school, or may be withdrawn from the district; hence, the mining required further exploration through archived data retrieved from the office of Accountability and Research.

In the next stage of the data collection process, students were disaggregated with respect to the type of bilingual instruction received – that is, two-way dual language or transitional. Data were recorded on a data collection form without identification of student names. Instead, a number was assigned to each student along with the corresponding raw score on the TAKS Reading test. Only students who were (a) identified as ELL, (b) participated in the 2008-2011 5<sup>th</sup> grade English Reading TAKS test, (c) enrolled in either two-way dual language or transitional bilingual programs since kindergarten, and (d) attended the campus of study were included.

Students who meet the criteria listed above were assigned to one of two groups for each year of data. The first group was ELL students who received instruction in a two-way dual language class. Group two was ELL students who received instruction in a transitional bilingual class through 5<sup>th</sup> grade or exited at 3<sup>rd</sup> or 4<sup>th</sup> grade and were monitored by the campus as a prior bilingual student.

### **Instruments**

TAKS Confidential Student Reports (CSR), which are issued to the campus and to the student in May of each testing year, detailed the individual student's results of each TAKS test taken. Furthermore, it displayed (a) the number of questions possible and correct for each objective within a test, (b) a raw and scaled score, and (c) whether the student met expectations for passing. However, a distinction of the method of instruction or program was not shown on the CSR. Since students on which the data were taken were no longer at the campus of study and were at a high school, middle school, or withdrawn from the district, the mining required further exploration through the district office of Accountability and Research.

**Limitations**

The campus from which the data for this study was retrieved was the only campus with a two-way dual language program in existence for the length of time necessary to provide at least three years of data. Other campuses in the district with two-way dual language programs did not have three consecutive 5<sup>th</sup> grade cohort of students who were instructed in this method since their Kindergarten year. Therefore, the group size for this study is limited to one campus, which accounts for the small number of participants within the comparison group.

It is also important to note that students who were administered the TAKS Modified version of the test will be excluded from the data set. Additionally, as previously mentioned, teacher experience, training level, and fidelity to the two-way dual language instructional models were not controlled for in this study. Although these factors are valuable and worthy of consideration, they factors extend beyond the scope of this study and could, in fact, be their own research focus.

## **Chapter IV**

### **Results**

#### **Research Question**

The following research question is the primary focus of this study:

1. Is there a difference in academic achievement as measured by the Texas Assessment of Knowledge and Skills (TAKS) Reading test between 5<sup>th</sup> grade English Language Learners who received dual language instruction and students who received instruction in a classroom in a transitional bilingual program?

The data from two instructional models – namely, transitional bilingual and two-way dual language – used in a suburban school district in southwest Texas were examined. Specifically analyzed were 5<sup>th</sup> grade TAKS Reading test results on the spring 2009, 2010, and 2011 assessments. Data was analyzed through both a chi square and t-test to address the research question.

To ascertain whether differences were present in the extent to which students met the TAKS Reading standard as a function of their instructional program, Pearson chi-square procedures were calculated. To use a Pearson chi-square analysis, students' TAKS Reading scores were matched against the state standard for meeting the standard in reading.

As such, the independent variable of instructional program (i.e., transitional bilingual program and two-way language program) and TAKS Reading performance (i.e., either did or did not meet the standard) were both categorical in nature. Because the independent variable (i.e., instructional program) and dependent variable (i.e., TAKS

Reading performance) constituted categorical data, Pearson chi-square statistics are the optimal statistical procedures to calculate. Four separate Pearson chi-square procedures were calculated, one for each school year and one for the aggregated results across the three school years.

Revealed in Table 3 below are the Pearson chi-square values and the level of statistical significance for each of the four Pearson chi-squares that were calculated.

Table 3

*Pearson Chi-Square Statistical Output for Each School Year and Aggregated Across the School Years*

School Year	Chi-Square Value	<i>p</i> value
2009	4.727	.030
2010	1.656	.198
2011	1.294	.255
Aggregated Across School Years	6.954	.008

A statistically significant difference was present between the two instructional programs, with respect to whether or not students met the TAKS Reading standard, in the 2009 school year,  $\chi^2(1) = 4.727, p = .03$ , Cramer's *V* of .426, moderate effect size (Cohen, 1988). As revealed in Table 4, 100% of students in the two-way language program met the TAKS Reading standard in the 2009 school year, compared to only 69.2% of students in the transitional bilingual program. Results were not statistically significant for the 2010 school year,  $\chi^2(1) = 1.656, p = .198$ , or for the 2011 school year,  $\chi^2(1) = 1.294, p = .255$ . As indicated in Table 4, 95.2% of students in the two-way language program met the TAKS Reading standard in the 2010 school year, compared to



82.4% of students in the transitional bilingual program. Similar results were present for the 2011 school year, with 96.9% of students in the two-way language program meeting the TAKS Reading standard compared to 89.7% of students in the transitional bilingual program.

Aggregating student results across the three school years yielded a statistically significant effect of instructional program,  $\chi^2(1) = 6.954, p = .008$ , Cramer's  $V$  of .236, small effect size (Cohen, 1988). As revealed in Table 4, 97.0% of students in the two-way language program met the TAKS Reading standard across the 2009, 2010, and 2011 school years, compared to 83.1% of students in the transitional bilingual program.

Table 4

*Percent of Students Who Met the TAKS Reading Standard by Instructional Program for the 2009, 2010, and 2011 School Years*

School Year and Instructional Program	Met Standard	Did Not Meet Standard
2009		
Two-Way Language	100.0%	0.0%
Transitional Bilingual	69.2%	30.8%
2010		
Two-Way Language	95.2%	4.8%
Transitional Bilingual	82.4%	17.6%
2011		
Two-Way Language	96.9%	3.1%
Transitional Bilingual	89.7%	10.3%
Aggregated Across School Years		
Two-Way Language	97.0%	3.0%
Transitional Bilingual	83.1%	16.9%

As such, the results from the Pearson chi-square analyses are strongly supportive of the two-way language program over the transitional bilingual program, with respect to students meeting the TAKS Reading standard.

The 5<sup>th</sup> grade TAKS English Reading test results were analyzed first for the 2009 school year. In this school year, 13 students were enrolled in the dual language immersion/two-way program, whereas 27 students were enrolled in the transitional bilingual/late exit program. Descriptive statistics for students' TAKS Reading raw scores, scaled scores, vertical scale scores, and percent score are displayed in Table 5. It is also important to note that students who were enrolled in the two-way language program had slightly higher scores than did students who were enrolled in the transitional bilingual program.

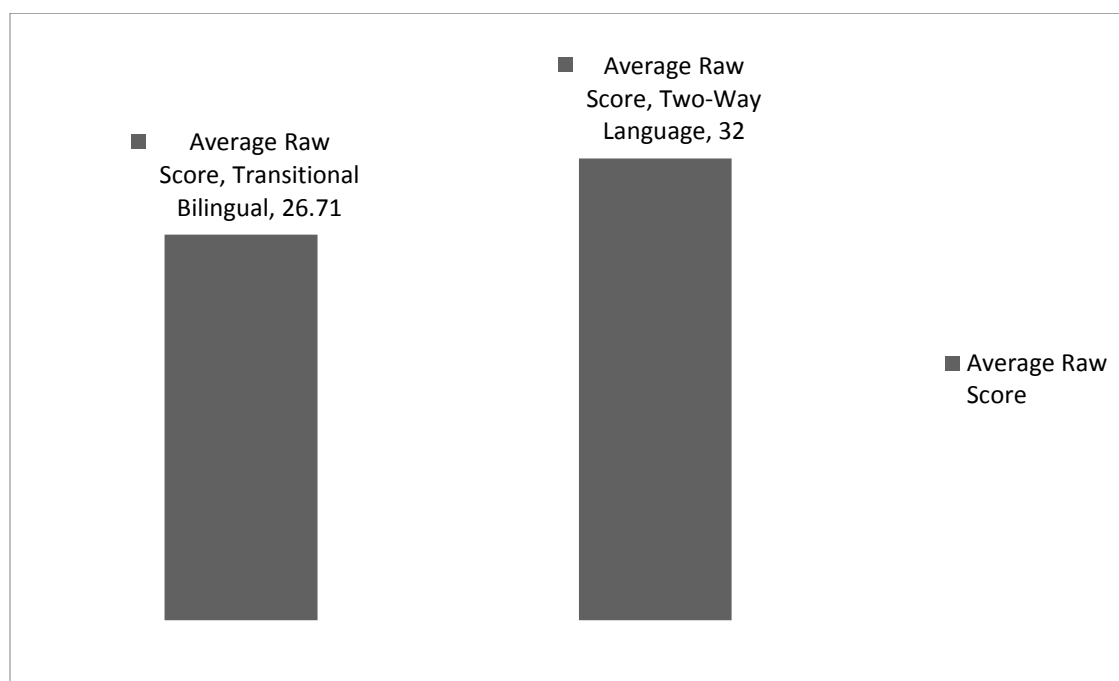
Table 5

*Descriptive Statistics for 5<sup>th</sup> Grade Students' TAKS Reading Scores as a Function of Transitional Bilingual and Two-Way Language Instruction for the 2009 School Year*

TAKS Measure	<u>Transitional Bilingual</u>			<u>Two-Way Language</u>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Raw Score	27	26.71	6.05	13	32.00	1.73
Scale Score	27	2073.43	126.39	13	2162.33	40.42
Vertical Scale Score	27	609.71	53.13	13	650.00	19.05
Percent Score	27	63.57	14.48	13	76.33	4.04

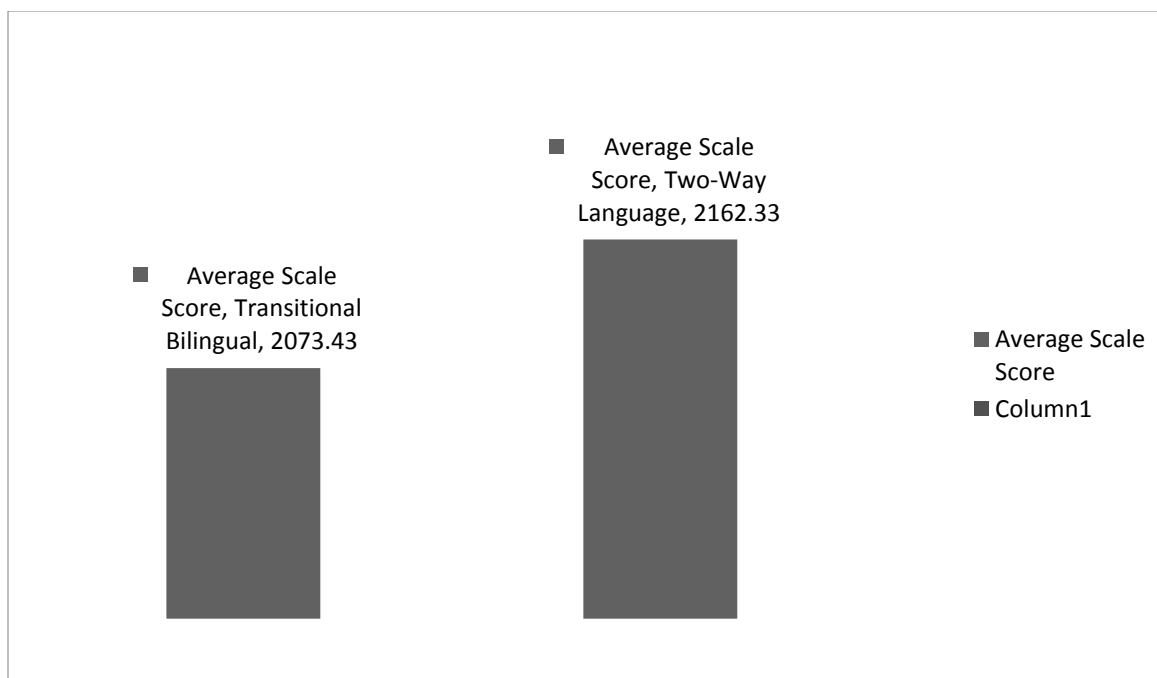
In order to determine whether differences were present in students' TAKS Reading scores as a function of their instructional program, independent sample *t*-tests were conducted. Since students' scores were reported in several different formats, a separate independent samples *t*-test was conducted for each score format. For the TAKS Reading raw score, a statistically significant difference was not present at the conventional level of statistical significance,  $t(7.673) = 2.12, p = .068$ . As depicted in

Figure 1, students enrolled in the two-way language program had slightly higher raw scores than did students who were enrolled in the transitional bilingual program.



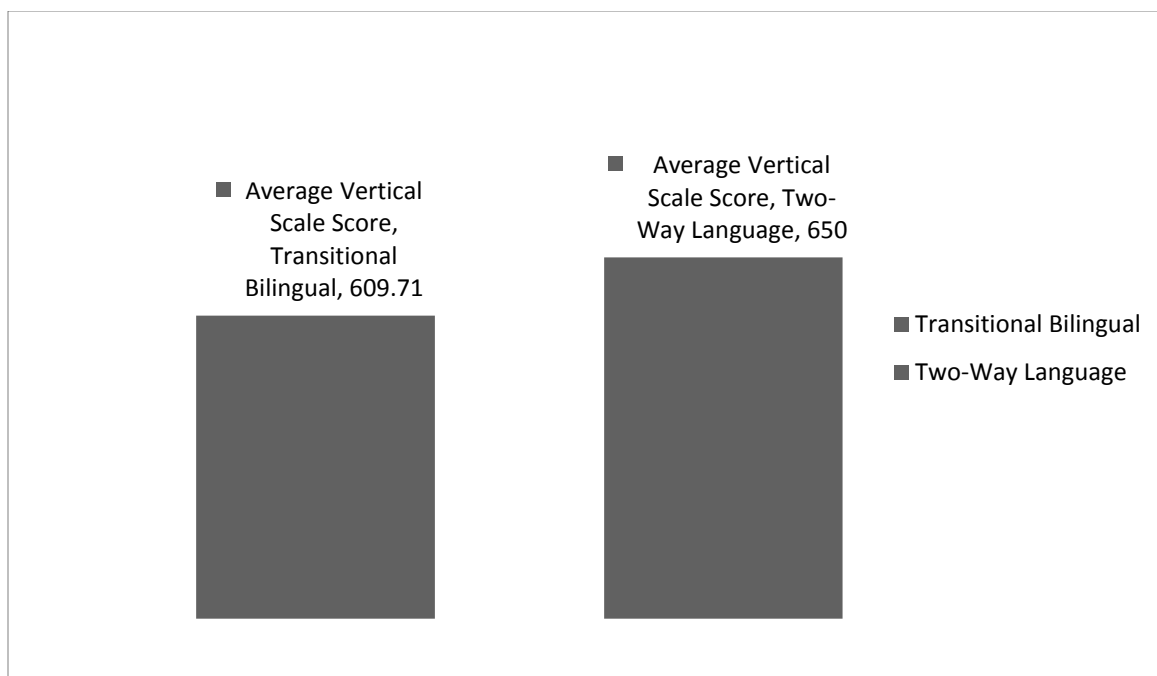
*Figure 1.* Average TAKS Reading raw scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2009 school year.

With regard to the TAKS Reading scaled score, a statistically significant difference was not revealed,  $t(7.682) = 1.67, p = .13$ . Shown in Figure 2 are the average TAKS Reading scaled scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2009 school year. Again, the average scale scores were slightly higher for students who were enrolled in the two-way language program than students who were enrolled in the transitional bilingual program.



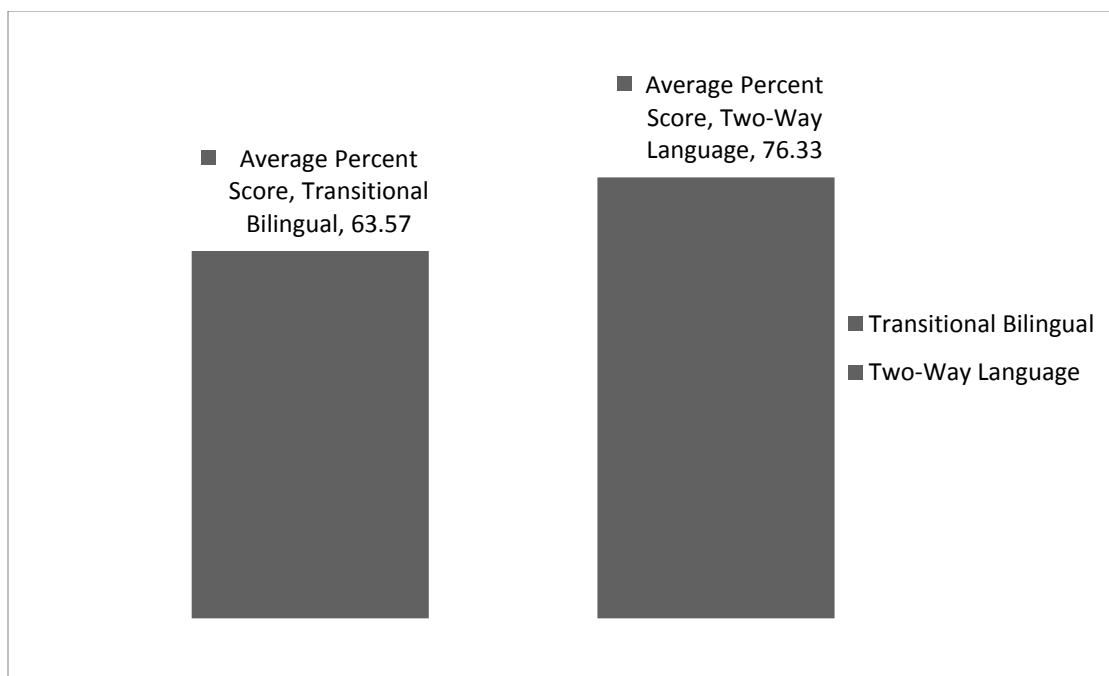
*Figure 2.* Average Taks Reading scale scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2009 school year.

With respect to the Taks Reading vertical scale score, a statistically significant difference was not present,  $t(7.984) = 1.76$ ,  $p = .12$ . And, students who were enrolled in the two-way language program had slightly higher vertical scale scores than did students who were enrolled in the transitional bilingual program. It is important to make note of Figure 3, which offers a visual depiction of students' vertical scale scores.



*Figure 3.* Average TAKS Reading vertical scale scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2009 school year.

With regard to the TAKS Reading percent score, a statistically significant difference was not present at the conventional level of statistical significance,  $t(7.624) = 2.14, p = .066$ . Furthermore, students who were enrolled in the two-way language program had an average percent score of 76.33% on the TAKS Reading test, as compared to an average percent score of 63.57% for students who were enrolled in the transitional bilingual program. These percentages are revealed in Figure 4.



*Figure 4.* Average TAKS Reading percent scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2009 school year.

Thus, although students who were enrolled in the in the two-way language program had slightly higher scores than did students who were enrolled in the transitional bilingual program, the scores were not statistically significantly higher for the 2009 school year.

Next, the 5<sup>th</sup> Grade TAKS English Reading test results were analyzed for the 2010 school year. During this school year, 21 students were enrolled in the dual language immersion/two-way program, whereas 17 students were enrolled in the transitional bilingual/late exit program. Descriptive statistics for their TAKS Reading raw scores, scaled scores, vertical scale scores, and percent score are presented in Table 6. It should be noted that students who were enrolled in the two-way language program again had slightly higher scores than did students who were enrolled in the transitional bilingual program

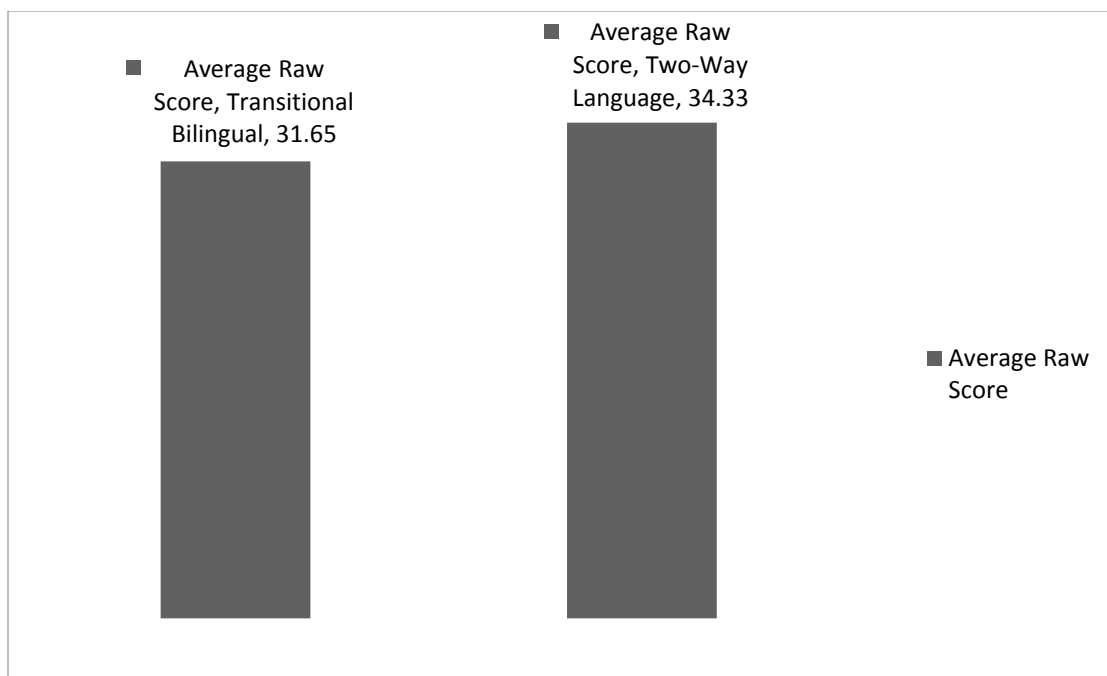
Table 6

*Descriptive Statistics for 5<sup>th</sup> Grade Students' TAKS Reading Scores as a Function of Transitional Bilingual and Two-Way Language Instruction for the 2010 School Year*

TAKS Measure	<u>Transitional Bilingual</u>			<u>Two-Way Language</u>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Raw Score	17	31.65	6.69	21	34.33	4.68
Scale Score	17	656.24	68.71	21	686.29	79.97
Vertical Scale Score	17	656.24	68.71	21	686.29	79.97
Percent Score	17	75.41	16.03	21	81.71	11.06

In order to determine whether differences were present in students' TAKS Reading scores as a function of their instructional program, independent samples *t*-tests were conducted. Given that students' scores were reported in several different formats, a separate independent samples *t*-test was conducted for each score format.

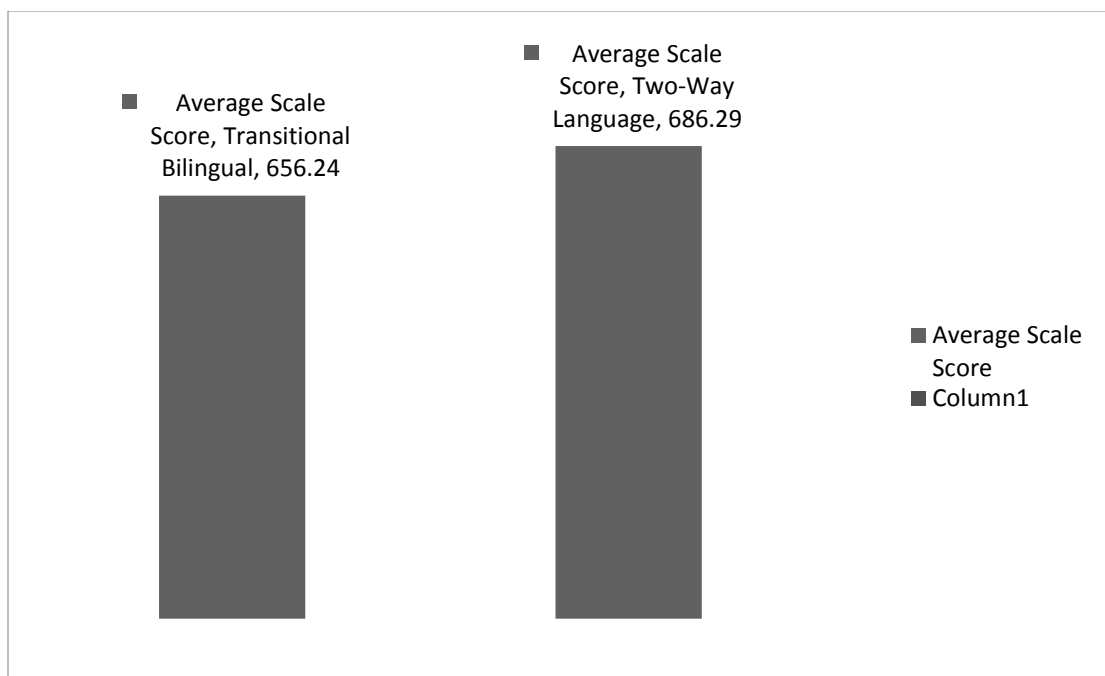
For the TAKS Reading raw score, a statistically significant difference was not present,  $t(27.69) = 1.40$ ,  $p = .173$ . Moreover, as depicted in Figure 5, students enrolled in the two-way language program had slightly higher raw scores than did students who were enrolled in the transitional bilingual program.



*Figure 5.* Average TAKS Reading raw scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2010 school year.

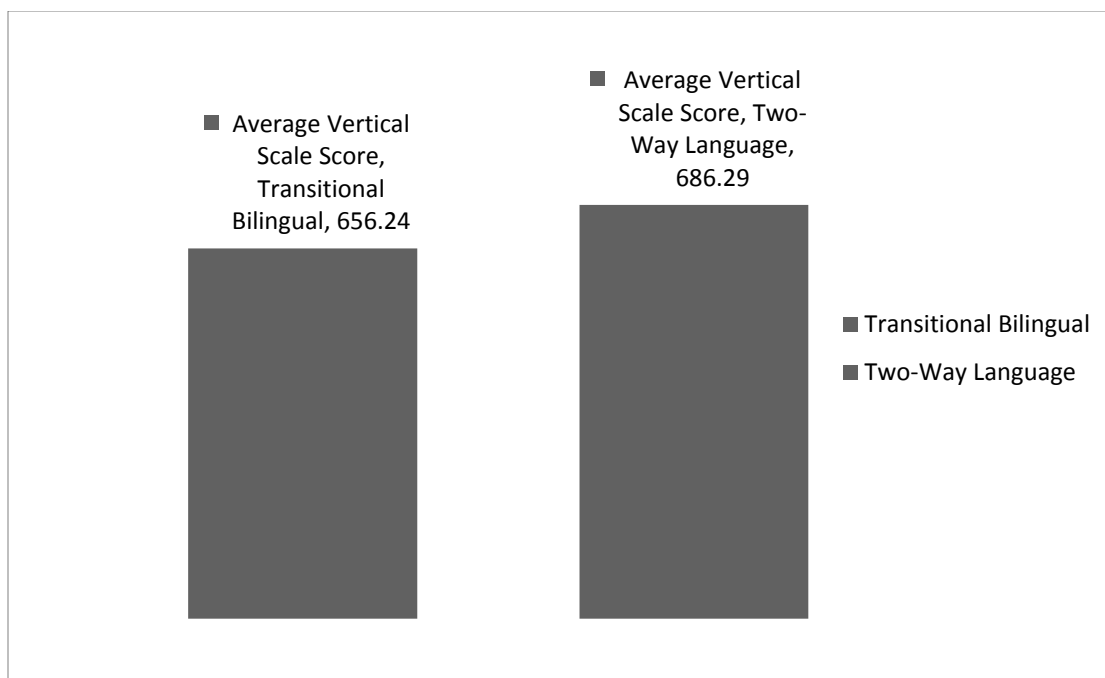
With regard to the TAKS Reading scale score, a statistically significant difference was not revealed,  $t(35.847) = 1.24, p = .22$ . Shown in Figure 6 are the average TAKS Reading scaled scores for 5<sup>th</sup> Grade students in the transitional bilingual and two-way language instructional programs for the 2010 school year. Once again, the average scale scores were slightly higher for students who were enrolled in the two-way language program than students who were enrolled in the transitional bilingual program.





*Figure 6.* Average TAKS Reading scale scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2010 school year.

With respect to the TAKS Reading vertical scale score, a statistically significant difference was not present,  $t(35.847) = 1.24, p = .22$ . Students who were enrolled in the two-way language program had slightly higher vertical scale scores than did students who were enrolled in the transitional bilingual program. In addition, students' vertical scale scores are depicted in Figure 7 below.



*Figure 7.* Average TAKS Reading vertical scale scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2010 school year.

With regard to the TAKS Reading percent score, a statistically significant difference was not present,  $t(27.457) = 1.38, p = .18$ . Students who were enrolled in the two-way language program had an average percent score of 81.71% on the TAKS Reading test, as compared to an average percent score of 75.41% for students who were enrolled in the transitional bilingual program. As shown below, Figure 8 depicts these revealed percentages.



*Figure 8.* Average TAKS Reading percent scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2010 school year.

For the 2010 school year, results were congruent with results for the 2009 school year. Students in both school years who were enrolled in the in the two-way language program had slightly higher scores than did students who were enrolled in the transitional bilingual program. In both school years, however, the differences, though in the same direction, were not statistically significant.

Next, the 5<sup>th</sup> Grade TAKS English Reading test results were analyzed for the 2011 school year. For this school year, 34 students were enrolled in the dual language immersion/two-way program and 25 students were enrolled in the transitional bilingual/late exit program. Table 7 depicts descriptive statistics for their TAKS Reading raw scores, scaled scores, vertical scale scores, and percent score. It should be noted that students who were enrolled in the two-way language program, once again, had higher scores than did those students who were enrolled in the transitional bilingual program.

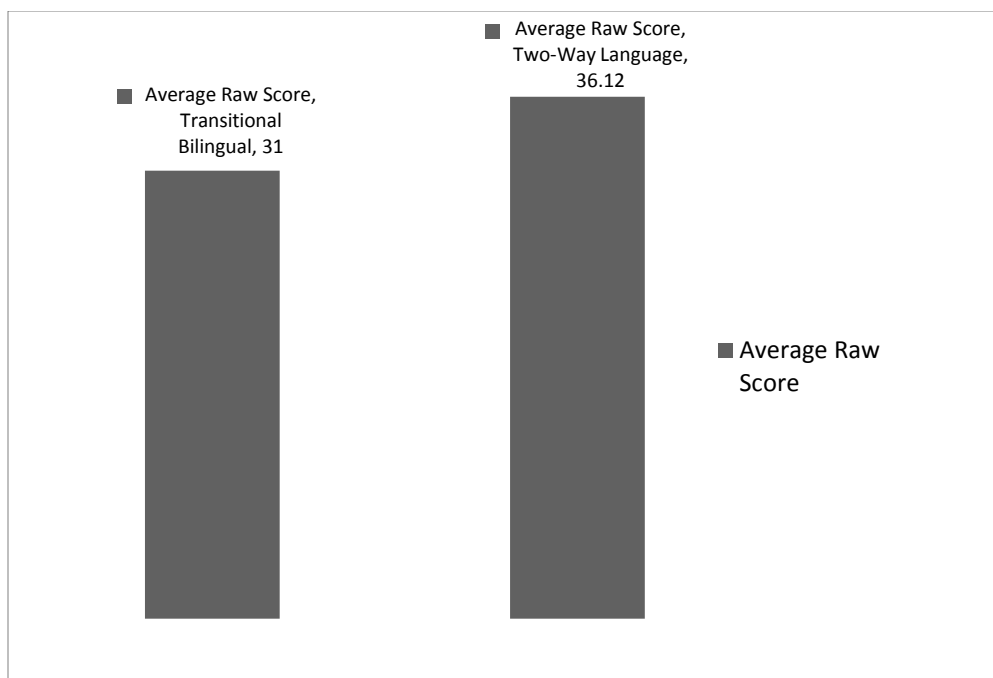
Table 7

*Descriptive Statistics for 5<sup>th</sup> Grade Students' TAKS Reading Scores as a Function of Transitional Bilingual and Two-Way Language Instruction for the 2011 School Year*

TAKS Measure	<u>Transitional Bilingual</u>			<u>Two-Way Language</u>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Raw Score	25	31.00	7.05	34	36.12	5.23
Scale Score	25	647.28	75.56	34	719.29	90.36
Vertical Scale Score	25	647.28	75.56	34	719.29	90.36
Percent Score	25	73.80	16.71	34	85.97	12.52

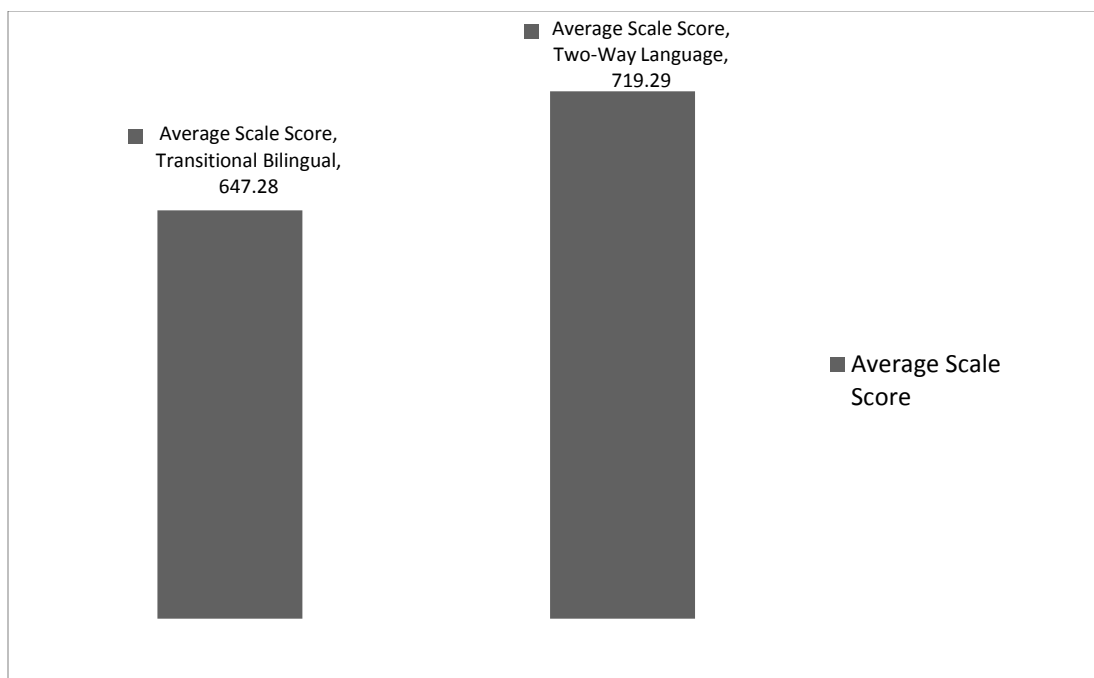
In order to determine whether differences were present in students' TAKS Reading scores as a function of their instructional program, independent samples *t*-tests were conducted. Given that students' scores were reported in several different formats, a separate independent samples *t*-test was conducted for each score format.

With regard to the TAKS Reading raw score, a statistically significant difference was present,  $t(42.315) = 3.06, p = .004$ . And, as depicted in Figure 9, students enrolled in the two-way language program had higher raw scores than did students who were enrolled in the transitional bilingual program. This difference reflected a Cohen's *d* of 0.82, or a large effect size (Cohen, 1988).



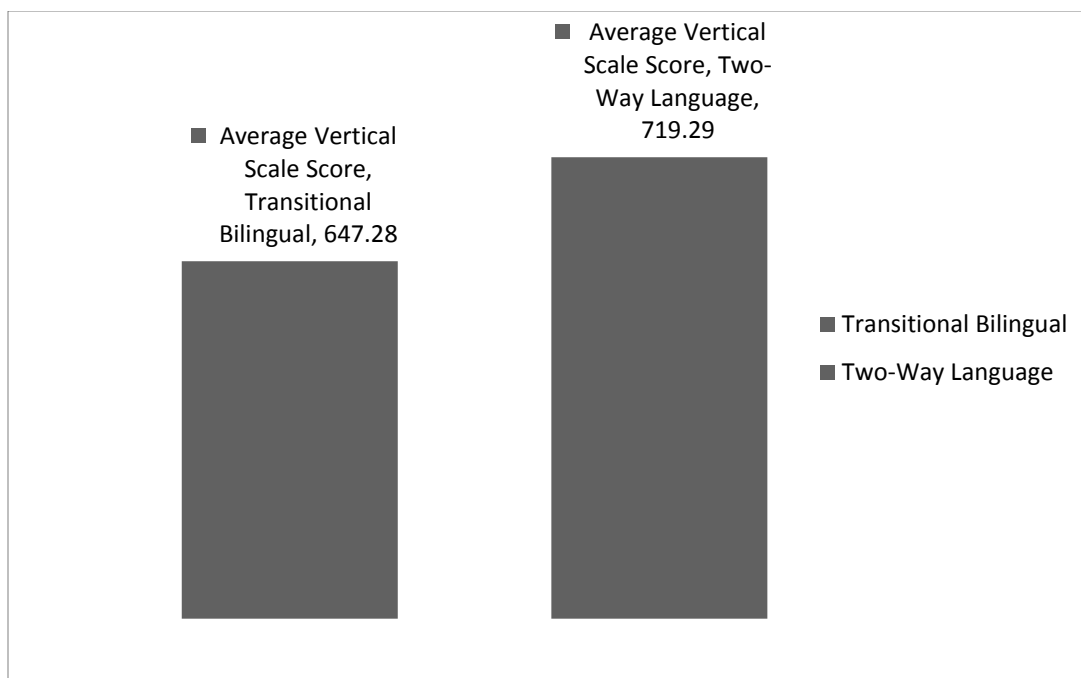
*Figure 9.* Average TAKS Reading raw scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2011 school year.

With regard to the TAKS Reading scale score, a statistically significant difference was revealed,  $t(55.987) = 3.33, p = .002$ . Figure 10 displays the average TAKS Reading scale scores for 5<sup>th</sup> Grade students in the transitional bilingual and two-way language instructional programs for the 2011 school year. Once again, the average scale scores were higher for students who were enrolled in the two-way dual language program than for those students who were enrolled in the transitional bilingual program. This difference reflected a Cohen's  $d$  of 0.86, or a large effect size (Cohen, 1988).



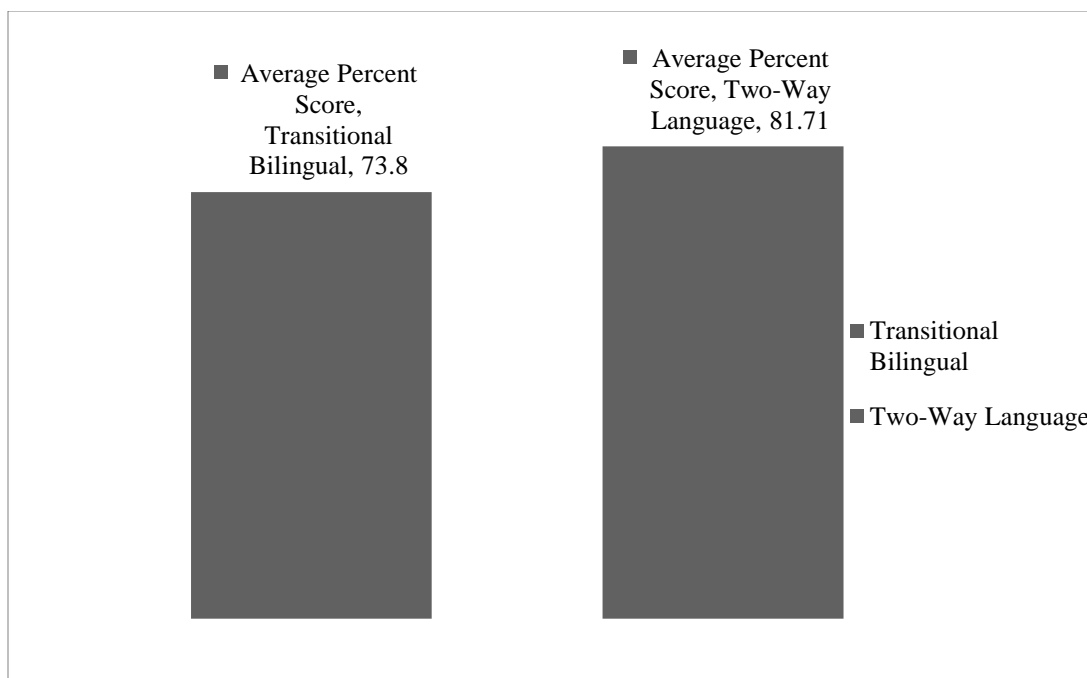
*Figure 10.* Average TAKS Reading scale scores for 5th grade students in the transitional bilingual and two-way language instructional programs for the 2011 school year.

With respect to the TAKS Reading vertical scale score, a statistically significant difference was present,  $t(55.987) = 3.33, p = .002$ . Students who were enrolled in the two-way language program had higher vertical scale scores than did those students who were enrolled in the transitional bilingual program. This difference reflected a Cohen's  $d$  of 0.86, or a large effect size (Cohen, 1988). As shown below, Figure 11 depicts students' vertical scale scores.



*Figure 11.* Average TAKS Reading vertical scale scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2011 school year.

With regard to the TAKS Reading percent score, a statistically significant difference was present,  $t(42.610) = 3.06, p = .004$ . Students who were enrolled in the two-way dual language program had an average percent score of 85.97% on the TAKS Reading test, as compared to an average percent score of 73.80% for students who were enrolled in the transitional bilingual program. These percentage differences reflected a Cohen's  $d$  of 0.82, or a large effect size (Cohen, 1988). These percentages are revealed in Figure 12.



*Figure 12.* Average TAKS Reading percent scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2011 school year.

For the 2011 school year, results were congruent with results for the 2009 and the 2010 school years. Students in all three school years who were enrolled in the two-way language program had higher scores than did students who were enrolled in the transitional bilingual program.

In light of the relatively small sample of students for each school year, data for students' raw scores and percent scores were aggregated for the 2009, 2010, and 2011 school years. Also, given that the scaled scores and vertical scaling scores changed from the 2009 to the 2010 and 2011 school years, they could not be aggregated for the purposes of analysis. Through the process of aggregating across these three school years, a total of 58 students were in the two-way language instruction group, as compared to a total of 49 students in the transitional bilingual group.

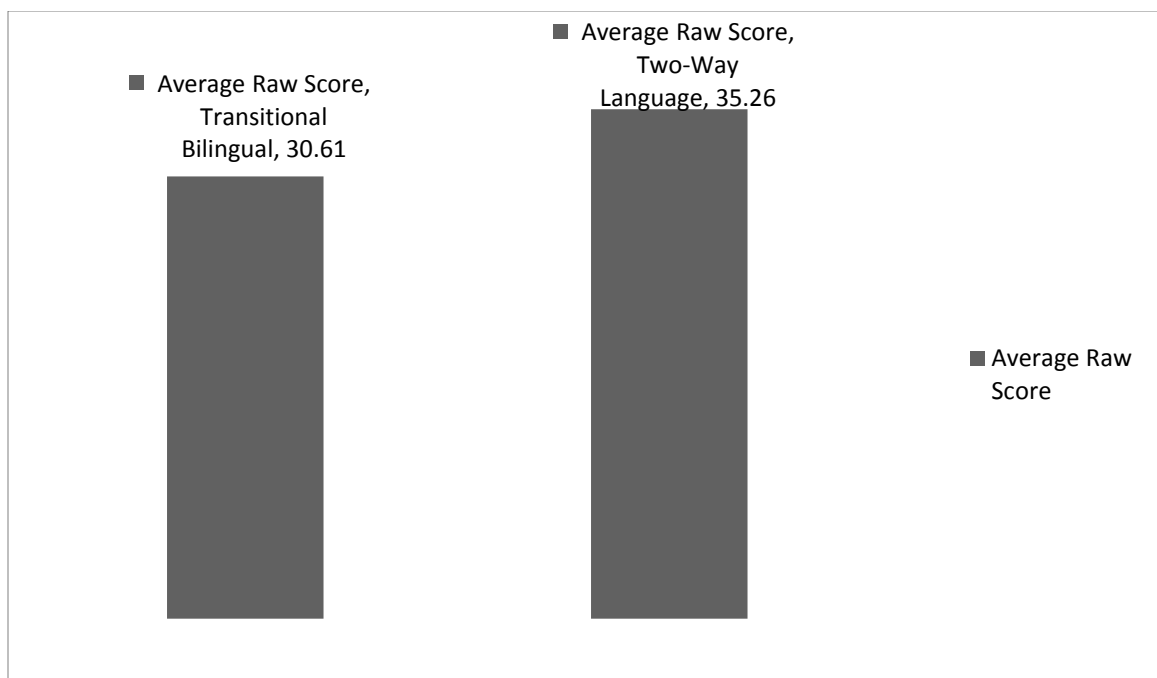


Table 8

*Descriptive Statistics for 5<sup>th</sup> Grade Students' TAKS Reading Scores as a Function of Transitional Bilingual and Two-Way Language Instruction Across the 2009, 2010, and 2011 School Years*

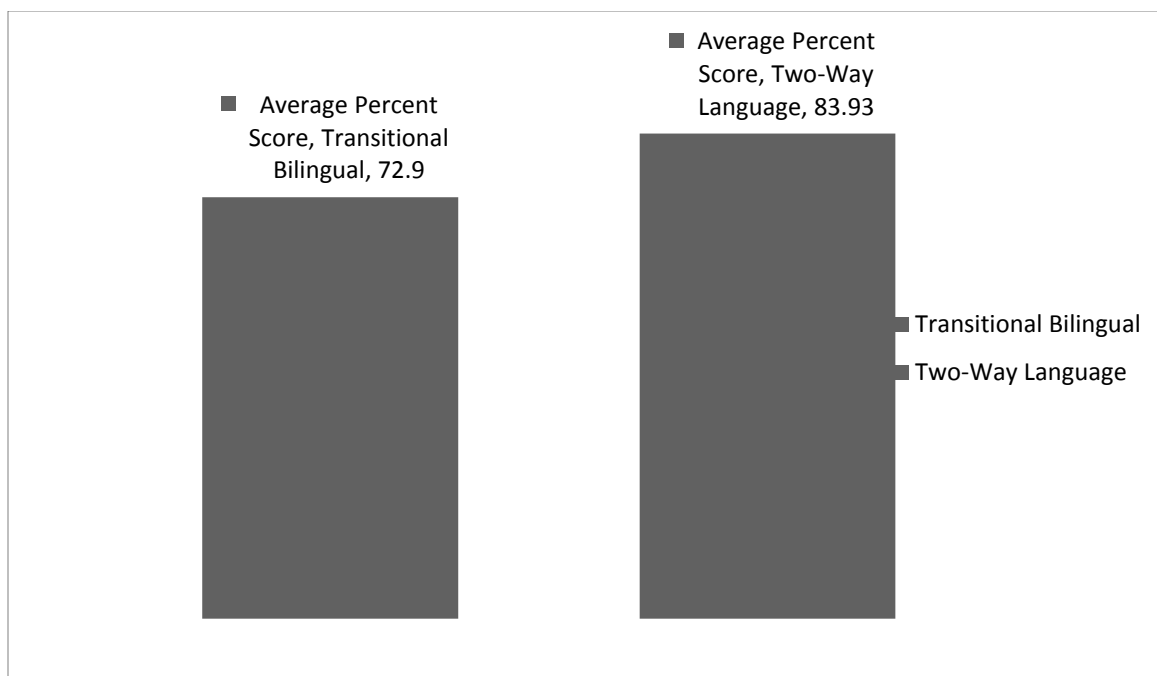
TAKS Measure	<u>Transitional Bilingual</u>			<u>Two-Way Language</u>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Raw Score	69	30.61	6.86	68	35.26	4.99
Percent Score	69	72.90	16.34	68	83.93	11.89

In order to determine whether differences were present in students' TAKS Reading scores as a function of their instructional program, independent samples *t*-tests were conducted for the raw scores and for the percent scores. For the TAKS Reading raw scores, a statistically significant difference was present,  $t(86.095) = 3.94, p < .001$ . As depicted in Figure 13, across the three school years of data analyzed therein, students enrolled in the two-way language program had statistically significantly higher raw scores than did students who were enrolled in the transitional bilingual program. This difference reflected a Cohen's *d* of 0.78, or a moderate/large effect size (Cohen, 1988).



*Figure 13.* Average TAKS Reading raw scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2009 through the 2011 school years.

With respect to the TAKS Reading percent scores, a statistically significant difference was present,  $t(86.105) = 3.93$ ,  $p < .001$ , across the three school years. Students who were enrolled in the two-language program had an average percent score of 83.93% on the TAKS Reading test, as compared to an average percent score of 72.90% for students who were enrolled in the transitional bilingual program. These percentage differences reflected a Cohen's  $d$  of 0.77, or a moderate/large effect size (Cohen, 1988). These percentages are revealed in Figure 14.



*Figure 14.* Average TAKS Reading percent scores for 5<sup>th</sup> grade students in the transitional bilingual and two-way language instructional programs for the 2009 through the 2011 school years.

For the 2009 through the 2011 school years, students in all three school years who were enrolled in the in the two-way language program had higher scores than did those students who were enrolled in the transitional bilingual program. Effect sizes for the statistically significant differences were in the moderate-to-large range (Cohen, 1988); thus, indicating that these results were practically significant.

## CHAPTER FIVE

### DISCUSSION

#### Introduction

District and campus leaders are tasked with the challenge of providing high-quality instruction that reaches all students. The challenge itself appears even more formidable when one considers that this task also entails creating a focus on college readiness, which demands that students think critically and creatively in order to solve novel problems. Nonetheless, each and every student requires an educational approach that will achieve this objective. Moreover, closing the educational achievement gap for students whose first language is Spanish is an important goal that cannot be overlooked or undervalued. The dropout rate that currently plagues students of Hispanic heritage is truly staggering and should signal a call to action on the part of educational leaders. More importantly, the implications of the performance of Hispanic students on the labor workforce and college completion rates are directly related to the achievement of students beginning in the primary years of schooling.

Bilingual programs take many forms and are designed to provide English language learners with literacy and language skills. The research reviewed in Chapter Two revealed the premises underlying language development and acquisition and supports the approach of solid development in a native language with the concurrent addition of a second. Bilingual programs that are subtractive in nature with the goal of English language acquisition, such as a traditional, transitional, or ESL approach, do not use this approach to teaching ELL students. Only dual language programs have the goal

extend to developing literacy and language skills in two languages equally while also cultivating and promoting a culturally inclusive environment.

### **Research Findings**

This study sought to examine whether students in a dual language program outperformed students in a transitional bilingual program in order to inform a discussion on the merits of the dual language program's features and promises. For school leaders, making a choice to lead campuses through the change necessary to effectively implement this type of program begins with having a solid research base related to student achievement which supports the research findings. The study of data from 2009-2011 retrieved from a campus with both dual language and transitional bilingual programs offered a perspective of how students performed on a standardized Reading test taken in English at the 5<sup>th</sup> grade.

The results of the chi-square test showed that, taken individually, only 2009 scores presented a statistically significant difference in the performance of dual language students over transitional bilingual student performance. However, as an aggregate, the total number of dual language students who met expectations on the assessment was statistically significant over the students in the transitional program. Since the study did not examine the degree to which the teacher or campus implemented dual language instruction, there can be no definitive way to attribute reasons why one year was significantly different from the others. However, as an aggregate and to inform the campus leader as a whole, it can be determined that dual language instruction more positively impacted students in the program over those who were in the transitional bilingual program.

When the results of the t-test were examined, 2009 data showed no statistically significant difference in either raw, scale or vertical scores between the two groups, although two-way dual language students showed slightly higher average scale scores. Likewise, the data in 2010 showed similar comparisons. Neither raw, scale or vertical scores were statistically significant in their differences to attribute a distinct benefit to two-way dual language instruction. However, like the previous year's data, the average scale scores were higher for the two-way group over the transitional bilingual group. In 2011, a significant difference appeared within the data showing a large effect size on the raw, scale and vertical scores. Two-way dual language students in this year scored higher than their peers in transitional bilingual classes. As an aggregate group for the three consecutive years of 2009-2011, students instructed through the two-way program showed marked difference over transitional bilingual student performance.

The findings of the data showed positive results for the benefits of dual language over transitional bilingual instruction in the overall, broad view. Students in all three school years who were enrolled in the in the two-way dual language program attained higher scores than did those students who were enrolled in the transitional bilingual program. The difference in the amount of instruction delivered in Spanish and English seems to support the body of research that underscores the cognitive and academic achievement benefits of dual language instruction.

The development, implementation and growth of a dual language program have significant implications for district and campus leadership. Once informed about the success that can be achieved in the areas of bilingualism, biliteracy, cognition, and

multicultural understanding, leaders are then faced with considering the implications of taking on the direction of a quality program.

### **Leadership Implications**

Student academic success in any program requires committed leadership and a belief in the potential of the program to provide academic and cognitive benefits. For instance, a leader who understands the cognitive benefits of the critical thinking and reasoning skills, and the mental flexibility that is strengthened by bilingualism is equipped with the foundation for promoting a strong dual language program. Such a leader communicates to the campus staff and larger community that being biliterate and bilingual is a great strength, and that being such is truly valued. Therefore, in their work to prioritize, cultivate and nurture, and actively promote bilingualism, leaders can be highly effective in creating a ripe environment for all students and their families. That being said, however, to accomplish this is no small feat. Making the decision to lead a campus into the adoption of a dual-language approach means introducing change.

Not all change is difficult when it applies to schools. Yet, particularly for the school administrator, change that involves shifts of culture and behavior are often fraught with many challenges. Chapter Two reviewed several researchers who have focused on how a school administrator leads a campus through the change process. Several types of leadership have been identified, explained and taught within university classes and examined by researchers as to their effectiveness. As fads of any nature come and go, so have many leadership models. Nevertheless, each of these models has inherent and universal merits that may help principals to navigate through change and affect positive outcomes for teachers and students.

As an instructional leader, the principal knows how to facilitate the design and implementation of dual language curricula and implement strategic plans that enhance instruction. Careful alignment of curriculum that makes best use of available and acquired resources can directly impact assessment. The use of varied assessments to measure student performance broadens the approach to assessing ELLs in ways that could reveal progress not formally tested but that would inform the effectiveness of the program implementation.

Facilitating the effective use of practices that are research based in the development, implementation and evaluation of a dual language program is an important function of the instructional leader. This includes the ability to successfully facilitate campus participation in collaborative planning, implementation, monitoring, and revision of curriculum which ensures appropriate scope and sequence of content. Dual language programs are enriched programs that have the added benefit of increasing cognitive abilities in the students. As such, the instructional leader must actively promote the use of creative thinking, critical thinking, and problem solving by staff. In efforts to achieve the campus vision and goals, an effective instructional leader will create conditions that encourage staff, students, and families.

Administrators and staff can establish the culture of a successful program through their own understanding of the vision and components of dual language. Leaders, therefore, have a responsibility to clearly understand the goals and benefits of dual language if they wish to articulate a clear and concise vision. Then, as noted by Wilmore (2008), once this vision is developed, communicated, and implemented, leaders must become good stewards of the vision established through the process of monitoring and



modification. For example, at the inception of a program, a good pep rally will excite a staff and community. Yet, long after the effects of that event have worn off, continued and highly-focused efforts will be necessary in order to sustain the overall quality of the given program.

Being open to change and modeling flexibility can also help to establish a tone for the community. Thus, through an open-ended community approach, any challenges that may arise can then be addressed and resolved within a collaborative approach while continuing to adhere to the vision. Given that change occurs slowly and over time, tenacity and perseverance will be paramount for the leader. For many, this process will be transformative and, thus, requires an unswerving commitment to keep people highly motivated toward the established goal. Sergiovanni (1988) wrote about transformational leadership saying that “it involves an exchange among people seeking common aims, uniting them to go beyond their separate interests in pursuit of higher goals” (p. 198). Specifically tied to dual language programs, Cummins (2000) related the transformative power of promoting and supporting a culture of bilingualism to overcome the dominant language culture and negative connotations of power that it inherently implies.

Overwhelmingly, researchers support the claim that principals are the most critical factor in the success of a school (Dufour, 2011; Fullan, 2005, 2007; Hall, 2006). In their book on strategies that help improve student achievement, McLaughlin and Talbert (2006) state, “Principals are in a key strategic position to promote or inhibit the development of a teacher learning community in their school...School administrators set the stage and conditions for starting and sustaining the community development process”

(p. 56). Such is the charge for administrators as it applies to setting a stage for starting and sustaining a dual language program within a community.

### **Implementation Strands**

A high quality program begins with a solid plan for implementation that addresses six key strands: curriculum and instruction, assessment, professional development, human and financial resources, program structure, and family and community. A curriculum that is structured addresses the standards set by the state curriculum and is geared toward both Spanish and English instruction that includes both languages in its approach to the learning targets and objectives. The ultimate goal for such a curriculum is biliteracy and bilingualism for all students in the program, and its mission is to support students in achieving that goal. Additionally, with respect to the curriculum, adherence to the state standards helps to ensure that students are instructed in areas that will increase literacy and critical thinking as well as address skills required to be mastered on the state mandated assessments. The core content areas should include focus on second language acquisition for both languages and be vertically and horizontally aligned. As previously stated, it is imperative that teachers meet regularly to have the professional planning and collaboration time to achieve vertical and horizontal alignment. Consequently, teachers need carefully planned lessons and thoughtfully crafted approaches to instruction. A team approach to planning and a commitment to collaboration with regard to student needs help in these situations. Therefore, principals who set expectations for team planning and who monitor the process and product of lesson planning will provide support to the teachers.

Dedication to the program on both the part of the teacher and student is required to sustain active participation even in the face of challenges and obstacles. A commitment to supporting struggling students through acceleration, remediation and intervention communicates the belief that students who enter the program will be able to continue in it with success. Administrators who help teachers understand the importance of this frame, and the importance of maintaining fidelity to the dual language program, will improve the teaching and learning that occurs within a dual language program.

Gauging the success of a program with specific regard to student learning requires both informal and formal assessment. Effective administrators understand the cyclical process of implementation, monitoring, assessing and revising. Program evaluation with regard to each of the seven strands can provide valuable data and feedback to the administrator. Additionally, the analysis of student assessment results on both standardized and norm referenced tests can add to the collective data set needed to determine strengths, areas for improvement and next steps.

Dual language pedagogy and instructional philosophy requires thorough, on-going, and systematic professional development. Teachers need effective and appropriate methods of instructional practice to support ELLs in language and literacy. It behooves leaders to place emphasis upon the time, structure, source of training and continuing support for teachers and staff when planning and organizing teacher professional development. Whether it is provided by consultants, on or off site, through site visits or book study, professional development should address best and next practices in language and literacy through dual language pedagogy as well as standards-based teaching that

targets critical thinking and high standards for all students. Substantial support and resources are essential for a quality dual language program.

The effective development, implementation and growth of an effective program calls upon district leaders to consider the human resources needed to coordinate, oversee and execute a dual language program. Furthermore, hiring is an essential aspect and key practice necessary to any district and campus' success with students. This is especially challenging when the district must aim to hire teachers who are highly competent in their own bilingualism. The effectiveness of a teacher is directly correlated with student success (Darling-Hammond, 2000). A strong teacher with highly effective practices and pedagogical expertise will impact student achievement at high levels and a marginal or ineffective teacher will be detrimental to the achievement of students. An obligatory facet of effective dual language programs is that teachers have additional characteristics that must be considered when recruiting and hiring (Cloud et al. 2000).

Lindholm-Leary (2001) suggests that effective teachers not only have the necessary certifications but are reflective of their practices. Actively seeking professional development in best practices, valuing the participation and inclusion of both language communities, and delivering multicultural instruction through an integrated approach are attributes possessed by this type of effective dual language teacher. Of particular importance is also possessing a deep understanding of bilingual theory and second language development and having native or native-like proficiency in the languages they teach. As stated previously, it takes up to six years for an individual to become competent in a second language, and this is no different for adults. Teachers of dual language programs are expected to provide strong instruction in two languages, one of

which will not be the teacher's own first language. Some teachers lack the experience with the environment they are responsible for providing. Moreover, their own fluency varies and leads to them operating primarily in their dominant language, which is ultimately limited to a student's bilingual experience and individual language development. A native English speaker may have acquired Spanish through their own schooling and studying and still be weak in the language. Conversely, a native Spanish speaking teacher who has acquired English speaking and reading skills may still be lacking in some areas of the language. A comfort level with one or the other as a first language may manifest in the teacher using the native language more often instead of adhering to the instructional model requirements of dual language instruction.

In some models, for instance, schools choose to hire teachers who share responsibility for instruction – that is, one in English and another in Spanish – between whom students alternate days of instruction. While this addresses the issue of teacher fluency and bilingualism, it presents a different challenge insuring that individual student struggles are recognized. An empathetic view of how a second language learner struggles to communicate is necessary in order to understand what a student is experiencing within the classroom (Freeman, 2005). However, care must be given not to overcompensate for the learner by giving an immediate translation. Concurrent translations by the teacher who notices a student struggling to understand, while tempting, is not an effective approach for the ELL either (Krashen, 1996). When a teacher rescues a student by immediately translating what was said, the student is more likely to hear only the language he understands and ignore the second language. This edifies the importance of carefully planned lessons and thoughtfully crafted approaches

to instruction. Therefore, principals who carefully select and hire teachers who are qualified on several levels including proficiency in the language of instruction will position the program and students for success.

Comparable resources in English and Spanish are areas requiring financial resources by the district. Regardless of how a campus decides to team teachers (either a team of two monolingual teachers or one teacher who instructs in two languages), the planning process will lean heavily on knowledge of the curriculum and resources. In any instance, this is a challenge all teachers face; yet, it is especially daunting when it comes to bilingual resources and doubly so at the secondary levels. Collaborative teachers and administrators find resources that will provide tools for instruction in both languages and content that builds logically (both horizontally and vertically) through the grade levels. Additionally, concepts must be taught over time that extends beyond one lesson. In other words, if a student is presented with math vocabulary that deals with shapes, the instruction should include multiple and various opportunities for the student to read, share and write about the concepts over an extended period of time (Pally, 2000). Finding resources to meet these particular needs will require a commitment of funds as well as time to allow teachers to collaborate and plan.

Districts must provide an articulated dual language program that is accessible to all students and one that includes explicit expectations of fidelity to the design model. As program models vary, as does the scheduling of a dual language program. Two specific models were explained earlier in the chapter – namely, the 90/10 model and the 50/50 model. The main differences between these two types are the structure of what content areas are taught in English and Spanish, how often and when. However, each

approach maintains the goal of biliteracy and bilingualism in a late release timeframe. Ultimately, the school administrator must select the model that best fits the needs of her or his students and school community, which also entails the consideration of several factors, including teacher recruitment and training, master scheduling, and student enrollment.

The benefits of a dual language program must be communicated to all stakeholders, including parents and the community in order to promote the academic and cultural value of the program. With this in mind, district-level committees can include district staff, parents and community members, and can serve as task forces or steering committees to communicate the purpose and goals for students in the program. Additionally, the implementation of district-wide support systems for parents and families should also include information related to program protocols, pathways for progression in the program, and opportunities for parent education.

Flexible, transformative and balanced leadership ensures that instructional and cultural considerations are made to meet the needs of all populations of students within a learning community. Thus, school leaders who understand, internalize and clearly communicate the mission and vision of a dual language program are poised to cohesively approach these six areas so that all students achieve the intended goal of full bilingualism, biliteracy and multicultural understanding. Subsequently, this ultimate objective also aims at two broader intentions: (a) to effectively close the achievement gap for Hispanic students, but (b) to potentially affect the quality of their future.

## **Future Research**

Over the course of this study, the review and analysis of data spurred more questions that extended beyond the scope of the presented research question but that are, nonetheless, significant areas to be further explored. In particular, four distinct areas are suggested for future study and exploration.

First, as dual language programs appear to gain more support and popularity as a preferred method for native Spanish speaking ELLs, attention can be given to the structures and methods that best support the program in a campus. With research that substantiates the connection between language development and cognitive development, further exploration into how leaders encourage and promote strategies that scaffold developmental language instruction in classrooms can serve to better sustain programs.

Secondly, the recruitment and retention of qualified bilingual and biliterate teachers can be a daunting task for administrators. Yet, it is crucial that a teacher in a dual language program be able to deliver pedagogically sound instruction in two languages. Hence, research into the traditional and non-traditional paths for individuals who are hired for these positions as well as their effectiveness once in a classroom may be of great use.

Thirdly, the importance of a culture within a multicultural community that embraces different perspectives and values diversity is paramount to establishing an environment where all students and families are celebrated and edified. Research that explores how students and adults perceive cultural differences within the classroom and school community can help educators understand how to expand their work with students.



And, finally, the benefits of a dual language program do not have to end with the transition from elementary to middle and high school. Although the formative years spent in elementary focus heavily on initial development of bilingualism and biliteracy, students need to continue to receive challenging and engaging programming that extends their cognitive development in both languages through a secondary dual language program. Research on the success rates of students in advanced level courses and Advance Placement tests can be of use in determining the effects of a program that extends beyond initial language development.

### **Final Thoughts**

From the outset of this study, the topic of dual language instruction is intriguing, particularly for the educator who works and serves within a diverse and multicultural educational environment. While some educators have the pleasure of working with students and families who are non-English speakers or early ELLs, many of those they serve represent many different languages besides Spanish. These young children come in doe-eyed and although they are at first silent, one can only imagine the chatter happening in their wondering brains. Even basic communication in English is a hurdle and understandably, both student and teacher work hard to meet in the middle.

For these students, the classroom is new culturally and linguistically and assimilation begins the instant they arrive. Through ESL instructional approaches teachers do their very best to embrace and teach the whole child, while also trying to meet the expectations of the state for English language proficiency in three short years – a daunting task to say the least. This study of dual language programs grew first through a researcher’s desire to understand how to better serve these English language learners,

and then turned into a wish for a duality of instruction that this research revealed as a premier model.

Dual language programs have begun to grow in popularity over the last decade as more are implemented and showing success that exceeds all other models of bilingual education. Yet, not without its critics still, this approach enjoys slightly more acceptance than other models, perhaps because of its perception of also being an enrichment program for native English speakers. Nevertheless, implementing and sustaining a program calls for a leadership that can be transformative as changes in instructional methods and cultural understandings must be purposeful as well as inclusive.

Through the findings of this research, it is intended that leaders who serve campuses with linguistically diverse students gain more insight into the roles leaders serve in establishing the conditions for all students to excel. More specifically, the benefits of dual language programming for ELLs present opportunities for leaders to promote collaboration, trust and multicultural understandings that students need to thrive in an environment that values bilingualism and biliteracy. The successful future of a historically underperforming group – that is, Hispanic students – stands in the horizon if only the educational leaders charged with their care will continue to support and lift them up as treasures in a multicultural society.

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