

**POSSIBLE HERITAGE LANGUAGE LOSS IN HISPANIC STUDENTS
ENROLLED IN ENGLISH AS A SECOND LANGUAGE PROGRAMS OR IN
TRANSITIONAL BILINGUAL EDUCATION PROGRAMS**

A Dissertation

by

MARIAGRAZIA MARZANO SHEFFIELD

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2007

Major Subject: Educational Psychology

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Approved by:

Chair of Committee, Richard Parker
Committee Members, Rafael Lara-Alecio
Linda Skrla
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ABSTRACT

Possible Heritage Language Loss in Hispanic Students Enrolled in English as a Second Language Programs or in Transitional Bilingual Education Programs. (May 2007)

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The present study investigated the possibility of heritage language loss in twenty students of Hispanic origin, selected from six second-grade classrooms in one elementary school of a large district in the Dallas-Fort Worth area. Ten students were enrolled in Transitional Bilingual Education (TBE) classes and ten students were enrolled in English as a Second Language (ESL) classes, during the academic year 2004-2005.

Oral Reading Fluency (ORF) in English and Spanish were measured over a short-term progress monitoring period (i.e. sixteen consecutive weeks), and over a long-term follow-up period (i.e. nine and twelve months later, respectively). To answer the first research question on the amount and type of growth in English and Spanish ORF demonstrated by the students over time, two main types of analyses were conducted: a) time series analysis of group improvement trends, and b) Analysis of Variance (ANOVA) on individual student slope coefficients.

Results from quantitative analyses revealed that both groups of students improved in English reading over time. However, when considering the long-term progress, the TBE group demonstrated a faster rate of improvement in English reading when compared to the ESL group and also to their own Spanish reading. As for the

ESL group, the students reached a plateau of performance in Spanish, indicating, at best, minimal skills in the heritage language while continuing to progress in English.

To answer the second research question, regarding parents' beliefs on bilingualism and maintenance of the heritage language in their children, semi-structured Parents' Interviews (PI) with open-ended questions were conducted.

Results from qualitative analyses revealed three major themes: Both sets of parents believed in the connection between the native language and increased life opportunities, the TBE parents affirmed the heritage language as symbol of their cultural identity, and the ESL parents acknowledged their children's native language loss.

Findings from this study suggest that students instructed in their native language in the early elementary years appear to have a better chance of maintaining their heritage language over time, when compared to students instructed solely in English.

DEDICATION

To my three children: Sara, Richard and Stephen.

Of all my accomplishments through the years, I consider the privilege of being their
mother the most rewarding.

ACKNOWLEDGMENTS

The present work is the culmination of a literal journey. For five consecutive years, I spent many lonely hours on the road between my house and Texas A&M to attend the classes required by the degree plan. It is also the result of a figurative journey, having invested much time and energy into a process of growth as an educator and a researcher. However, this dissertation would not have materialized without the continuous support of a nucleus of people, whom I greatly admire and respect.

First of all, I would like to acknowledge Dr. Richard Parker, dissertation committee chair. I acknowledge his valuable assistance in the process of selecting statistical analyses, interpreting results and formulating graphs. He taught me so much through the years! Dr. Parker demonstrates high standards as a scholar and a professor and expects the same degree of quality from students.

I would like to express my gratitude to Dr. Rafael Lara, whose leadership in the field of Bilingual Education is well-recognized in Texas. Special thanks go to Dr. Lara who arranged for me to be trained in the use of the Transitional Bilingual Observation Protocol (TBOP).

I would like to acknowledge Dr. Linda Skrla and her contribution to this work. Dr. Skrla's suggestions offered during the dissertation proposal exam added strength to the qualitative data collection and analyses. I admire her commitment to research as well as her focus on equity in education for all students.

I would also like to acknowledge Dr. Luana Zellner and her contribution to the qualitative part of the study. I am also indebted to Dr. Zellner professionally: Her

mentoring skills prepared me to successfully overcome the multiple challenges encountered as an administrator of a large urban district.

Lastly, but certainly not least, I would like to express my deepest respects to the memory of my father, who instilled in me the love for *academia*. My gratitude also goes to my mother for exemplifying a servant spirit with anyone who crosses her path, and to nana and pappy for always believing that I could finish.

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CHAPTER I

INTRODUCTION

Heritage Language and Subtractive Bilingualism

The ability to speak and be literate in more than one language has been considered a valuable skill throughout the centuries. In recent years, in the United States, more than 70 government agencies have reported the need to employ individuals with foreign language expertise in the social, economic, diplomatic, and geopolitical fields (Brecht & Ingold, 2002; Brecht & Rivers, 2000). “Language professionals and policy makers are increasingly aware of the potential value of heritage languages as a resource to the nation” (Heritage Language Research Conference Report, 2000, p. 335). Yet, there is a growing concern among those in the second language research and educational communities that the United States is losing the valuable resource of a multilingual population (Yamauchi, Ceppi & Lau-Smith, 2000).

In describing the trajectory of the bilingual experience for many ethnic groups residing in this country, researchers (i.e. linguists, sociologists, demographers, etc.) often cite *subtractive bilingualism* as the most common pattern of language development (Portes & Rumbaut, 1996). The expression *subtractive bilingualism* has been used by linguistics, researchers and educators alike to describe the process by which a person who is bilingual or has the potential of becoming bilingual reverts to

This dissertation follows the style of *Bilingual Research Journal*.

the use of just one language, usually the majority language, at the expense of the heritage language (Kaufman & Aronoff, 1991; Lambert, 1975, 1977, 1981; Pan & Berko-Gleason, 1986).

Language loss is “the weakening of an individual’s first language because of a concentrated focus on the development of L2 (English)” (Schiff-Myers, 1992, p.28).

The loss can manifest itself in diminished oral language proficiency and/or in diminished literacy skills (i.e. ability to read and write the heritage language).

Statement of Need

Subtractive Schooling

The United States is home to more than 300 different idioms; however, the past two decades have been defined as the “dismissive period” (Ovando, 2003, p.12), due to a political resurgence of the English only movement, which emphasizes the importance of standard English above any other language spoken in the country. It is not uncommon to encounter among the population of the United States a pervasive sentiment that affirms standard English as the undisputed hegemonic language of the country (Reyes, 2001). According to Portes and Hao (1998), “The United States is a veritable cemetery of foreign languages, in that knowledge of the mother tongue... has rarely lasted past the third generation” (p. 269).

Thus, bilingualism can easily be defined as nothing more than “a temporary intergenerational bridge between monolingualisms” (Pease-Alvarez, 2002, p.115). This phenomenon is common even in well-established ethnic groups (i.e. Hispanics and Asians) (Smith, 2001; Tse, 2001). Although the Hispanic populace is currently the

largest minority group in the United States, representing approximately 12 percent of the population in the nation (León, 2003), and continues to grow at a rapid pace (Villa, 2000), “the proportion of children...who remain fluent in their native language is shockingly low and steadily decreasing” (Worthy, Rodriguez-Galindo, Assaf, Martinez & Cuero, 2003, p. 277). “Research on language use among immigrant populations suggests a shift from the minority language to the majority language” (Anderson, 1999, p. 319). Nettle and Romaine (2000, p. 194) argue that “Spanish is fast approaching a two-generation pattern shift, rather than the three-generation model typical of immigrant groups in the past”.

Thus, the question has emerged as to the possibility of Spanish becoming “scarcely viable in the U. S. over the long term” (Smith, 2001, p. 254). “People from different cultural and linguistic backgrounds have always come together to season the American melting pot, yet we have nevertheless held monolingualism in English as the golden standard of U.S. citizenship, often at the expense of heritage languages” (Cutshall, 2005, p. 20). Spanish-English bilingualism is increasingly becoming a transitory state for children of Spanish-speaking homes in the United States (Fillmore, 2000; Smith, 2001). “While the shift in dominance from the immigrants’ native language to the language of the host environment can take several generations within the community as a group, loss of L1 proficiency among children often occurs within a single generation” (Kaufman, 1998, p. 409).

Any amount of atrophy and/or loss of the heritage language is a threat to the identity of an individual and a serious attack to the very essence of his or her culture and community values (Hinton, 1999; Moses, 2000; Zentella, 1997). Therefore,

linguists search for instructional programs that might covertly and unintentionally contribute to students' diminished use of their heritage language. According to Valenzuela (1999), pedagogy that fosters the development of English only, at the expenses of other languages, can be categorized as *subtractive schooling*. Garcia (1995) argues that in educating Second Language Learners (SLLs) it is not uncommon for a program to gauge its success by how rapidly the students give up their first language to shift to English. It is not uncommon for SLLs to be exited from bilingual programs in the third grade, after demonstrating oral proficiency in English as well as mastery in reading and writing of the English language. "The main goal of bilingual programs is the acquisition of English skills by language-minority children so that they can succeed in mainstream, English-only classrooms" (Lara-Alecio, Galloway, Irby, Rodriguez, Gómez, 2004, p. 27).

Achievement Gap

However, while the goal of bilingual programs is to ensure that SLLs are successful in the mainstream English-only classrooms, a disparity in academic performance still exists between the subgroup of students of Hispanic origins and the subgroup of students of Anglo-Saxon origins. Klingner, Artiles and Méndez Barletta (2006) state: "ELLs tend to exhibit lower academic achievement (particularly in literacy) than their non-ELLs peers" (p. 108).

In the past decade, the achievement gap of Spanish-speaking students in the United States, especially in the area of reading, has been well-documented (Fernandez, Pearson, Umbel, Oiler & Molinet-Molina, 1992; Fitzgerald, 1995; Garcia, 2000; Gunn, Smolkowski, Biglan & Black, 2002; López & Tashakkori, 2004; Snow, Burns &

Griffin, 1998; Valencia, 1991). In the same decade, the efficacy of educational programs, implemented for SLLs across the nation, has been seriously questioned. Researchers have begun to analyze whether a relationship exists between the achievement gap displayed by Hispanic students and the different types of programs in which students are enrolled. In addition, it is possible that some programs, by their very nature, make it easier for students to lose their native oral language, which is necessary for the development of literacy and reading skills.

Need for Additional Empirical Research

In order to accommodate the instructional needs of SLLs, public school agencies in the United States have utilized programs such as English as a Second Language (ESL) and Transitional Bilingual Education (TBE) as the most common models of service to minority students. Additional empirical research is necessary to conclude whether such specific programs, while well-meaning, might support an educational structure that fosters subtractive bilingualism, acerbates reading difficulties and widens the achievement gap between minority and majority students.

Statement of Purpose

The purpose of this study was twofold. First, the study sought to determine the potential impact of school programs on gains and losses of reading skills in English (Standard Language) and Spanish (Heritage Language) as measured by Oral Reading Fluency (ORF) in N=20 Hispanic second-grade students, enrolled in TBE or ESL classrooms. Students were initially matched for similar reading ability across these two instructional settings. ORF was measured in English and Spanish over a school

semester to obtain short-term progress monitoring data and again at nine and at twelve months to collect long-term follow-up progress monitoring data.

The second purpose of the study was to gather information on the parents' beliefs and ideas on bilingualism and maintenance of the heritage language in their children.

Research Questions

The present study addressed the following research questions:

- 1) What amount and type of growth in ORF in English and Spanish were demonstrated over time by ten second-grade students, enrolled in a TBE program, and by ten second-grade students, enrolled in an ESL program?
- 2) What prominent themes and concerns emerged from informal, semi-structured interviews with the students' parents regarding the values of bilingualism and potential language loss in their children?

Operational Definitions

Oral Reading Fluency (ORF)

Oral Reading Fluency (ORF) is calculated as the words read correctly per minute. It is the ability to read connected text with accuracy and speed (i.e. the ability to translate letters into sounds, and sounds into words effortlessly and automatically). The fluent reader is one whose decoding processes are automatic and rapid, requiring no conscious attention in cracking the grapheme-phoneme code (Fuchs, Fuchs, Hosp & Jenkins, 2001; Juel, 1988).

Curriculum Based Measurement (CBM)

Curriculum Based Measurement (CBM) consists of “a series of informal mini achievement tests”(Scott & Weisharr, 2003, p. 153), often developed by teachers, with the purpose of monitoring, over a pre-determined period of time, the students’ educational progress and performance toward a long-term goal. CBM includes ORF as a common procedure of measuring progress in reading. However, CBM can be used to measure basic skills in all areas of students’ curricula. CBM includes “standard simple, short-duration fluency measures of reading, spelling, written expression, and mathematics computation” (Shinn & Bamonto, 1998, p. 1).

Heritage Language (HL)

A heritage language is the speech and/or idiom associated with a person’s specific ethnic group and cultural background. It is the language mostly spoken by his or her ancestors (Cho, 2000; Valdés, 2000). In this particular study, the heritage language is Spanish.

Standard Language (SL)

A standard language is the established speech of a nation, formally taught in *academia* and also used in commerce. In this particular study, the standard language is English.

Transitional Bilingual Education (TBE)

Transitional Bilingual Education (TBE) is a common model of Bilingual Education, available most often at the elementary grades. Although many variations exist, the major purpose of TBE is to gradually transition English-Language Learners (ELLs) to academic instruction in English. “The transitional model serves as a bridge

for students” (Alanis, 2000, p. 228). The transition to English from the home language is usually completed by the third grade (early exit); however, some districts extend it till the fifth or sixth grade (late exit) (August & Hakuta, 1998). Students who are enrolled in TBE programs are gradually mainstreamed into English-speaking general education classrooms.

English as a Second Language (ESL)

English as a Second Language (ESL) is also a model of Bilingual Education. In this program, academic instruction is provided to SLLs exclusively in English. Although content areas and concepts are being presented in the target language (i.e. English), teachers often use educational strategies to facilitate comprehension in the students.

Organization of the Dissertation

Chapter I outlines the purpose of the study and the need for additional empirical research to determine whether common models of Bilingual Education, such as TBE and ESL, support an educational structure which fosters *subtractive bilingualism* in elementary students of Hispanic origin. Chapter I presents the two specific research questions which drove the entire project. The first research question sought to determine the amount and type of growth in ORF in English and Spanish obtained over time by ten second-grade students enrolled in TBE classrooms and by ten second-grade students enrolled in ESL classes. The second research question sought to determine the prominent ideas and concerns that would emerge from semi-

structured interviews with the students' parents, regarding the value of bilingualism and/or the possibility of language loss in their children.

Chapter II summarizes the position of the existing literature regarding the status of English and Spanish in our global society and the stages of language loss. This chapter describes the connection between oral language and literacy skills and reports the findings of five studies, all measuring reading in English and Spanish in elementary Hispanic students enrolled in traditional models of Bilingual Education.

Chapter III introduces the study design which includes quantitative as well as qualitative research methods. Quantitative methods were used to answer the first research question and qualitative methods were used to answer the second research question. Chapter III also describes the context, participants, instruments and procedures used during the entire dissertation project.

Chapter IV presents the descriptive results of the study's preliminary assessments. In addition, it provides a description of the results of the main quantitative analyses as well as the results from the qualitative data collection and analyses.

Chapter V presents a discussion of the findings delineated in Chapter IV. It also reports implications for future research and possible recommendations for school districts still searching for the best program type for the education of ELLs.

CHAPTER II

LITERATURE REVIEW

Historical Perspective on Foreign Languages in the United States

When compared to other countries, the history of the United States has displayed throughout the years a “chronic case of *xenoglossophobia* - the fear of foreign languages” argues Cutshall (2005, p. 20). In the United States, “only about 33 percent of students in grades 7-12 study a foreign language” (Wilcox, 2006, p.3). Contrary to the practice of the rest of the industrialized world, learning a foreign language is a low priority in American secondary as well as elementary schools (Haurwitz, 2006). Although most Americans are very comfortable with being monolingual Anglophones, the 20th century has witnessed a continuous political debate among educators regarding the use of English only or English plus the heritage language as the medium of academic instruction in American schools. Thomas and Collier (2003) state “The debate about whether ‘bilingual’ or ‘English only’ instruction is better for English learners has been long and rancorous” (p. 62).

Beginning with the political winds that swept the nation after World War I, a widespread nationalistic sentiment has permeated the United States through the years. This sentiment has associated patriotism and allegiance to the country with the promotion of English only in schools and in the nation (Crawford, 1999). Title VII of the Elementary and Secondary Act, also called the Bilingual Education Act, ratified into law Bilingual Education in 1968 (Bentz & Pavri, 2000). Bilingual Education allowed students whose primary language was one other than English to receive

academic instruction in their native language, within the public school. Subsequent landmark law cases, i.e. *Lau vs. Nichols* in 1974 and *Castañeda vs. Pickard* in 1981, further clarified the right of these students to be instructed in their primary language. Notwithstanding these legal developments, the United States has demonstrated a general apathy toward learning foreign languages (Clifford, 2002), and toward encouraging the maintenance of the immigrants' heritage language.

Historically, federal education policy, beginning in the 1870s and continuing for a century, has emphasized assimilation (Lipka, 2002) as the philosophy of integration of various ethnic groups into the mainstream American society. In public education, the acquisition of English as the academic language and the consequent abandonment of the heritage language on the part of the student (Benally & Viri, 2005) have been considered an essential part of the assimilation process. The off-reservation federal boarding schools, which emerged at the end of the 19th century in Pennsylvania, Oregon, Kansas and Oklahoma, had the purpose of ensuring that Native American children acquired English as well as the value-system of the Anglo culture (Juneau, 2001). "Throughout the colonization of the Americas, the goal of schooling for America's indigenous peoples was forced assimilation" (Reyhner, 2005, p.22). Following the Civil War, the U.S. government aggressively pursued a minority deculturation program, which included "replacing the use of native languages with English and destroying Indian customs" (Spring, 1994, p. 18). In the federal off-reservation residential schools, children were prohibited from using their mother tongue and often punished for doing so (Norgren & Nanda, 1988).

For over a century, government policies supported the idea that languages other than English were representative of a sub-standard social class of individuals. Anyone who spoke a language other than English was expected to change his or her native idiom and customs in order to be integrated and accepted into the mainstream culture (Hock, 1991; Reyhner, 1999). The government policies applied to all ethnic communities, including large and well-established groups. According to Lessow-Hurley (1996), “the use of Spanish in the United States has traditionally provoked repressive reactions”(p.133), and “there have been rigorous and ongoing attempts to suppress the use of Spanish [even] in schools” (p.134).

The movement toward enforced monolingualism, the imposition of a single dominant language, is tantamount to the subjugation of a people. If we wanted to destroy a culture, we would sever its language roots. If we wanted to subjugate a rising generation, we would separate children from their native language. Language is the life of a people. (Tinajero, 2005, p. 20)

Globalization and the English Language

Furthermore, the contemporary globalization process is contributing to the rapid eradication of cultural walls and differences, including linguistic differences, making Standard English, now more than ever, the hegemonic language in the world, the language of economic power, prestige and commerce (Abley, 2004). “English is the high-status language; it is the societal language” (Fillmore, 1991, p. 342). English is the prime example of the few high-prestige languages in the world, “which dominate the media, the marketplace, school systems and bureaucracies” (Abley, 2004, p. 4).

International and transnational exchanges “are facilitated by the Internet, airline travel, wireless networks, migration” (Starke-Meyerring, 2005, p. 471), as well as the common use of the English language (Harris, 2003). English is becoming, *de facto*, the official “lingua franca” of the cultural homogenization phenomenon, occurring in our contemporary society (Linton, 2004).

Although the English language is in a place of global recognition, Norton (2000) argues that only the heritage language can express the identity of the speakers as members of their specific community. Crystal (2000) states that the heritage language “is inward-looking...fostering family ties, maintaining social relationships, preserving historical links, giving people a sense of their pedigree” (p. 29). Yano (2001) argues also that

The global spread of such a powerful and convenient global language is driving minor languages to extinction, thus depriving us of the privilege to understand different beliefs, values and views, which help us to develop insight into the human mind and spirit... (p.120)

Stages of Language Loss

It is estimated that by the end of the 21st century, more than half of the approximately 6,800 languages presently spoken in the world will be extinct (Janse & Tol, 2003), and that only 600 of the languages spoken today appear to be safe from the threat of disappearance and obsolescence (Abley, 2004). Hawkins (2005) reports that the languages spoken in the world today already represent half of those spoken 500 years ago.

Based on his study of minority languages worldwide, Fishman (1991) postulates a continuum of eight stages of language loss. In the continuum, stage one is the level at which a language is present in written and oral form in higher government services, media and institutions of learning. Stage eight is the level at which a language is found exclusively in oral form and spoken by a few isolated elderly members. When considering the status of an idiom, Krauss (1992) extends the boundaries even further by recognizing five classifications, which range from viable languages, spoken by a very large population base of over 100 million people, to extinct languages, which have witnessed the loss of the last few fluent speakers. Socio-linguists like Krauss (1992) and Wurm (1998) emphasize the precarious state of the middle-level languages, which are classified as endangered and moribund, and whose survival is a possibility only with the mobilization of community supports, increased public awareness, and the cooperation of educational establishments.

Status of the Spanish Language

Spanish is the most popular romance language in existence today, spoken by more than 350 million people in the globe. Due to the size of the language group, it has been hypothesized that it is not in danger of becoming globally obsolete or of losing its vitality, (Grenoble & Whaley, 1998). “Spanish is here to stay” (p. 31) Zolberg and Long (1999) affirm. Notwithstanding the fact that the global status of Spanish is secure, evidence exists in the literature for linguistic shifts in societies and in communities at large (Weinreich, 1970). Evidence also exists in the literature for language shifts occurring within the individual person (Merino, 1983; Pease-Alvarez &

Winsler, 1994). Wooden and Hurley (1992) argue that it is possible for a person, or a small group of people, to lose a particular language, although that language is still being spoken in the society and in the community where they live.

In the United States, studies have been conducted to explore the issue of language attrition and or language loss in first and second generation Hispanics. Linguists and educational researchers have investigated the possible impact that heritage language loss could have on the individual's cultural identity, community connections (Nieto, 1999), family interactions (Fillmore, 1991; Harlan, 1991; Hudson-Edwards & Bills, 1982; Veltman, 1988) and on his or her long-term ability to be literate in the native language.

Heritage Language and Literacy

Connection between Oral Language and Literacy

In the past two decades, researchers in second language acquisition have concentrated their efforts in studying Second Language Learners' (SLLs) meta-cognitive processes of transition from the Heritage Language (HL) to the Standard Language (SL), especially in regard to oral and literacy skills (De Villar, 1994; McLaughlin, 1985; Romaine, 1995; Ruiz, 1988). Although skilled reading appears effortless, learning to read with speed and accuracy, with a level of automaticity that ensures vocabulary acquisition and content comprehension, is a very complex and elaborate task (Gunn, Biglan, Smolkowski & Ary, 2000). In the continuum of skills necessary to develop competent young readers and writers, oral language development

is seen as an indispensable prerequisite, a condition *sine qua* satisfactory academic performance, in the areas of reading and writing, is difficult to achieve.

Propensity toward Majority Language

For SLLs, the individual student's linguistic ability has surfaced as an important factor in the development of adequate reading skills (Carr, Brown, Vavrus & Evans, 1990; Cullinan, 1993; Heller, 1995; Hudelson, 1994; Philips, 1972; Saiegh-Hadad, 2003; Wollman-Bonilla, 1993). In fact, measures of oral language "have been found to independently predict reading achievement" (Miller, Heilmann, Nockerts, Iglesias, Fabiano, Francis, 2006, p. 30). When Hispanic students do not develop the HL orally, obtaining the level of academic Spanish necessary for fluency and competence in reading and writing becomes almost an insurmountable task. "Even in instances where there is a conscious attempt by parents to foster the L1, as in enrolling the children in special programs where the home language is taught, diminished abilities in the language have been noted" (Anderson, 1999, p. 320). Due to the connection between oral language development and literacy, it is not unusual to find students who, having lost their ability to speak the HL, also display diminished reading skills in the HL. In addition, Kaufman (1998) argues that children possess an "integrative orientation that automatically propels them toward the majority language" (p. 409); thus, making the danger of losing oral proficiency and literacy in the native language even more possible.

Review of Previous Findings on the Reading Development of SLLs

The literature is prolific with studies reporting the various educational outcomes of SLLs enrolled in traditional models of Bilingual Education (BE). “The debate on Bilingual Education produced scores of studies” Brisk (1999, p. 3) affirms. The majority of these studies purported to evaluate the effectiveness of BE programs in general. The studies were often supported by and funded through the Department of Education (Baker & de Kanter, 1981, 1983; Willig, 1985; Ramirez, 1992; Rossell & Baker, 1996; Thomas & Collier, 1997). However, the studies reported in this work have a much narrower focus. Their specific focus is the efficacy of models of BE (i.e. TBE, ESL and Two-Way Immersion [TWI] or Dual Language [DL]), as they each relate to the reading performance in English and/or Spanish of Hispanic elementary-age students. In addition, to keep the focus relevant to this research project, three of the five studies were conducted in the state of Texas.

The Friedenbergs Study (1984)

The participants in this study were approximately 300 Spanish-speaking third and fourth graders, selected from 17 elementary schools in Dade County, Florida. Of the participants, “249 received reading instruction in both English and Spanish, ...while 53 received reading instruction only in English” (p. 122). The purpose of this study was to investigate how bilingual children, who were simultaneously instructed in the native language (Spanish) and also the target language (English), would perform on the reading portion of the Stanford Achievement Test (SAT) when compared to children who were instructed and learned to read only in English. The scores yielded by the reading part of the SAT in English for the two groups were analyzed through

Analysis of Variance (ANOVA). Results indicated that the elementary students who were receiving instruction in their native language (Spanish) “scored higher in English reading than those who did not” (p. 123). This study was one of the first ones to suggest that instruction through the medium of L1 does not appear to slow down the reading progress of L2 for Spanish-speaking students; it actually seems to produce “better readers in the second language” (p. 123).

The López Study (2001)

The participants in this study were 97 SLLs, enrolled in first grade, and receiving Spanish reading instruction in a TBE program, as well as 57 SLLs, enrolled in first grade also, and receiving English reading instruction in an ESL program. The students were selected from seven TBE classrooms and from five ESL classrooms in four schools in a large urban district in Arizona. The purpose of this study was to examine the role that phonological awareness and other pre-reading skills (i.e. oral language, letter knowledge and letter-sound correspondence) would have in the development of reading in both languages for SLLs.

The children were administered three sets of measures in English and Spanish: a) experimental measures of early literacy, b) experimental measures of oral language skills, and c) criterion measures of language skills and reading achievement. The experimental measures of early literacy included Phonemic Segmentation Fluency (PSF), Letter Naming Fluency (LNF), and Nonsense Word Fluency (NWF). These tasks of pre-reading skills were presented to the students in the language of instruction. The experimental measures of oral language skills included Picture Description Fluency (PDF) and Word Meaning Fluency (WMF) and were administered in English

and Spanish to all the participants. In regard to the criterion measure of language skills, the Language Assessment Scale-Oral (LAS-O) was administered in English and Spanish to all the students. In regard to the measures of reading achievement, the ESL students were administered Curriculum-Based Measures (CBM) and the Letter-Word Identification (LWI) subtest of the Woodcock Johnson-Revised (WJ-R) in English, while the TBE students were administered CBM and the LWI subtest of the Woodcock-Muñoz Achievement Test in Spanish.

Results from this study indicate that, overall, both groups of students, the ones enrolled in the TBE program as well as the ones enrolled in the ESL program, “improved their pre-reading and reading skills over time” (p. 92). The ESL sample achieved higher on the PSF and LNF measures, while the TBE sample achieved higher on the NWF measure. In oral language, the TBE group performed higher in Spanish, while the ESL group performed higher in English, as one would expect, due to the influence of the language of instruction on the students. However, both samples demonstrated growth in English and Spanish oral language proficiency over time, although not at a rapid pace.

In examining the contribution of phonological awareness (i.e. the independent variable) to reading acquisition in English and Spanish (i.e. the dependent variable), results demonstrated a greater predictive power for students in the TBE group learning to read in Spanish than for the students in the ESL group learning to read in English. The researcher speculated that the difference in predictive power between the two languages could be attributed to the stability of the Spanish orthography, when compared to the English.

The Quiroga, Lemos-Britton, Mostafapour, Abbott & Berninger Study (2002)

Thirty children, all enrolled in first grade, participated in this study. The students, all Spanish-speaking, were selected from fifteen ESL classrooms in three different districts (urban, suburban and semi rural). During the school day, the participants received English instruction exclusively, including in the content area of reading. The study conducted by Quiroga *et al.* intended to replicate two previous studies, one by Durgunoglu, Nagy & Hancin-Bhatt (1993) and the other by Ciscero and Royer (1995). As in the two previous studies, measures of phonological awareness as well as measures of oral language proficiency in English and Spanish were included. To measure phonological awareness in English and Spanish, the assessment battery consisted of a three-task composite (i.e. Blending Task, Segmenting Task and Matching Task) as well as the Modified Rosner test in each language. To assess oral language proficiency in English and Spanish, the Pre-Language Assessment Scale (Pre-LAS) was administered as well as the Word Identification (WI) and Word Attack (WA) subtests taken respectively from the Woodcock Reading Mastery Test- Revised (WRMT-R) in English and the Prueba de Aprovechamiento-Revisada in Spanish.

Results from the study indicated that the children's oral language scores in Spanish on the Pre-LAS were much higher than the scores in English, as to be expected. However, "the children read significantly better in English, the language of their reading instruction, than in Spanish for Word Identification (WI)... and for Word Attack (WA)" (Quiroga *et al.*, 2002, p. 102). The authors concluded that phonological awareness in L1 (Spanish), just like phonological awareness in L2 (English), was a

good predictor for word reading in L2 also. In addition, higher oral proficiency in L1 did not appear to negatively affect or impede literacy in L2.

The Stewart Study (2003)

Approximately 30 schools were selected for this study. As defined by the Texas Education Agency, some of the schools had been found to have a high passing rate on the state-mandated assessment in reading, while others had been found to have a low passing rate. The purpose of the study was to compare the students' reading outcomes, as measured by the Texas Assessment of Knowledge and Skills (TAKS) reading test, administered in the spring 2003 to third-grade Hispanic students enrolled in three different programs: TBE, ESL and TWI or DL. In addition, the researcher hoped to identify factors that had possibly contributed to the high passing rate in some schools. Based on the students' language of instruction and on the recommendation of the Language Proficiency Assessment Committee (LPAC), students had taken the English or the Spanish version of the test. Only the scores from ELLs who had received consistent instruction in a language (English or Spanish) since kindergarten and had been enrolled in a consistent program were analyzed. A comparison of the three programs followed. Though the difference was not statistically significant, findings from this study reported that the students enrolled in the TWI programs passed TAKS reading at a higher rate than the students enrolled in TBE or ESL models. Thus, in the schools where TWI programs had been implemented, the third graders enrolled in the TWI programs had experienced, overall, a higher passing rate on the state assessment in the area of reading than the third-graders enrolled in schools where only the TBE and/or ESL programs had been implemented. This study lent support to the hypothesis

that elementary-age children from Spanish-speaking homes are capable of developing two languages simultaneously (L1 + L2); thus, diminishing the danger of losing L1.

The Rodriguez, Irby, Brown, Lara-Alecio & Galloway Study (2005)

For this study, 100 Hispanic students were randomly selected from a pool of 450 second-grade students. The children were enrolled in TBE programs and ESL programs in schools located in a suburban area of Houston. Of the 100 children, 50 had participated in a bilingual Montessori program during their pre-kindergarten year and 50 in a traditional TBE program. However, beginning with the kindergarten year, the Montessori-exposed children had continued their education in a traditional TBE program, while the other 50 had continued their education in a traditional ESL program. During the fall semester of their second-grade, the researchers collected the children's Spanish reading achievement scores from the Aprenda, yielded by the students enrolled in the TBE program, and the English reading achievement scores from the Iowa Test of Basic Skills (ITBS), yielded by the students enrolled in the ESL program. Both sets of scores were then analyzed.

Findings from this study indicated that the second-grade students who, after the pre-kindergarten year, had been placed in the TBE classrooms performed significantly higher in English reading than the students who had been placed in the ESL classrooms. While it was true that the students in the TBE program had been exposed to Montessori-influenced instruction during their pre-kindergarten year, future enrollment in the TBE model in kindergarten, first grade and second grade did not seem to impede the students' general progress in reading in L2. Actually, the findings

reported that the students enrolled in the TBE program achieved equally well in both languages, L1 and L2.

Summary of the Studies

The literature related to the education of Hispanic children in general and ELLs in particular recognizes multiple factors that should be taken into consideration when attempting to draw conclusions or to generalize findings. In evaluating the effectiveness of programs for ELLs, a pivotal factor to consider is whether the students in the programs have been served in a consistent instructional model of Bilingual Education throughout their early elementary years (Zehr, 2000).

Almost all the participants in the reported studies were enrolled in one type of program for at least three consecutive years (i.e. kindergarten, first grade and second grade). Although the reported studies had a different design, sample size and instrumentation, all purported to measure the students' performance in reading in Spanish and/or English. They also planned to compare the reading growth and achievement of one subgroup of children (i.e. the ones instructed in Spanish) versus the other subgroup of children (i.e. the ones instructed in English).

The findings from the studies reported the following commonality: Instruction in the native language (L1) does not appear to impede in any way the acquisition of the English language (L2) or the consequent development of literacy skills in L2. The minority language (L1) does not seem to threaten in any way the majority language (L2). In addition, one of the studies lends support to the position that the students' academic performance in reading can actually be higher when children are given the

opportunity in school to simultaneously develop the Standard Language of the nation (English) as well as the Heritage Language of their ethnic origin (Spanish).

Previous studies have affirmed the idea that instructing Hispanic students in the native language does not seem to deter the development of oral language and literacy skills in English. However, previous studies did not address the issue of language development in English and Spanish for first-generation children of immigrant parents. In past years, it was accepted that most first-generation children would speak their parents' language. When compared to second or third-generation children, they were the most likely to maintain the native language in oral and written form. In recent years, there has been a growing concern among linguists and educators that the shift in dominance from the heritage language to the majority language is occurring within one generation. Their concern is not limited to the students' loss of oral proficiency in the native language, but it extends to the students' consequent loss of literacy skills as well.

The existing literature does not provide much light regarding the influence that the majority language could exercise on the maintenance of oral and literacy skills in the native language for first-generation children. Through the present study, an answer will be sought as to the possibility that the influence of the majority language is such that first-generation children shift from Spanish to English within one generation. Through the present study, a comparison will be made between two groups of students, all first-generation children of Spanish-speaking immigrant parents. One group received instruction in Spanish in the TBE program and one group received instruction in English in the ESL program. This study seeks to measure the rate of improvement in

ORF in English and Spanish for each group over time to determine whether traditional models of Bilingual Education, such as TBE or ESL, foster *additive* or *subtractive bilingualism* in first-generation Hispanic children.

CHAPTER III

METHODOLOGY

Context

Independent School District

The present study was conducted in a large district in Texas, located in the Dallas/ Fort Worth metroplex area. According to data gathered from the Academic Excellence Indicator System (AEIS) of the Texas Education Agency (TEA), in the year 2004-2005, the district received an overall rating of “academically acceptable” and featured a total enrollment of 79,576 students. The ethnic representation of the various subgroups was as follows: Hispanics comprised 54.0% of the student population, African Americans 27.2%, Whites 16.9%, Asians 1.7% and Native Americans 0.2%. The district also reported 21,426 Limited English Proficient (LEP) students to TEA.

District’s Policy for LEP Students’ Program Placement

According to information gathered from the district’s Bilingual/ESL Program Manual, the district requires parents to complete a Home Language Survey (HLS) upon enrolling their children in school. When the HLS reports a language other than English as the language spoken in the home, the students are directed to the district’s Student Placement Center (SPC), a centralized location, where the students’ English and home language are assessed by qualified personnel. Hispanic students enrolling in pre-kindergarten through first grade and reporting Spanish as their home language are administered the IDEA/Individual Proficiency Test-Oral (IDEA/IPT-O) in English and

Spanish as the initial assessment. For pre-kindergarten students, scores between A-D on the IPT-O in English indicate a classification of the students as LEP. For kindergarten and for first grade students, scores between A-B and scores between A-D indicate the LEP classification for those students, respectively. LEP students are consequently placed in Transitional Bilingual Education (TBE) classes and/or English as a Second Language (ESL) classes based on the number of the students available to comprise a full class, the availability of bilingual teachers, and the location of the home school.

Elementary School

The study was conducted in one of the eighty elementary schools of the district mentioned above. The school is located in the South West section of the city. According to data gathered from AEIS, in the year 2004-2005, the school received an overall rating of “recognized”, met Adequate Yearly Progress (AYP), and featured a total enrollment of 814 students. The school’s ethnic configuration was predominantly Hispanic (88.4%), with 1.4% African Americans, 6.9% Whites, and 3.3% Asians. The school opened its doors to the first cohort of students in August 2000, following an unprecedented growth of the Hispanic community in the South West part of the city.

Participants

The participants in the study were N=20 students, selected from six second-grade classrooms, during the academic year 2004-2005. All the students, seven girls and thirteen boys, were of Hispanic ethnicity, with Spanish listed in the HLS as the language spoken in the home. Consequently, the selected participants had been

reported to the Public Education Information Management System (PEIMS) of TEA with a code of 01, indicating Spanish as the primary home language. Of the sample selected, sixteen students were born in Tarrant county, Texas, two were born in other states and two in Mexico. They were all first-generation children of immigrant Hispanic parents. All students but one belonged to a traditional, two-parent Hispanic family, with the father assuming the role of the main provider, and the mother being the care-giver for the children and the care-taker for the home.

The rationale for selecting students enrolled in the second-grade was threefold: a) in the educational field, it is commonly accepted that most typical students have already mastered the phonological rules of reading by the end of second-grade and are able to negotiate the grapheme-phoneme code effortlessly; thus, this grade level is conducive to measuring Oral Reading Fluency (ORF); b) most students, who are Second Language Learners (SLLs), by the end of second-grade, have received at least three years of consistent academic instruction in one type of program, and c) this specific district practices early exit from Bilingual Education; thus, drastically reducing the number of students receiving Transitional Bilingual Education (TBE) in the third grade and following grades.

Originally, the participants were selected from a pool of 129 second-graders, who comprised the school's entire student population at that specific grade level. The students were divided in two groups: One ($n_1=10$) was comprised of students instructed in TBE classes; and the other ($n_2=10$) was comprised of students instructed in English as a Second Language (ESL) classes. The participants were selected from six different classrooms, taught by six different teachers: three teachers were bilingual

(fluent in Spanish and English), while the other three were monolingual English-speakers. The students were selected from all six second-grade classrooms to control for the teacher's quality effect: The researcher wanted to ensure that any amount of growth in the students' reading performance could not be connected exclusively to one instructor's teaching ability.

In addition, the six elementary teachers were observed during the instructional time in their respective classrooms on three different occasions to ensure that fidelity to the paradigms of each instructional model was maintained.

Each student from the TBE group was matched with a student from the ESL group. Matching was based on the following criteria: a) similar reading fluency rate in English or Spanish as indicated by scores of Words read Correctly Per Minute (WCPM) obtained during administrations of the Texas Primary Reading Inventory (TPRI) in English and the Tejas Lee in Spanish, and b) similar reading fluency rate in English or Spanish as indicated by WCPM in the first administration of a benchmark test, administered to the students in December 2004, by each individual teacher.

In addition to the students and the teachers, the parents participated in the study. Each family was represented by at least one parent (i.e. six fathers and fourteen mothers) during an informal, semi-structured interview with the researcher, on the values of bilingualism in general and the maintenance of the Heritage Language in particular.

Instruments

Woodcock-Muñoz Language Survey (WMLS)

The participants in the study were matched on the basis of similar reading fluency rate in English or Spanish, as yielded by the TPRI and the Tejas Lee. They were also selected and matched on the basis of similar fluency rate as indicated by the results of their first district-wide benchmark test in reading. However, to determine whether the two groups had equivalent levels of Cognitive and Academic Language Proficiency (CALP) in English and Spanish, each student was administered the Woodcock-Muñoz Language Survey (WMLS).

The WMLS presents students with language tasks in English and Spanish. While the test is not perfect, it still provides a theoretically and technically sound procedure for classifying SLLs' proficiency in either language (Laija-Rodriguez, Ochoa & Parker, 2006). Each form of the WMLS measures CALP (i.e. aspects of language proficiency that emerge and become distinctive with formal schooling). Therefore, the WMLS classifies not only oral language but also the students' ability to read and write in a language. This classification is based on five different levels of proficiency with language tasks: 1 = Negligible; 2 = Very Limited; 3 = Limited; 4 = Fluent; and 5 = Advanced.

Curriculum Based Measures (CBM)

To measure progress in ORF in English and Spanish, Curriculum Based Measures (CBM) were chosen (i.e. a total of thirty-two reading passages). CBM has gained wide acceptance among educators and researchers interested in aligning assessment with instruction, and adjusting pedagogy and interventions to meet the

immediate educational needs of students (Deno, 1985, 1989; Fuchs & Fuchs, 1986; Fuchs, Fuchs, Hamlett & Allinder, 1991; Phillips, Hamlett, Fuchs & Fuchs, 1993; Shinn, 1995; Stecker & Fuchs, 2000). CBM is also particularly conducive to research over time, since some CBM measures have been recognized to possess good sensitivity to growth, detecting growth even in small increments, and occurring over a short period of time. Hence, these measures have become valuable tools for educators interested in evaluating students' early literacy skills as well as monitoring students' progress toward benchmark goals.

Furthermore, "CBM's technical adequacy has been studied extensively" (Fewster & MacMillan, 2002, p.149). The criterion-related validity, the construct validity and the reliability of CBM are well-documented in the research literature (Espin & Deno, 1993; Fuchs and Deno, 1992; Fuchs & Fuchs, 1990; Good & Jefferson, 1998; Marston, 1989; Shinn & Hadebank, 1992).

To monitor the progress of ORF in English, sixteen reading probes in English were selected from a pool of curriculum-based materials, compiled by researchers at the University of Oregon in the *Dynamic Indicators of Basic Early Literacy Skills* (DIBELS) series. To select the most equivalent probes, the researcher applied the Flesch-Kincaid readability formula (Scott & Weisharr, 2003) to each passage in English to obtain its readability level (i.e. reading ease). The newer versions of the Microsoft Word (MW) program automatically display the reading level of a document, if the program is set up before-hand to perform this task. Therefore, the researcher first typed every passage in MW and then obtained the Flesch-Kincaid readability level electronically. Four passages were eliminated due to the fact that their respective

Flesch-Kincaid readability indices, ranging from grade 4.6 to 5.3, were deemed to be too difficult for second-graders and possibly above their frustration reading level. The remaining probes yielded an average Flesch-Kincaid readability index of 3.8.

To monitor the progress of ORF in Spanish, sixteen reading probes in Spanish were selected from a pool of reading passages, field tested in a tutoring project sponsored by the Special and Bilingual Education (SABE) program of the Texas A&M University. To ensure that only the most equivalent probes were selected, the Fry readability formula (Fry, 1977) was applied to all the passages in Spanish. Micro-features (i.e. number of syllables per word and words per sentence) were counted in each text (Parker, Hasbrouck, & Weaver, 2001). The syllable count in the selected passages ranged from 164 to 210 per 100 words, with an average syllable count of 174.8. The sentence count ranged from 2 to 22 words, with an average sentence count of 7.16 words. Adjustments and adaptations of the formula had to be made, due to the much higher syllable count in Spanish words when compared to English text (Gilliam, Peña, & Mountain, 1980). Passages were modified to make them more similar: the number of syllables for each passage was equated and then the Fry readability graph was applied and readability index obtained for each passage. The selected probes yielded an average Fry readability index of 3.4.

English and Spanish probes were administered to students in random order at each testing session.

Transitional Bilingual Observation Protocol (TBOP)

To ensure program fidelity, three full observation cycles for each classroom teacher were conducted and data gathered with the Transitional Bilingual Observation

Protocol (TBOP) (Bruce, Lara-Alecio, Parker, Hasbrouck, Weaver, Irby, 1997). Data were obtained from a total of eighteen observation sessions of approximately thirty minutes each, with each complete cycle containing sixty, twenty-second mini-observations. The researcher received training in Aldine Independent School District on the proper administration of the TBOP, prior to the use of the instrument.

The TBOP was created in 1997 to operationalize the Transitional Bilingual Pedagogical (TBP) model, developed by Lara-Alecio and Parker (1994), for the purpose of “providing theory-consistent, yet specific, concrete data to teachers on the process of transitional bilingual instruction” (p. 126). Thus, the TBP model provided the theoretical foundation for the use of direct observation as a means of coding and summarizing the dimensions of a specific instructional model. Consequently, the TBOP was created to identify detailed components of transitional bilingual programs, as observed during the activities occurring within the actual classroom. The TBOP records frequency of use of the language spoken by the teacher during instruction (L1 representing the primary language and L2 the target language), frequency of use of the language spoken by the students in response to instruction, and the type of the language content during instruction (i.e. social, academic, light cognitive or dense cognitive) (Bruce *et al.*, 1997).

Parents’ Interviews (PI)

To provide additional instruction to students in preparation for the Texas Assessment of Knowledge and Skills (TAKS), the school where the study was conducted remained opened on Saturday mornings for the months of February and March 2005. During that time, each family was invited to come to the school for an

interview with the researcher. Appendix A displays a sample of the note sent to the parents to invite them to participate in the Parents' Interviews (PI) (see Appendix A). However, only the parents of three students came to the school for the scheduled interview. For the remaining seventeen students, individual home visits were made by the researcher, throughout the months of April and May 2005. At least one parent of each student was present during the interview session and was asked to respond to open-ended questions. Six fathers and fourteen mothers participated. The interviews were audio-taped, and lasted approximately twenty minutes per family.

Appendix B displays a sample of the interview protocol, with the questions asked to the students' parents by the researcher (see Appendix B). The same order in asking the questions was not necessarily followed in each interview session: the questions were mainly used to provide a consistent scaffold for the open dialogue between the researcher and the parents. For this specific study, the semi-structured interview model, with open-ended questions in a non-threatening setting (i.e. Saturday school or the home), was chosen. Interviews rely on the honesty and the integrity of each interviewee as a means of establishing validity (Fraenkel & Wallen, 2003). Therefore the interview model was deemed to be an effective tool to elicit accurate answers from parents, regarding their personal beliefs on bilingualism and their children's use of English and/or Spanish in the home, the school and the community.

Design

The design of the study was a mixed-method design, incorporating quantitative as well as qualitative research methods. Although "previous research in bilingual

education had predominantly utilized quantitative methods” (López & Tashakkori, 2006, p. 142), for this study the researcher selected a combination of the two: Quantitative methods were used to answer the first research question, and qualitative methods were used to answer the second question. Figure 1 represents the overall research design in graphic form.

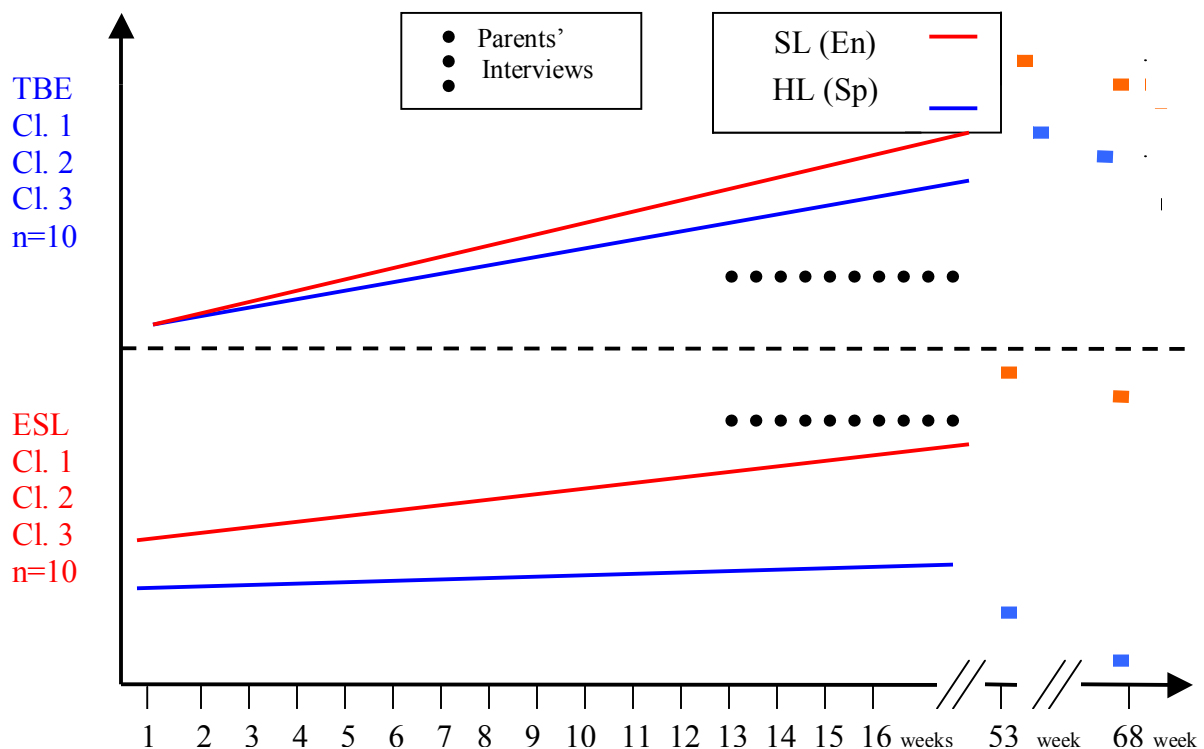


Figure 1. Graphic representation of research design.

First Research Question Addressed

The first research question sought to discover the amount and type of growth in ORF in English and Spanish as demonstrated by ten second-grade students, enrolled in a TBE program and by ten second-grade students, enrolled in an ESL program. Data to

measure ORF were gathered through repeated administrations of equivalent probes in English and Spanish, over a period of sixteen weeks. Long-term, follow-up data were also collected at nine months (week 53) and at twelve months (week 68), respectively. ORF in English and Spanish were the targeted outcomes for the two groups of children; therefore, the ORF scores (i.e. WCPM) obtained during the repeated administrations of the reading probes became the Dependent Variable (DV), and the two groups of students comprised the Independent Variable (IV), or grouping factor.

The researcher used NCSS 2000 to run the statistical analyses. Two main types of analyses were conducted: a) time series analysis of group mean improvement trends, and b) Analysis of Variance (ANOVA) on individual student slope coefficients.

To obtain both groups' growth trends for English and Spanish, mean scores were first calculated from raw data (i.e. WCPM), yielded by the students' weekly administrations of the reading probes. Following the calculation of the group means and variability estimates, improvement trends of ORF in English and Spanish for each group of students were plotted and displayed in graphic form to facilitate comparison between the two groups' reading performance.

In addition, to calculate the rate of growth of ORF in English and Spanish for each group, a Simple Regression Analysis (SRA) was conducted on: a) the short-term progress monitoring data, and b) the short-term plus the long-term follow-up progress monitoring data. The SRA yielded a slope coefficient (with standard error) for each group of students for each language. The slope coefficient (or regression coefficient) can be interpreted as the amount of growth per week achieved by each group in English and Spanish. The slope coefficient value for each group's reading performance

in English was subsequently compared with the existing average ORF norms for second and third grade students.

The second main analysis was a factorial ANOVA conducted on the individual student slope coefficients to test the mean difference in rate of growth in English and Spanish reading between the ESL group and the TBE group. In order to perform the factorial ANOVA on individual student slope coefficients, the raw slope coefficient values for English and Spanish for each individual student had to be calculated first. Through a Simple Regression Analysis (SRA) conducted on each student's raw data, two slope coefficients were obtained for each individual student: one coefficient for English and one for Spanish. Then the factorial ANOVA was performed with the raw slope coefficients being the DV and the two groups of students, ESL and TBE, being the IV, or grouping factor.

Second Research Question Addressed

The second research question sought to identify the parents' prominent beliefs and concerns on bilingualism and maintenance of their children's native language through open-ended questions in semi-structured interviews. From the traditions of qualitative inquiry, the researcher chose to use the ethnographic approach (Agar, 1986), deemed suitable to record human beliefs and behaviors in cultural terms (Creswell, 1998; Harkness & Super, 1996). Raw data collected through the PI were color-coordinated, coded and organized into themes. "Data-driven codes are constructed inductively from the raw information. They appear with the words and syntax of the raw information. It is the task of the researcher to interpret the meaning ... and to construct a theory" (Boyatzis, 1998, p. 30).

Procedure

Preparatory Stage: Site Selection

Plans for the implementation of the study began in the Spring of 2004. As the primary researcher, I met with a group of Hispanic elementary principals at the monthly meeting of the Texas Association of Hispanic School Administrators (TAHSA), in April of 2004. I shared with them my desire to conduct a dissertation study in an elementary school with a high percentage of Hispanic children in Fort Worth Independent School District (ISD). I explained to them the purpose of the research study which was to investigate the potential impact of established programs (i.e. TBE and ESL) on gains and losses on reading skills in English and Spanish for SLLs of Hispanic origin. One of the principals present demonstrated a clear interest in the intent of the study and expressed her willingness to cooperate. She made available as the research project site the elementary school in which she served, pending final approval from the Research and Evaluation Department (RED) of Fort Worth ISD. The RED approval was received on November 17th, 2004.

Preparatory Stage: Participants' Selection

In order to assess the reading performance in English and Spanish of students enrolled in BE programs, the principal and the researcher decided to target Hispanic second grade students who, for the most part, had already been enrolled in TBE and ESL classes for at least three consecutive years. In addition, of particular interest to both was the development of reading skills in English and Spanish for first-generation children of Hispanic immigrant parents. After the grade of the participants had been identified, the principal provided to the researcher several data files (i.e. Excel

spreadsheets) electronically. The files contained reading benchmark tests results as well as data from the TPRI in English and the Tejas Lee in Spanish for all the second-grade students enrolled at the school during the academic year 2004-2005. Twenty students were finally selected from a pool of 129 second-grade students. Ten students were enrolled in TBE classes and ten in ESL classes. Students were matched based on similar reading fluency in English and Spanish as indicated by similar values of WCPM, obtained by the students in benchmark tests and in the TPRI and Tejas Lee.

The selected students were all first-generation children of immigrant parents, as verified by the researcher through biographical information maintained at the school. Throughout the months of November and December 2004, the parents of the identified students signed a written consent for their children to participate in the doctoral study (see Appendix C).

Preparatory Stage: Instruments' Selection

Following the advice offered by the dissertation committee members during the proposal defense on November 8th, 2004, the researcher chose the Woodcock-Muñoz Language Survey (WMLS) as the instrument deemed appropriate for yielding information on each student's level of CALP in English and Spanish.

The search for the most appropriate CBM for measuring ORF was facilitated by the committee chair's suggestion to visit the DIBELS website at <http://dibels.uoregon.edu/>. In addition, he provided the researcher with a disk containing reading passages in English and Spanish, selected from curriculum-based materials. Only the second-grade student materials were printed from the disk and a copy of each reading probe in English and Spanish was placed in a notebook, later

used during the data collection period of the progress monitoring of ORF for each student. The researcher also purchased a conventional stop watch that was used to measure the one-minute reading time for each student.

Throughout the course of study at TAMU, professors often referred to the TBOP as an instrument appropriate for collecting observation data on the teachers' and pupils' language use within Bilingual Education classrooms. Therefore, the TBOP was selected as the instrument for observing and recording the teachers' use of English and/or Spanish during the instructional time.

To collect data on the parents' beliefs on bilingualism and maintenance of the heritage language in their children, the researcher prepared a questionnaire in English and Spanish with eight open-ended questions to be used as the scaffold during the semi-structured interviews with the parents. The questionnaire is presented as Appendix B (see Appendix B). To audio-tape the parent interviews, two mini-cassette players and several tapes were purchased by the researcher.

Stage 1: Data Collection from Preliminary Assessments

Each student was administered the WMLS in English during the month of December 2004, and the WMLS in Spanish during the month of January 2005. The WMLS tests were given individually; each student was pulled out of the classroom and assessed in a room adjacent to the library. The same location was used throughout the entire process of collecting data, being to obtain a CALP level in each language for each student, or to record the number of WCPM in each language, using CBM.

Teachers' observations with the TBOP were not formally scheduled; however, teachers had been previously informed that the researcher would observe in each

classroom in three separate occasions. Observations took place throughout the month of April 2005. Data from the observations were manually recorded on a matrix, indicating, for each complete observation cycle, which curriculum and content areas were being taught, how the students were grouped, what was the structure of the activity in relation to the student-teacher interaction (i.e. lecture/listening, lecture/performance, question/answer, etc.), and which language, English or Spanish, was being used by the teacher and the students during the instructional time observed.

Stage 2: Data Collection from Main Assessments

To collect the data necessary to measure ORF in both languages, each selected second-grader was exposed to two passages per week (one in English and one in Spanish), over a span of sixteen weeks, from January through April of 2005. The students were tested again at nine months (53rd week) in January of 2006 and at twelve months (68th week) in April of 2006. The students were individually pulled out of their respective classrooms during the Language Arts portion of the school day, as previously agreed with the principal and the six teachers, usually on Mondays and Tuesdays, and then again on Thursdays and Fridays. Each student was asked to read a probe (randomly selected) for a one-minute interval. The researcher used a conventional stop watch to time the one-minute sections. At the end of each interval, the examiner stopped the procedure, marked the student's concluding place in the text, and calculated the WCPM, by subtracting the word reading errors (i.e. mispronunciations, substitutions, omissions, and transpositions) from the total number of words contained in the passage from the beginning till the stop point.

The PI were conducted in the Spring semester of 2005, in the school setting or at the student's home. They were audio-taped and lasted on an average of approximately twenty minutes each. The first half of the interview was dedicated to explaining to each parent the emphasis of the study, and, specifically, how it related to their child. The second half of the interview focused on asking the parents to express their opinion on bilingualism in general and on maintenance of the heritage language in particular.

At a later date, the audio-taped contents of each parent's interview were transcribed *verbatim* by the researcher and stored at her home. Following common data analysis strategies recommended by most qualitative authors (Bogdan & Biglen, 1992; Boyatzis, 1998; Cassell & Symon, 1994; Guba & Lincoln, 1988), the interview transcripts were first read by the researcher to obtain a general idea of the entire bulk of data. During the second reading, reflective notes were jotted-down (Emerson, Fretz, & Shaw, 1995) and similar thoughts and statements were color-coordinated and coded to assist with the stages of sorting-out the written texts as well as reducing, summarizing, and organizing the data. "Central codes" were categorized into major themes and "axial codes" discarded. The thematic analysis approach was used in this stage of the study. Boyatzis (1998) states "Although researchers may find thematic analysis to be of most use in the early stages of the research inquiry process, ...it can be useful at all stages" (p. 5). Thematic analysis facilitated the identification of main categories and themes emerging from the PI: Excerpts from the interviews in the form of phrasal summaries are reported in Chapter IV.

CHAPTER IV

RESULTS

Descriptive Results from Assessments

Preliminary Assessment: Woodcock-Muñoz Language Survey (WMLS)

The Woodcock-Muñoz Language Survey (WMLS) was first administered to all twenty students to determine their Broad Language Ability (BLA) in English and Spanish. The BLA provides an overall measure of Cognitive and Academic Language Proficiency (CALP), encompassing the students' oral language as well as reading and writing abilities in each language. The CALP levels, expressed in scaled scores, range from 1= Negligible to 5= Advanced.

Following are Table 1 and Table 2 representing the CALP levels in each language for the students in the TBE program and the students in the ESL program.

Table 1

TBE Students' CALP Levels for English and Spanish

TBE Students (N=10)	CALP level for English	CALP level for Spanish
TBE Student 1	3	4
TBE Student 2	3	4
TBE Student 3	3	4
TBE Student 4	3-4	4-5
TBE Student 5	4	5
TBE Student 6	4	5
TBE Student 7	4	4-5
TBE Student 8	4	4
TBE Student 9	4-5	5
TBE Student 10	4-5	5
Average of n=10	3.75	4.5

Note. CALP Levels: 1=Negligible; 2=Very Limited; 3=Limited; 4=Fluent; 5=Advanced

Table 2

ESL Students' CALP Levels for English and Spanish

ESL Students (N=10)	CALP level for English	CALP level for Spanish
ESL Student 1	3-4	3
ESL Student 2	4	2
ESL Student 3	4	1
ESL Student 4	4	2-3
ESL Student 5	4	4-5
ESL Student 6	4	3-4
ESL Student 7	4	4
ESL Student 8	4	3-4
ESL Student 9	4-5	2
ESL Student 10	5	2
Average of n=10	4.1	2.8

Note. CALP Levels: 1=Negligible; 2=Very Limited; 3=Limited; 4=Fluent; 5=Advanced

When reviewing the CALP levels obtained from the individual administrations of the WMLS in English and Spanish, nine students out of ten in the TBE group demonstrated only one level higher in Spanish than English, suggesting almost equal ability in the two languages. The remaining student in the group displayed equal levels of Spanish and English ability. It could be concluded that the students in the TBE group demonstrated overall a good balance between the two languages, as indicated by average CALP scores of 3.75 and 4.5 for English and Spanish, respectively.

In contrast, within the ESL group, three students out of ten demonstrated one CALP level higher in English than Spanish, one student displayed equal levels of ability in the two languages, and one student displayed a slightly higher score in Spanish than English, suggesting that at least for these five students a good balance existed between the two languages. However, the remaining five students in the ESL group demonstrated CALP levels from two to three scores higher in English than Spanish, suggesting an overall better development in English skills rather than in the

native language. As a group, the ESL students demonstrated average CALP scores of 4.1 and 2.8 for English and Spanish, respectively.

In summary, the WMLS measures students' individual BLA in English and Spanish and provides a good indication of students' CALP levels, encompassing their abilities in oral language as well as in reading and writing a language. From the CALP levels reported in Table 1 and Table 2, it is obvious that the two groups were not equivalent in their overall ability in Spanish; however, they appeared to be fairly comparable in their English skills (i.e. oral, reading and writing). From the WMLS results, the children in the TBE group were much more developed in Spanish than the children in the ESL group, but both groups appeared to be fairly equivalent in English language skills. The inequality between the two groups in Spanish inserts a "selection bias" in the design, and reduces the ability to make inferences about differential program effects.

Preliminary Assessment: Transitional Bilingual Observation Protocol (TBOP)

Three observation sessions (i.e. one session per week) were conducted in each of the six classrooms for the purpose of observing type and frequency of language use by the teachers, and type of language content during direct instruction. Each observation session was comprised of 60 mini-observations of 20 seconds each. Therefore, each teacher was observed for a total of 20 minutes per session, and a total of 60 minutes for the three sessions. The researcher wanted to ensure program fidelity, since "the phenomenon of nearly exclusive English instruction within 'bilingual' classrooms is not uncommon" (Bruce *et al.*, 1997, p. 123). However, as indicated in the following Tables, it was evident that this was not a problem in the TBE classrooms.

In fact, in the TBE classrooms, Spanish was the predominant language of instruction, with teachers being native speakers and bilingual, and in the ESL classrooms, English was the exclusive language of instruction, with teachers being monolingual speakers.

Table 3

Percentage of Use of Languages by the Teachers in the Three TBE classrooms

	Classroom 1	Classroom 2	Classroom 3
Type of Language Content	Social	Social	Social
Percentage of L1 use	13.3	7.8	2.2
Percentage of L2 use	0	1.7	0
Percentage of L1-L2 use	0	1.1	0
Type of Language Content	Academic	Academic	Academic
Percentage of L1 use	50.5	32.2	7.8
Percentage of L2 use	0	.5	.5
Percentage of L1-L2 use	0	0	0
Type of Language Content	Light Cog	Light Cog	Light Cog
Percentage of L1 use	29.4	47.8	37.8
Percentage of L2 use	1.1	1.7	0
Percentage of L1-L2 use	0	1.1	0
Type of Language Content	Dense Cog	Dense Cog	Dense Cog
Percentage of L1 use	3.9	6.1	26.7
Percentage of L2 use	0	0	0
Percentage of L1-L2 use	0	0	0
Silent Time	1.7	0	25

Note. L1 = Spanish; L2 = English

Light Cog = Light Cognitive (i.e. Review of previously-introduced concepts and vocabulary);

Dense Cog = Dense Cognitive (i.e. Introduction of new concepts and specialized vocabulary);

Academic = Instructional directives; Social = Language not related to academics.

A complete observation cycle is comprised of 60 mini-observations of 20 seconds each. Three complete cycles were conducted in each classroom, for a total of 180 mini-observations and a total of 60 minutes. Each value represents the percentage of time the language was used within a total of 60 minutes.

Table 3 indicates that Spanish was the language most used by the teachers in the TBE classrooms; in fact, Spanish was used for approximately 97.1% of the observed time in Classroom 1, 93.9% in Classroom 2, and 74.5% in Classroom 3.

Table 4

Percentage of Use of Languages by the Teachers in the Three ESL classrooms

	Classroom 1	Classroom 2	Classroom 3
Type of Language Content	Social	Social	Social
Percentage of L1 use	0	0	0
Percentage of L2 use	3.9	8.3	4.4
Percentage of L1-L2 use	0	0	0
Type of Language Content	Academic	Academic	Academic
Percentage of L1 use	0	0	0
Percentage of L2 use	17.2	28.9	5.5
Percentage of L1-L2 use	0	0	0
Type of Language Content	Light Cog	Light Cog	Light Cog
Percentage of L1 use	0	0	0
Percentage of L2 use	43.9	16.7	53.9
Percentage of L1-L2 use	0	0	0
Type of Language Content	Dense Cog	Dense Cog	Dense Cog
Percentage of L1 use	0	0	0
Percentage of L2 use	26.7	42.8	36.1
Percentage of L1-L2 use	0	0	0
Silent time	8.3	3.3	0

Note. L1 = Spanish; L2 = English.

Light Cog = Light Cognitive (i.e. Review of previously-introduced concepts and vocabulary);

Dense Cog = Dense Cognitive (i.e. Introduction of new concepts and specialized vocabulary);

Academic = Instructional directives; Social = Language not related to academics.

A complete observation cycle is comprised of 60 mini-observations of 20 seconds each. Three complete cycles were conducted in each classroom, for a total of 180 mini-observations and a total of 60 minutes. Each value represents the percentage of time the language was used within a total of 60 minutes.

Table 4 indicates that English was the language most used by the teachers in the ESL classrooms; in fact, English was used for approximately 91.7% of the observed time in Classroom 1, 96.7% in Classroom 2, and 99.9% in Classroom 3.

From data gathered through direct observation sessions, it was verified that the language of instruction in the six selected classrooms was consistent with what the program type purported to represent.

First Research Question Addressed

To answer the first research question on the amount and type of growth in ORF in English and Spanish demonstrated over time by ten students enrolled in the TBE program versus ten students enrolled in the ESL program, two main types of analyses were conducted: a) time series analysis of group mean improvement trends, and b) Analysis of Variance (ANOVA) on individual student slope coefficients.

Data were collected over a period of sixteen consecutive weeks, comprising the short-term progress monitoring data. In order to obtain long-term follow-up data, additional data were collected at week 53 and again at week 68 (nine months and twelve months after the original data collection, respectively). All data were time series in nature (i.e. periodic equivalent probes).

Time Series Analysis of Group Mean Improvement Trends

To analyze each group's growth trend in each language over time, group means and variability estimates were calculated from the progress monitoring reading data collected over the short-term period of sixteen weeks, and again from the additional long-term follow-up data collected at nine and twelve months. Since ORF in English and Spanish were the targeted outcomes for the two groups of children, the ORF scores [i.e. Words Correct Per Minute (WCPM)] obtained during the repeated administrations of the reading probes comprised the Dependent Variable (DV) and the two groups of students comprised the Independent Variable (IV), or grouping factor.

Following the calculation of the group means and variability estimates, the values were plotted and yielded a graphic representation of the groups' improvement trends. Figure 2 displays each group's improvement trend in each language as represented through two separate sets of graphs. The first pair of graphs (1a and 1b) displays for the TBE group the two trend lines of ORF in English and Spanish, respectively. The second pair of graphs (1c and 1d) displays the same information for the ESL group. Graph 1c depicts English and 1d Spanish. It must be noted that, to permit a clearer display of the scores, the vertical axes (y-axes) have been made identical for both measures within a program, but not across the two programs. The vertical axes have been synchronized to display the exact position of each graph in relation to the other, thus making the comparison between the two graphs much clearer.

Each graph includes two trend lines: a) one line indicates the short-term progress monitoring of ORF over a four month period, and b) the other line indicates the short-term plus the additional long-term follow-up monitoring progress of ORF over a twelve month period.

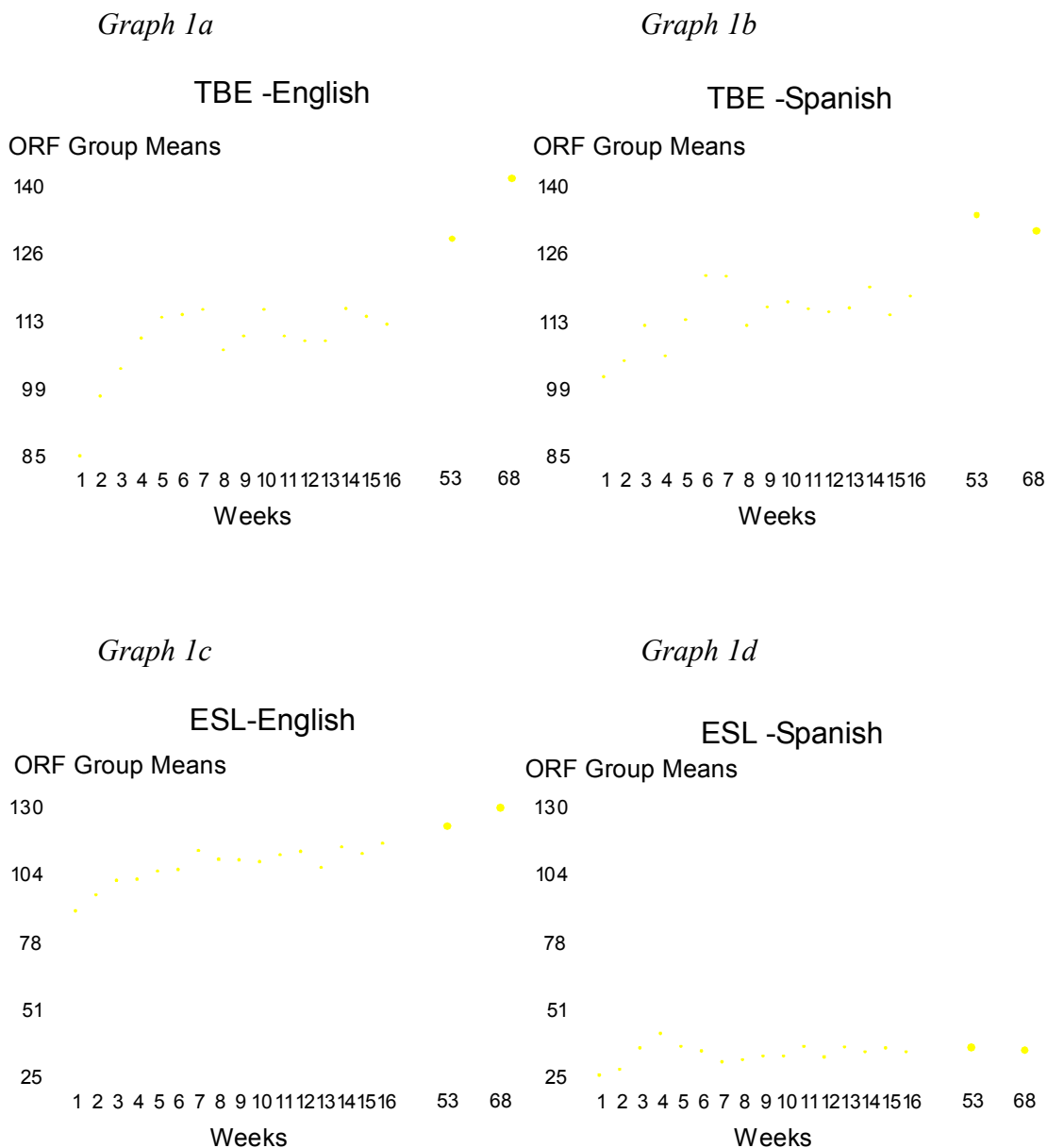


Figure 2. Trend lines for short-term and long-term progress monitoring of ORF in English and Spanish for each group of students.

Both trend lines are represented in each graph: (a) the short-term monitoring trend line, with 16 data points, and (b) the short-term plus the long-term follow-up monitoring trend line, with 18 data points. The horizontal axis (x-axis) has been necessarily shortened to permit the display of the long-term follow-up data points without affecting the details of the short-term data. However, it must be noted that the

two trend lines have been plotted accurately, as they would have been if the horizontal axis had been produced full scale. In addition, it must also be noted that the last two data points carry more weight, when compared to the preceding 16, as in the ordinary least squares analyses extreme scores on the time dimension carry more weight.

Interpretation of Graphs

Graphs 1a and 1b:

Graphs 1a and 1b represent the growth in English and Spanish, respectively, for the TBE group. Visual comparison indicates that, during the short-term monitoring period, the TBE students performed equally well in both languages. However, a year later, the TBE group demonstrated a larger growth in English rather than Spanish, contrary to what one would expect, considering the fact that these students had received consistent instruction in Spanish for three consecutive years.

Graphs 1c and 1d:

Graphs 1c and 1d represent the growth in English and Spanish, respectively, for the ESL group. Visual comparison indicates that, during the short-term monitoring period, the ESL students progressed well in English. They even demonstrated a slight growth in Spanish. However, when considering the long-term monitoring progress of a year later, it is obvious that the ESL students had continued to improve steadily in English, while reaching a plateau in Spanish. These results are consistent with what one would expect, considering the fact that the ESL students already possessed low levels of CALP in Spanish at the beginning of the study in second grade, and they had been consistently instructed in English since kindergarten.

Graph 1c represents the ESL students' much higher reading skills in English when compared to their reading skills in Spanish, presented in graph 1d.

Simple Regression Analysis

ORF in English and Spanish were measured every week for sixteen consecutive weeks for each group of students. ORF was measured as WCPM read for each weekly probe. Data also were collected nine months and twelve months after the initial data collection. To obtain the exact amount of growth between assessments, a Simple Regression Analysis (SRA) was conducted on: (a) the short-term progress monitoring data and on (b) the short-term plus long-term follow-up progress monitoring data. The raw score, WCPM in English and in Spanish per week per student, comprised the DV and Time was the IV. The SRA yielded a raw slope coefficient or regression coefficient (with standard error) for each group of students for each language, representing the amount of growth per week obtained by the TBE group and by the ESL group in English and in Spanish, over the short-term as well as the long-term progress monitoring period. From the slope standard errors, Confidence Intervals (CIs) were calculated around each slope coefficient value. The CIs indicate the level of certainty in the obtained "rate of improvement" or raw slope coefficient. A CI containing zero further indicates that we cannot be 90% certain than the slope is greater than zero.

Table 5 reports the regression coefficients with their respective CIs for each group of students in each language, for the short-term as well as the long-term progress monitoring period.

Table 5

Regression Coefficients and Confidence Intervals for Short-term and Long-term Progress Monitoring of ORF in English and Spanish for Each Group of Students

TBE English	TBE Spanish	ESL English	ESL Spanish
Short-term: .43<<1.01>>1.58	Short-term: .341<<.746>>1.16	Short-term: .911<<1.25>>1.61	Short-term: -.10<<.265>>.59
Long-term: .484<<<.611>>.775	Long-term: .278<<.391>>.509	Long-term: .318<<.426>>.56	Long-term: -.04<<.038>>.123

Note. Short-term = 16 consecutive weeks; Long-term = Short-term plus week 53 and week 68 (9 months and 12 months later).

The WCPM regression coefficients displayed in Table 5 show that for both TBE and ESL students the rate of improvement in English reading appeared to be faster than in Spanish. However, when analyzing the overall results of the long-term progress monitoring data, the trend for both groups of students is that the rate of improvement for each language seemed to slow down over a year. For the ESL group, the growth in Spanish was very minimal, supporting other published studies that reading in the native language seems to reach a plateau when instruction to students is provided solely in English.

Visual comparison of the CIs around the regression coefficients shows that the CI values indicating the growth in English reading for the TBE group overlap with the CI values indicating the growth in Spanish reading, for the short-term as well as for the long-term progress monitoring data. On the contrary, the CI values indicating the growth in English reading for the ESL group do not overlap with the CI values indicating the ESL Spanish reading growth. Due to the overlap of the CIs for the TBE group, we can conclude that the difference between the two languages

is not statistically significant for these students. However, due to the fact that the CIs for the ESL group do not overlap, we can conclude that the difference between the two languages is statistically significant for these students.

Comparison with Available Normative Data

Over the past two decades, studies have been conducted for the purpose of examining elementary students' weekly rates of academic growth in ORF, when Curriculum Based Measures are used (Fuchs & Fuchs, 1996; Hasbrouck & Tindal, 1992). As a result of these studies on large student samples, normative data are now available. Available norms provide the approximate number of WCPM read by students in the fall, winter or spring of each elementary grade as well as the average weekly increase that could be expected in English ORF for each grade. Relevant to this study are the norms obtained from children enrolled in the second and third grade. However, it must be noted that the available norms apply only to ORF in English and not Spanish. Table 6 represents the average ORF norms, or the average number of WCPM that students enrolled in second or third grade and belonging to the 50th percentile rank are expected to read correctly by the end of the academic year (Hasbrouck & Tindal, 1992).

Table 6

Average ORF Norms for Second and Third Grade Students

<i>Student grade</i>	<i>Student Percentile Rank</i>	<i>WCPM – end of year -</i>
2 nd	50 th	94
3 rd	50 th	114

Note. WCPM = Words Correct Per Minute.

From the above table, it can be concluded that a growth of 20 WCPM can be expected in one academic year for students promoting from second to third grade. The length in weeks of one academic year is approximately 40 weeks (national average); therefore, when dividing the value of 20 WCPM by the 40 weeks an average weekly growth of .5 WCPM is obtained. This value can now be compared with the regression coefficients, or slope coefficients, previously reported in English ORF for the TBE group and the ESL group. The two groups' respective "improvement rates" (i.e. raw slope coefficients), interpreted as WCPM read per week, are .61 and .42, indicating that the rate of growth for the TBE group is slightly above the normative average, while the rate of growth for the ESL group is slightly below. Although both values do not deviate greatly from the normative average, the higher value for the TBE group could be attributed to the intensified English instruction that often takes place during the third grade in TBE programs, especially when early exit from Bilingual Education is the position advocated and promoted by the district.

Factorial ANOVA on Slope Coefficients

To test the mean difference in rate of growth in English and Spanish between the ESL group and the TBE group of students, a factorial ANOVA was conducted. In order to perform the ANOVA, individual raw slope coefficients were first obtained for each student. Each student had two scores, one for English and one for Spanish. Appendix D reports the raw slope coefficients in English and Spanish for each student (see Appendix D) for the short-term progress monitoring period as well as the long-term progress monitoring period. Raw slope coefficients were used as they can

be interpreted directly as growth in WCPM read per week. The raw slope coefficients comprised the DV and the two programs, ESL and TBE, comprised the IV. Separate ANOVAs were performed: a) one with the first 16 scores from the short-term progress monitoring period, and b) one with all the 18 scores from the short-term plus the long-term follow-up monitoring period. Table 7 represents the results of the two ANOVAs, reporting the respective *F* and *p* values for each language. Table 8 represents a summary of the Mean scores (regression coefficients) with standard error for each group of students in each language.

Table 7

Results from ANOVAs with Slope Coefficients

<i>ORF</i>	<i>F</i>	<i>p</i>
<i>English</i>		
Short-term:	.96	.33
Long-term:	2.82	.11
<i>Spanish</i>		
Short-term:	4.52	.04
Long-term:	18.98	.0003*

Note. *Term significant at $\alpha = .05$. ORF = Oral Reading Fluency.

Short-term = 16 consecutive weeks; Long-term = Short-term plus week 53 and week 68 (9 months and 12 months later).

Table 8

Summary of Means (Regression Coefficients)

	English		Spanish	
	<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>
<i>TBE group</i>				
Short-term:	1.01	.17	.746	.15
Long-term:	.611	.07	.391	.05
<i>ESL group</i>				
Short-term:	1.25	.17	.265	.15
Long-term:	.426	.07	.038	.05

Note. M = Mean; SE = Standard Error.

From the ANOVAs results in Table 7, it can be concluded that there was no statistically significant difference in the rate of growth of English reading for the two programs, during the short-term or the long-term progress monitoring period, as indicated by the values of $p = .33$ (for the short-term progress) and of $p = .11$ (for the long-term progress). However, when considering the long-term monitoring data, the difference in the rate of growth of English reading for the two programs is closer to being significant.

On the contrary, the two ANOVAs results in Table 7 show that the difference in the rate of growth of Spanish reading for the two programs was statistically significant during the short-term progress monitoring period, as indicated by the value of $p = .04$, and it was highly significant during the long-term progress monitoring period, as indicated by the value of $p = .0003^*$.

From Table 8, it can be concluded that the rate of growth in English for the TBE group was slower than for the ESL group during the short-term progress

monitoring period, (regression coefficients of 1.01 and 1.25, respectively). However, when considering the long-term follow-up data, the rate of growth in English for the TBE group was faster than for the ESL group, (regression coefficients of .611 and .426, respectively).

Regarding the rate of growth in Spanish reading, for the TBE group it was consistently much higher than for the ESL group during the short-term progress monitoring period, (regression coefficients of .746 and .265, respectively), and during the long-term progress monitoring period as well, (regression coefficients of .391 and .038, respectively).

When considering the long-term progress monitoring period, it must be noted that overall the students in the TBE program achieved higher rates of improvement than the students in the ESL program, in both English and Spanish reading.

Summary of Results from Quantitative Analyses

To answer the first research question on the amount and type of growth in ORF in English and Spanish demonstrated over time by ten students enrolled in the TBE program versus ten students enrolled in the ESL program, two main types of analyses were conducted: a) time series analysis of group mean improvement trends, and b) Analysis of Variance (ANOVA) on individual student slope coefficients.

Data were collected for sixteen consecutive weeks, and then again at week 53 and a week 68, nine and twelve months after the original data collection, respectively. Thus, data were obtained from the short-term progress monitoring period as well as from the long-term follow-up period.

Findings from the time series analyses revealed that both groups of students improved in English reading over time. However, when considering the long-term progress monitoring data, the TBE group demonstrated a faster rate of improvement in English reading than the ESL group, contrary to what one would expect. As for Spanish reading, both groups demonstrated growth during the short-term progress monitoring period, although the growth in Spanish for the ESL group was very minimal and the rate very slow. When considering the long-term progress monitoring data, the TBE group continued to improve in Spanish, although at a slower rate than before, while the ESL group reached an obvious plateau of performance in Spanish, as one would expect since these students had been instructed solely in English for three consecutive years.

Finally, the mean difference in rate of growth in English and Spanish between the ESL group and the TBE group was tested through ANOVA. Findings indicated that there was no statistically significant difference in the rate of growth of English between the two programs, during the short-term or the long-term progress monitoring period. On the contrary, the difference in the rate of growth of Spanish between the two programs was statistically significant during the short-term progress monitoring period ($p = .04$), and it was highly statistically significant during the long-term progress monitoring period ($p = .0003^*$).

Descriptive Results from Qualitative Analyses

To answer the second research question as to the identification of the major ideas and concerns of the students' families on the value of bilingualism and

maintenance of the Heritage Language (HL) in their children, Parents' Interviews (PI) were conducted. In analyzing the transcripts of the PI, similar concepts were color-coordinated and coded. Codes that were identified more than twenty times within the body of the transcribed interviews were considered "central". Codes that were present less than twenty times were considered "axial". The axial codes were discarded but the central codes were categorized into three major themes: Theme A, Theme B, and Theme C. "A theme is a pattern found in the information that at minimum describes and organizes the possible observations and at minimum interprets aspects of the phenomenon" (Boyatzis, 1998, p. 4). In this study, Theme A represents the parents' belief in the connection between the Heritage Language and increased life opportunities, Theme B represents the parents' belief in the connection between the Heritage Language and family roots and culture, and Theme C represents the parents' acknowledgment of their children's possible Heritage Language loss. The results from the qualitative data collection and thematic analysis are presented in textual as well as in graphic form.

Figure 3 displays in graphic form the major themes identified as a pattern in the interviews with the parents of the students in both programs.

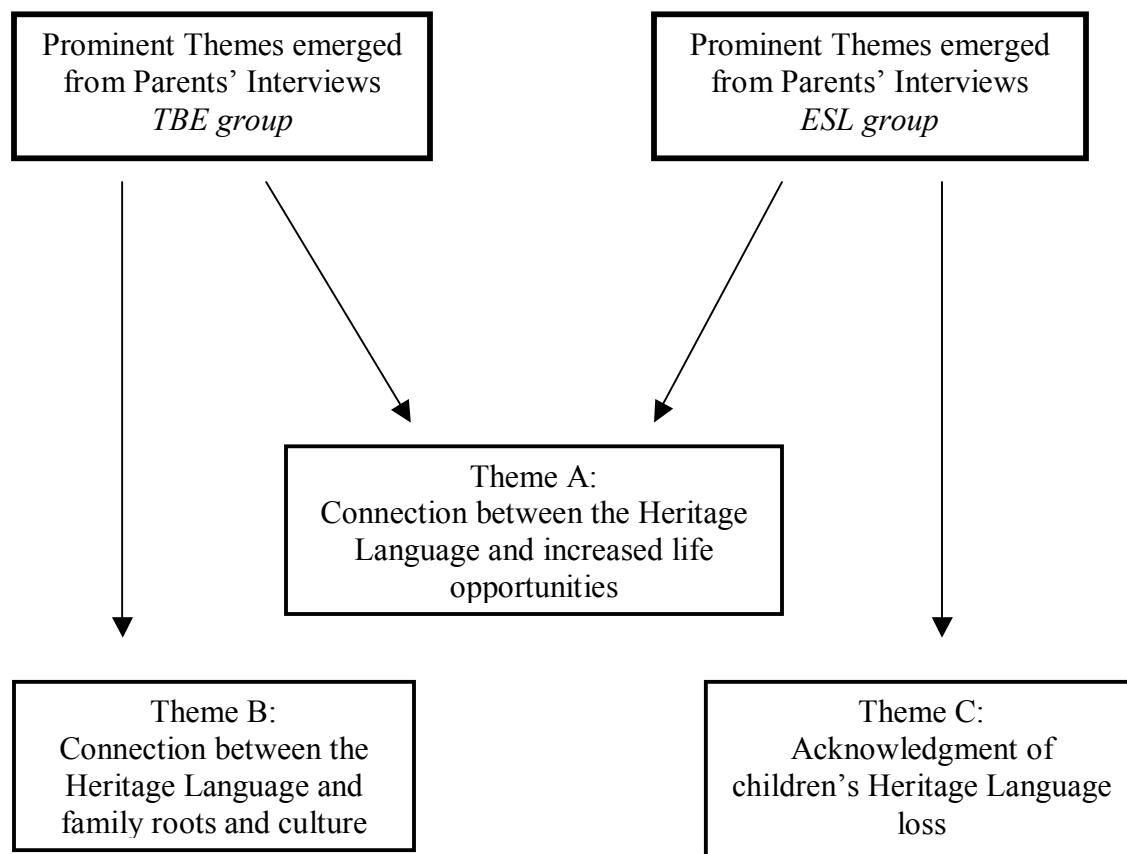


Figure 3. Prominent themes from interviews with parents of students in both groups (ESL and TBE).

Table 9 reports the number of “central codes” identified in the transcripts of the PI for each one of the three major themes.

Table 9

Number of “Central Codes” for Theme A, Theme B, and Theme C Identified in the Parents’ Interviews

	Theme A		Theme B		Theme C	
	ESL	TBE	ESL	TBE	ESL	TBE
TOTAL	14	19	8	21	25	2
	33		29		27	

Note. Theme A = Connection between the Heritage Language and increased life opportunities

Theme B = Connection between the Heritage Language and family roots and culture

Theme C = Acknowledgment of children’s Heritage Language loss.

Table 10 reports the percentage of parents in each group stating each one of the three major ideas.

Table 10

Percentage of Parents from Each Group Stating Theme A, Theme B, and Theme C

	Theme A		Theme B		Theme C	
	ESL	TBE	ESL	TBE	ESL	TBE
	90%	100%	50%	90%	90%	20%

Note. Theme A = Connection between the Heritage Language and increased life opportunities

Theme B = Connection between the Heritage Language and family roots and culture

Theme C = Acknowledgment of children’s Heritage Language loss.

Prominent Theme Common to Both Groups of Parents: Theme A

Theme A reports the connection between the HL and increased life opportunities. Parents in both groups expressed their belief that bilingualism is an asset in the life of an individual. Both sets of parents were united in their general sentiment that the ability to function in at least two languages would increase their children’s chances to obtain better employment opportunities in life. All the parents of the students in the

TBE group (100%) mentioned at least once that the United States offer a variety of opportunities for employability. In their opinion, these opportunities could certainly be maximized if their children were bilingual or maintained the native language while developing English. The parents of the ESL students affirmed the importance of being fluent in two languages also. All the parents from the ESL group except one (90%) affirmed Theme A. This concept was coded 19 times in the interviews with the parents of the TBE group and 14 times in the interviews with the parents of the ESL group, for a total of 33 times between the two groups. Phrasal excerpts representing this theme have been selected from the interviews with both sets of parents. Following are phrasal excerpts selected from the interviews with the TBE students' parents.

Luis' father, from the TBE group, stated:

Creemos que es una gran ventaja, muy grande, hablar los dos idiomas en los Estados Unidos.... Muchas más oportunidades.... Sí, si sabe los dos idiomas, si es bilingüe....

[We believe that it is a big advantage, very big, to speak two languages in the United States....Many more opportunities....Yes, if (he) knows two languages, if (he) is bilingual....]

Briana's father, from the TBE group, stated:

Yo quiero que mis hijos sean bilingües. Si saben dos idiomas, será más fácil encontrar un trabajo en el futuro....

[I want for my children to be bilingual. If they know two languages, it will be easier to find a job in the future....]

Guadalupe's mother, from the TBE group, stated:

Es que si uno habla dos idiomas tiene más oportunidades en su vida.

[Is that if one speaks two languages (he) has more opportunities in life.]

Following are phrasal excerpts selected from the interviews with the ESL students' parents.

Marco's mother, from the ESL group, stated:

(Los niños) tienen doble oportunidad por ser bilingüe. Sirven dos idiomas, si se aprendiera más, más oportunidades (hay).

[(Children) have double opportunities for being bilingual. Two languages are necessary, if we learn more, more opportunities (there are).]

Juan's mother, from the ESL group, stated:

(Es necesario que los niños hablen dos idiomas en los Estados Unidos) porque puedan tener un futuro mejor.

[(It is necessary for children to speak two languages in the United States) so that they can have a better future.]

Jesus' father, from the ESL group, stated:

Sí, me gustaría que se quedaran los dos idiomas. Es por el, por darle más oportunidades en la vida.

[Yes, I would like for the two languages to remain. It's for him, to give him more opportunities in life.]

Prominent Theme from Parents' Interviews of TBE Group: Theme B

Theme B reports the connection between the HL and family roots and culture. From the interviews with the parents of the students enrolled in the TBE program, the prominent theme that surfaced was a deep sense of pride in the family heritage and in the Hispanic origin. The Spanish language was seen as a symbol of the family roots

and culture and a uniting force among Hispanics. All the parents from the TBE group except one (90%) affirmed this idea; on the contrary, only five parents of the ESL group (50%) mentioned it. This theme was coded 21 times in the interviews with the parents of the students in the TBE group, and only 8 times in the interviews with the parents of the ESL group, for a total of 29 times. Following are phrasal excerpts representing this theme and selected from the interviews with the TBE students' parents.

Jessica's father, from the TBE group, stated:

Como los Hispanos que sus hijos ya no hablan español. Hay bastantes que ya no hablan español. Yo sé que es un error que no los enseñan español a sus hijos porque es la cultura de la familia, es la raíz de la familia.

[Like Hispanics whose children already do not speak Spanish. There are several who already do not speak Spanish. I know that it is a mistake not to teach Spanish to their children because it is the family's culture and root.]

Briana's father, from the TBE group, stated:

No quieren que sus hijos lean español, pero son Latinos, son Latinos, son de los que llegaron aquí. Y no pueden cambiar lo que son.

[(They) do not want for their children to learn Spanish, but they are Latinos, they are Latinos, they belong to those who arrived here. And they cannot change who they are].

Vanessa's mother, from the TBE group, stated:

El idioma de español es parte de la costumbre de nosotros....

[The Spanish language is part of our customs....]

Prominent Theme from Parents' Interviews of ESL Group: Theme C

Theme C reports the ESL parents' acknowledgment of the native language loss in their children. From the interviews with the parents of the students enrolled in the ESL program, the prominent theme that surfaced was the acknowledgement of the native language loss occurring in their children's life. All the parents from the ESL group except one (90%) affirmed this idea; on the contrary, only two parents from the TBE group (20%) mentioned it. This concept was coded 25 times in the interviews with the parents from the ESL group, versus only twice in the interviews with the parents from the TBE group, for a total of 27 times. Following are phrasal excerpts representing this theme and selected from the interviews with the ESL students' parents.

Chris' mother, from the ESL group, stated:

Yo le hablo a Chris (en español) y no me entiende; yo lo veo que habla más inglés.

[I speak (Spanish) with Chris and he doesn't understand me; I see that he speaks more English.]

Marco's mother, from the ESL group, stated:

Pero el niño, Marco, el casi no habla español. El me entiende, ... pero no lo puede hablar.... De español no sabe nada.

[But the boy, Marco, almost does not speak any Spanish. He understands me, ... but he can't speak it. He knows nothing of Spanish]

John's mother, from the ESL group, stated:

Es como si se le olvida hablar el español. No se acuerda las palabras....

[It is like he forgets to speak Spanish. He doesn't remember the words....]

Todavía me parece que se está olvidando el español.

[Anyway it looks like to me that (she) is forgetting Spanish.]

Summary of Results from Qualitative Analyses

To answer the second research question as to the parents' major beliefs and concerns regarding the value of bilingualism and maintenance of the native language in their children, Parents' Interviews were conducted and interview transcripts color-coordinated, coded and analyzed. Three major themes emerged from the transcripts of the interviews: Theme A, Theme B, and Theme C.

Theme A represented the parents' belief in the connection between bilingualism and increased life opportunities. This theme emerged from the interviews with the parents in both groups. The parents of the students in the ESL group as well as the parents of the students in the TBE group were in agreement that being fluent and literate in two languages prepares students for better employment opportunities in life. One hundred percent of the TBE parents (100%) and ninety percent of the ESL parents (90%) affirmed Theme A. This concept was coded 14 times in the transcripts of the interviews with the ESL parents and 19 times in the transcripts of the interviews with the TBE parents, for a total of 33 times.

Theme B represented the parents' belief in the connection between the Heritage Language and the family roots and culture. This theme was more prevalent among the parents of the students enrolled in the TBE program; in fact, ninety percent of the TBE parents (90%) affirmed it versus fifty percent of the ESL parents (50%). This concept was coded 21 times in the transcripts of the interviews of the TBE

parents; on the contrary, the transcripts of the interviews of the ESL parents mentioned it only 8 times, for a total of 29 times.

Theme C represented the parents' acknowledgment of the loss of the Heritage Language in their children. This theme was much more prevalent among the parents of the students enrolled in the ESL program; in fact, ninety percent of the ESL parents (90%) affirmed it versus only twenty percent of the TBE parents (20%). This concept was coded 25 times in the transcripts of the interviews of the ESL parents; on the contrary, the transcripts of the interviews of the TBE parents mentioned it only twice, for a total of 27 times.

In summary, while almost all parents from both groups recognized the possibility of increased life opportunities for being bilingual and biliterate, only the parents of the students in the TBE group affirmed the connection between the native language and the family's heritage and cultural roots. In contrast, the parents of the students in the ESL group recognized that their children were gaining English at the expense of their native tongue, and that their children were losing the ability to communicate even with their own family members.

CHAPTER V

DISCUSSION AND CONCLUSION

Overview of the Study

The present study sought to investigate the potential impact of school programs on gains and losses of reading skills in English and Spanish for N=20 second-grade students of Hispanic origin. All the students were first-generation children of immigrant parents. Ten students were enrolled in Transitional Bilingual Education (TBE) classes and ten students were enrolled in English as a Second Language (ESL) classes. The purpose of the study was twofold: first, to determine whether well-established models of Bilingual Education (BE), such as TBE and ESL, contribute to *subtractive bilingualism and schooling* in students whose Heritage Language (HL) is Spanish; and second, to gather information on the parents' beliefs and ideas on bilingualism and maintenance of the heritage language in their children. In subtractive bilingualism, students usually develop oral proficiency and literacy skills in the majority language at expense of their native language.

The existing literature on the acquisition of literacy skills (i.e. reading and writing) for most typical students has established a positive relationship between oral language and the development of literacy skills (Miller *et al.*, 2006; Saiegh-Hadad, 2003). Success in literacy appears to be directly related to the level of oral language a student has developed as a prerequisite skill. In the continuum of skills necessary to become a competent reader, Oral Reading Fluency (ORF) is considered the bridge between the phonemic principle (cracking the grapheme-phoneme code) and reading

comprehension. In the present study, ORF was measured weekly over a span of sixteen consecutive weeks (short-term progress monitoring period), and again at week 53 and a week 68 (long-term follow-up progress monitoring period at nine and twelve months, respectively). Data were collected as Words Correct Per Minute (WCPM) read by students when presented with randomly-selected equivalent probes in English and Spanish.

The design of the study was a mixed-method design incorporating quantitative as well as qualitative research methods. Quantitative data collection and analyses were used to answer the first research question and qualitative data collection and analyses were used to answer the second research question. The following section reviews the two research questions and presents a summary and discussion of the major findings from the study.

Review of Research Questions

First Research Question

The first research question sought to determine the amount and type of growth in ORF in English and Spanish demonstrated by ten second-grade students enrolled in a TBE program and by ten second-grade students enrolled in an ESL program, over a short-term progress monitoring period (sixteen consecutive weeks) and again over a long-term follow-up progress monitoring period (nine and twelve months later, respectively).

To answer the first research question, two main types of analyses were conducted: a) time series analyses of group mean improvement trends, and b) Analysis of Variance (ANOVA) on individual slope coefficients.

Second Research Question

The second research question sought to determine the parents' prominent beliefs and concerns on bilingualism and the maintenance of their children's native language. Data were collected from semi-structured interviews with open-ended questions conducted with the students' parents.

To answer the second research question, prominent themes surfaced from "central codes" identified throughout the entire body of the transcribed interviews.

First Research Question: Observations from Findings

Of the students who participated in the study, ten were selected from three TBE classes and ten were selected from three ESL classes. Findings from the quantitative analyses indicate that both groups of students made considerable gains in English reading during the short-term as well as the long-term follow-up progress monitoring period.

Furthermore, during the long-term progress monitoring period, the TBE students achieved a faster rate of improvement in English reading when compared to the ESL students and also a faster rate of improvement in English when compared to their own Spanish. In light of the fact that the TBE students had received consistent Spanish instruction for three consecutive years in pre-kindergarten, kindergarten and first grade, these results for English reading were unexpected. However, they are consistent with findings from previous studies (Lambert & Tucker, 1973; Nguyen,

Shin & Krashen, 2001; Quiroga *et al.*, 2002; Rodriguez *et al.*, 2005) which concluded that instruction in the native language (L1) does not appear to interfere in any way with the students' development of the society's dominant language (L2).

The executive summary of the National Literacy Panel on Language Minority Children and Youth recently reported that "Studies that compare bilingual instruction with English-only instruction demonstrate that language minority students instructed in their native language perform better, on average, on measures of English reading proficiency than language minority students instructed only in English" (August & Shanahan, 2006, p. 5). Consistent with this statement in the report, results from the long-term progress monitoring data analyses in the present study also demonstrate that the TBE students out-performed the ESL students in English reading.

In addition, when the mean difference in rate of growth in English and Spanish between the TBE group and the ESL group was tested through ANOVA, the results obtained in the present study were similar to the findings of a two-year study by Carlisle and Beeman (2000). In their research, Carlisle and Beeman reported that there was no significant difference between the English reading scores of students instructed in L1 (Spanish) and the scores of students instructed in L2 (English). The performance on measures of English academic assessments was comparable for both groups; however, it differed significantly on measures of Spanish reading. Results from the present study reached the same conclusions as the Carlisle and Beeman study, for English as well as for Spanish reading achievement for both groups.

Findings from the present study are not only consistent with inferences from previous studies; they also lend support to the cross-linguistic interdependence theory espoused by Cummins (1993). Cummins avers that a transfer of literacy skills from L1 to L2 is very common in the process of second-language acquisition for English Language Learners (ELLs). The literacy skills acquired in L1 provide the foundation for the transferability of skills to L2 (August & Shanahan, 2006). Furthermore, other researchers affirm that the majority language (L2) has been found to exercise a strong influence or pull on the minority language (L1) (Hakuta & D'Andrea, 1992; Kaufman, 1998; Sole, 1982). As afore-mentioned, the TBE students outperformed the ESL students in English reading during the long-term progress monitoring period, thus providing some evidence of literacy skills transfer from L1 to L2 as well as of dominant language (English) influence on the minority language (Spanish).

In addition to these reasons (i.e. transferability of literacy skills from L1 to L2 and the influence of L2 on L1), the results of the present study could be attributed to another possible reason: The intensification of English instruction in the third grade, due to the district's policy of "early exit" from BE for ELLs. In the district where the study was conducted, formal instruction in Spanish is replaced by instruction in English during the students' third grade year.

This practice is not uncommon across the state of Texas or across the nation, since most states' educational accountability systems require students to be tested with standardized or criterion-referenced measures in reading, not any later than the third grade. The overwhelming majority of assessments used by the states for

accountability purposes are in English. Most state-mandated tests measure student performance in various academic domains using only the medium of English. For this reason, it is not uncommon for schools to intensify English instruction after the early elementary years.

Bilingual Education Programs and Language Outcomes

Most TBE programs intensify English instruction in the third grade for ELLs, hoping to transition the students to all-English classes by the fourth grade (early exit). Previous research on “early exit” programs (Cummins, 2000; Thomas & Collier, 2002) found that complete transition to English instruction in the early elementary years is responsible for slowing down and eventually truncating the development of ELLs’ native language. “Limited growth in Spanish is typical with Transitional Bilingual Education programs, given that the goal for these types of programs is to develop L2 and not continue to develop L1” (Laija-Rodriguez, Ochoa & Parker, 2006, p. 102). During the long-term progress monitoring period of the present study, the TBE students’ rate of improvement in Spanish slowed down over time and the ESL students reached an obvious plateau of performance in Spanish, suggesting that, at least for these children, the development of English (L2) was clearly occurring at the expense of the native language (L1). English, the former L2 was rapidly becoming the “new L1” (Francis, 2005, p. 496).

The gain in English reading over Spanish achieved by both groups of students in this study appears to support the underlying principle of TBE and ESL programs, which is to transition ELLs to English as soon as possible, with little or no regard for the students’ future outcomes of the Heritage Language. Historically,

both programs, TBE and ESL, have operated on the premise that English language development is the desired outcome for ELLs. Findings from this study lend support to the theory that, for the most part, TBE and ESL programs appear to foster *subtractive bilingualism*. They do not maximize the ELLs' full potential for developing balanced bilingualism and biliteracy, but emphasize the development of English over the native language.

However, findings from this study also suggest that the process of Heritage Language erosion and loss appears to be delayed when children receive instruction in L1 in the early elementary years. Because of the selection bias of the students across the two programs, there is no clear causal link; however, the results are suggestive. The present study concluded that there was a significant difference in the rate of growth in Spanish reading between the students taught in the TBE program and those taught in the ESL program. The students in the TBE classes greatly outperformed the students in the ESL classes, on measures of Spanish reading. Thus, it is suggestive that children instructed in TBE models of BE by bilingual and biliterate teachers may have a better chance of maintaining their Heritage Language over time when compared to students instructed in English-only by monolingual English-speaking teachers.

Popularity of Two-Way Immersion (TWI) Bilingual Programs

In the “long and rancorous” (Thomas & Collier, 2003, p.62) battle among the proponents of various models of BE, the issue of the optimal instructional model for ELLs has not yet been resolved. The controversy surrounding which language should be used in the classroom as the medium of instruction for ELLs is likely to

continue in the future. In the last decade, Two-Way Immersion (TWI) bilingual programs have joined TBE and ESL models as possible educational program choices for ELLs. TWI programs have gained an unprecedented popularity across the country over TBE and ESL programs. In TWI models, majority and minority students are integrated in the same classroom with the purpose of developing two languages simultaneously (Kirk-Senesac, 2002). Most TWI programs “are implemented at the elementary level with Spanish as the minority language” (de Jong, 2002, p. 2). During the past decade, several studies have been conducted with elementary students enrolled in TWI programs to determine the efficacy and quality of these programs (Christian, 1996; Christian, Howard, & Loeb, 2000; Cloud, Genesee & Hamayan, 2000; Montone & Loeb, 2000). Overall, findings from these studies conclude that students enrolled in TWI programs perform consistently well on measures of English reading (L2), and although they receive instruction in the native language for only 50% of the time, they appear to develop and maintain high levels of proficiency in L1 (Spanish) over time.

When considering the Heritage Language, findings from the present study are not consistent with the general results from studies of TWI models of BE. In the present study, during the long-term progress monitoring period, students taught in the TBE program demonstrated a slower rate of improvement in Spanish reading, when compared to their own rate during the short-term progress monitoring period: Progress in Spanish slowed down over time for the TBE group. For the students taught in the ESL program, growth in Spanish reading was almost non-existent, as

evidenced by the obvious plateau of performance reached during the long-term progress monitoring period.

In summary, although a causal connection cannot be established in this study, its findings tend to support the theory that TBE and ESL models of BE are characterized by *subtractive bilingualism* for ELLs. On the contrary, findings from studies conducted with ELLs enrolled in TWI programs conclude that, for the most part, the TWI instructional model seems to fit a framework of *additive bilingualism* instead. When comparing language outcomes in students enrolled in more recent program models (i.e. TWI) with outcomes in students in more traditional models of BE (i.e. TBE and ESL), the difference in language results could explain in part the current popularity of TWI across the country (cal.org/twi/directory/twigrow.htm, 2005), and why it seems to be the preferred contemporary program type, when compared to more traditional programs.

Second Research Question: Observations from Findings

The ELLs' language shift from L1 to L2 at an early age is well documented in the literature (Fillmore, 1991, 2000; Orellana, 1994; Orellana, Ek, & Hernández, 2000). The present study lends support to these findings and adds to them a specific dimension: The evidence that a complete transition from L1 to L2 could occur as rapidly as within one generation. The students selected for the study were all first generation children of immigrant parents. As mentioned earlier, results from quantitative analyses revealed that the ESL students in this study had reached a plateau in Spanish reading over the long term progress monitoring period, indicating, at best, very minimal growth in L1. These results were corroborated

through qualitative data collection and analyses also. Through the Parents' Interviews (PI), it was discovered that the overwhelming majority of the ESL parents recognized that their children had already lost the ability to converse in Spanish at home or in the community. Two of the parents from the ESL group echoed the sentiment of the entire group when they made reference to their own children in this way: "*¡Sí, pero de español no sabe nada!!*" [Yes, but of Spanish he knows nothing!] or "*¡Yo le hablo en español pero él no me entiende!*" [I speak Spanish to him, but he does not understand me!].

The theme of language loss in their children was evident in the comments of the ESL parents, but it was not as common among the parents from the TBE group. Ninety percent (90%) of the ESL parents admitted to their children's diminished ability of speaking the Heritage Language, while only 20% of the TBE parents recognized some language loss in L1 in their children. These findings lend support to the theory that instruction in the native language delivered by bilingual and biliterate teachers appears to delay the process of erosion and ultimate loss of the Heritage Language. This theory encourages school districts to consider, at a minimum, "late exit" policies for their ELL students.

Ninety percent (90%) of the TBE parents expressed a desire to see their children maintain their native language. They recognized Spanish as a symbol of the family's roots and heritage. These results are consistent with findings from previous studies (Pacini-Ketchabaw, Bernhard & Freire, 2001; Worthy, Rodriguez-Galindo, Assaf, Martinez & Cuero, 2003), which conclude that most Hispanic parents consider Spanish language maintenance a way to foster family unity and cultural

identity. Findings from the present study lend support to the theory that language appears to be inextricably connected to the life of a people (Tinajero, 2005) and represents the heart of its cultural treasure (Bernal-Enriquez, 2003).

Overall, both sets of parents affirmed the importance of bilingualism and recognized the economic benefits associated with being proficient in more than one language. These findings are consistent with conclusions from previous studies (Satterfield Scheffer, 2003; Worthy *et al.*, 2003). Results obtained in the past five years, for the most part through qualitative data collections and analyses, provide evidence to the fact that most Hispanic parents hold the belief that bilingualism and education are the ways to secure better employment opportunities for their children in the future.

Implications for Future Research

Overall findings from the present study demonstrate that both groups of students, from the TBE classes as well as the ESL classes, made gains in English reading over time, with the TBE students progressing at a faster rate than the ESL students. The TBE students made gains in Spanish also; however, the rate of growth in Spanish was not as rapid as the improvement in English over time. Linguists and researchers in second-language acquisition are of the opinion that the ELLs' pattern of stronger English than Spanish by the third grade could indicate the beginning of a downward spiral for the native language. It could indicate the beginning of the L1 erosion process which eventually culminates in the students' complete shift to L2.

The question remains as to what will happen to the TBE students' oral proficiency and literacy skills in Spanish after the third grade, when instruction in Spanish is totally discontinued, due to district's policy of "early exit" from BE programs. Further investigation, in the form of a longitudinal study with the same cohort of students, could provide validation to the suspicion that these students, although demonstrating near balanced bilingualism at the onset of the study, are indeed the forerunners of native language erosion and/or possible loss. Subtractive schooling has a tendency to being more evident in the middle and high school years, rather than in the early elementary years. However, "there is little research (with secondary Hispanic students) that links long-term language maintenance in Spanish-speaking students to bilingual instruction or any kind of program" (Hasson, 2006, p. 50) in the elementary years. Further research with sixth through twelve grade students is necessary to determine whether well-intentioned practices implemented for ELLs in the early elementary grades are truly "best practices" for the long run. More empirical research with secondary students is necessary to investigate the possible connection between their long-term language outcomes and their elementary program-type.

Furthermore, findings from this study indicate that an overwhelming majority of parents in both groups believes that bilingualism is the way of the future for their children. However, in schools across Texas, it is not uncommon to encounter parents who still deny BE services and prefer to enroll their children in all-English classes (Télez, 1998). Historically, students' use of the home language has not been welcomed in the mainstream classroom. Consequently, many Hispanic

parents do not hold pleasant memories of their own school experiences in mainstream classrooms as culturally and linguistically diverse students (MacGregor-Mendoza, 2000; Schecter & Bayley, 1998). Desiring more pleasant experiences for their children, many parents attribute more value to learning and speaking English rather than Spanish. Further research with Hispanic families is necessary to determine whether parents' traditional opinions of wanting their children learning and speaking English, even at expense of their Heritage Language, is gradually changing. Results from this study seem to point to a possible shift in parents' beliefs from an English-at-any-cost perspective to one that favors bilingualism in their children.

Study Limitations

The limitations of this study are at least three in number: a) small sample size, b) groups' initial inequalities in Spanish, and c) potential researcher's bias.

Small Sample Size

The participants in this study were N=20 second-grade students of Hispanic origin. They were all first-generation children of immigrant parents. Ten students were enrolled in Transitional Bilingual Education (TBE) classes and ten in English as a Second Language (ESL) classes. Since TBE and ESL are common models of BE, a larger sample of participants could have been considered. It would have been interesting to see whether a larger sample size would have yielded the same growth trends and improvement rates in English and Spanish reading. The researcher avers

that the small sample size in this study limits the degree of generalizations of the findings to similar groups of students.

Groups' Language Inequalities

Through preliminary assessments of the students' levels of Cognitive and Academic Language Proficiency (CALP) in English and Spanish, it was discovered that the children in the TBE group were initially much more developed in Spanish than the children in the ESL group. However, both groups appeared to be fairly equivalent in English language skills. The inequality between the two groups in Spanish inserts a "selection bias" in the design, and reduces the ability to inference about differential program effects.

Researcher's Bias

Throughout the study, the researcher was very cognizant of her own strong beliefs in the value of bilingualism and maintenance of the Heritage Language. A plethora of positive life-experiences encountered for being trilingual could have certainly clouded her objectivity. However, the awareness of this potential prejudice remained vivid in her mind throughout the study, and it fueled a desire to exemplify the highest possible degree of professionalism and research ethics.

Conclusion

Since the onset of BE in 1968, public school agencies in the United States have utilized programs such as ESL and TBE as the most common models of service to minority students. In this study, the question was raised as to whether these traditional instructional models support a "deficit" educational structure or an

“enrichment” educational structure for Second Language Learners. In other words, the following question was asked “Do they fit a *subtractive bilingualism* framework or an *additive bilingualism* framework?”

The design of this study was a mixed-method design, utilizing quantitative as well as qualitative data collection and analyses. Findings from the study suggest that specific programs of BE (i.e. ESL and TBE), while well-meaning and often well-intentioned, could support an educational structure that fosters *subtractive bilingualism* and *subtractive schooling*.

Although there is some evidence from research that TWI programs and “late exit” programs appear to be better suited for long-term maintenance of the heritage language (Lessow-Hurley, 1996; Ramirez, Yuen, & Ramey, 1991; Roberts, 1995), the efficacy of bilingual programs is still evaluated, for the most part, in terms of the ELLs’ development and academic progress in English, and not in the native language. Established models of BE, such as TBE and ESL, function under “the monolingual instructional assumption” (Cummins, 2005, p. 587), which affirms English as the only medium for achieving academic success in the United States. In recent years, this assumption has been made even stronger by the No Child Left Behind (NCLB) Education Act (McCarty & Romero, 2005), mandating that local education agencies evaluate ELLs’ Adequate Yearly Progress (AYP) in English only, and not in the students’ native language.

However, educators, researchers and policy makers should continue to pay attention to what is happening to ELLs’ Heritage Languages in the nation’s classrooms and communities. Language development and literacy skills in English

should not be the only items under scrutiny in American schools for ELLs.

Although high levels of English proficiency are required to be successful in our contemporary and global society, the development and maintenance of the native language cannot be excluded from one's formula for success. In a diverse and industrialized society, the status of students' Heritage Languages should be equal to the status attributed to the Standard Language and not hold an inferior place. The native language should be seen as an asset, not a detriment to one's quest for success. Schools are often the first environments where ELLs encounter English. Giving equal respect in schools to the process of developing the Heritage Language as it is given to learning English could make a difference in the education of ELLs. At a minimum, it could make a difference in the Second Language Learners' attainment and long-term maintenance of their most valuable resource: The mother tongue.

In the continuous search for the best possible services to an ever-growing ethnically diverse student population, schools should consider shifting from compensatory, *subtractive schooling* to enriching, *additive schooling*. Local education agencies should consider giving equal respect to the students' home language by extending and promoting its study through the secondary years, and not truncating it as early as the third grade. It is believed that through this practice, the students' Heritage Language will have a much better probability of survival and of remaining with the individual child for a life time.

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APPENDIX A

Letter to parents in Spanish

Estimados Padres de _____,

Muchas gracias por permitir a su hijo/a de participar en el estudio doctoral llevado a cabo por Mariagrazia Marzano Sheffield en la escuela Contreras.

Ustedes están invitados a venir a una reunión informal con la Sra. Sheffield el _____ de _____ a las _____, en la escuela Alice Contreras.

Firma

Fecha

English translation of the letter

Dear Parents of _____,

Thank you for allowing your child to participate in the doctoral study conducted by Mariagrazia Marzano Sheffield at Contreras Elementary.

You are invited to an informal meeting with Mrs. Sheffield on _____, at _____, at Alice Contreras Elementary.

Signature

Date

APPENDIX B

Questions for the semi-structured Interviews with the parents

1. ¿Cuál es el idioma que más se habla en su casa?
2. ¿Cuál es el idioma que su hijo/a habla la mayor parte del tiempo en la casa?
3. ¿Usted cree que es necesario hablar dos idiomas en los Estados Unidos?
4. ¿Porqué sí o porqué no es necesario hablar más de un idioma en los Estados Unidos?
5. ¿Cuál es su opinión si su hijo/a creciera hablando solo puro inglés?
6. ¿Es importante para Usted y su familia que su hijo/a mantenga el idioma de español?
7. ¿Porqué sí o porqué no es importante que su hijo/a mantenga el idioma de español?
8. ¿Qué cree Usted que pasa cuando los niños pierden el idioma nativo?

English translation of the questions

1. What language is mostly spoken in the home?
2. What language does your child speak mostly at home?
3. Do you think that it is necessary to speak two languages in the United States?
4. Why or why not is it necessary to speak more than one language in the United States?
5. What is your opinion if your child would grow up speaking only English?
6. Is it important for you and your family that your child maintain the Spanish language?

7. Why or why not is it important that your child maintain the Spanish language?
8. What do you believe happens when children lose their native language?

APPENDIX C*Parent consent in Spanish*

Yo, padre de _____ doy/ no doy (marque uno) el permiso que mi hijo/a participe en el estudio doctoral, llevado a cabo por Mariagrazia Marzano Sheffield, en la escuela de Alice Contreras. Para cualquier pregunta, puedo llamar a la S.ra Sheffield, al número 817-xxx-xxxx.

Firma de los padres _____ Fecha _____

English translation of parent consent

I, the parent of _____ give/ do not give (mark one) permission for my child to participate in a dissertation study, conducted by Mariagrazia Marzano Sheffield, at Alice Contreras elementary school. For any question, I can call Ms. Sheffield, at 817-xxx-xxxx.

Parent signature _____ Date _____

APPENDIX D

Raw Slope Coefficients (RSC) in English and Spanish for each student for the Short-Term (ST) progress monitoring period and for the Long-Term (LT) progress monitoring period

Student	RSC (Eng) ST	RSC (Span) ST	RSC (Eng) LT	RSL (Span) LT
1	1.05	0.826	0.263	0.355
2	1.655	-0.547	0.874	0.025
3	1.608	0.588	0.408	0.115
4	1.12	0.279	0.415	-0.051
5	2.314	-0.25	0.89	0.183
6	1.061	0.582	0.368	-0.014
7	0.838	0.217	0.183	-0.076
8	1.041	0.45	0.623	-0.177
9	0.77	0.864	0.171	0.148
10	1.1	-0.255	0.066	-0.123
11	1.991	1.144	0.767	0.223
12	0.941	0.885	0.928	0.337
13	0.873	1.405	0.741	0.82
14	0.87	0.894	0.494	0.335
15	0.988	0.291	0.644	0.428
16	0.173	-0.202	0.716	0.547
17	2.132	0.379	0.55	0.435
18	0.92	1.37	0.632	0.074
19	0.252	0.541	0.358	0.308
20	0.982	0.755	0.276	0.402

VITA

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Education: Ph. D., Educational Psychology, Texas A&M University, College Station, May 2007
M.S., Education, The University of Texas at Tyler, 1997
B.S., Modern Languages, Università di Torino, Italy, 1977

Certifications: 2003 Principalship
2001 Secondary Spanish (6-12)
1997 Educational Diagnostician (Pk-12)
Generic Special Education (Pk-12)
1994 Elementary Self-contained (1-8)
Elementary Bilingual/ESL (1-8)
Early Childhood Education (Pk-K)

Languages: Italian, English and Spanish

Experience: 2004 – present Area Director for Special Education
Fort Worth ISD – Fort Worth, TX
2001 – 2004 Bilingual/ ESL Coordinator
Jacksonville ISD- Jacksonville, TX
1997 – 2001 Educational Diagnostician
Jacksonville ISD – Jacksonville, TX
1995 – 1997 Two-Way Immersion Kindergarten
Teacher
Jacksonville ISD – Jacksonville, TX
1992 – 1995 Transitional Bilingual Education Kindergarten
Teacher
Jacksonville ISD – Jacksonville, TX

Presentations: National Association of Bilingual Educators (NABE)
Topic: Is it a linguistic difference or a true learning disability?
NABE 2006 Phoenix, AZ; NABE 2005 San Antonio, TX;
NABE 2004 Albuquerque, NM; NABE 2003 New Orleans, LA;
NABE 2002 Philadelphia, PA; NABE 2001 Phoenix, AZ;
NABE 2000 San Antonio, TX.

Publication: NABE & ILIAD Project (2002). *Determining appropriate referrals of English language learners to special education: Self-assessment guide for principals*. Washington, DC: NABE.