STORYTELLING AND RETELLING AND HIGHER ORDER THINKING
FOR ENGLISH LANGUAGE AND LITERACY ACQUISITION (STELLA)
FOR IMMIGRANT STUDENTS

A Dissertation

by

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DOCTOR OF PHILOSOPHY

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ABSTRACT

In this study, I examined the effectiveness of the literacy curriculum known as STELLA (Storytelling and Retelling and Higher Order Thinking for English Language and Literacy Acquisition) for newcomers to the United States in Grade 2. The number of immigrant students in elementary schools in Texas is on the rise, largely due to the geopolitical exodus of tens of thousands of Central American children. While STELLA has been proven to be an effective curriculum for gains in English language learners’ (ELL) oral language development in a previous longitudinal research study, the data had not been disaggregated to measure its effectiveness for the subgroup of ELLs – newcomers. In this small-n, mixed-methods study, I found no initial differences for three out of four of the Woodcock-Munoz Language Survey Revised subtests measuring oral language proficiency. On Story Recall, for which there was an initial difference, the immigrant group caught up to the home group nine months later. For Texas English Language Proficiency Assessment System (TELPAS) Listening, immigrant students entered Grade 2 with a lower ability, but caught up to the home group by the end of the grade; whereas for TELPAS Speaking, immigrant students entered Grade 2 with a lower ability, but did not catch up to the home group by the end of the grade. The context of this study was STELLA treatment classrooms in an urban school district in the Houston metro-area between newcomer ELLs who arrived to the United States within three years of Grade 2 and ELL students who were either born in the United States or arrived more than three years previous to Grade 2. Qualitative classroom observations in this study
provide insight for teachers, administrators, and researchers as to what types of events should be occurring in a classroom housing newcomer ELLs.
DEDICATION

To the immigrant children with whom I have worked: you are modern day Pilgrim-Huck Finn-Adventurers. I love your pluck, grit, and simple, but profound, dreams. May they come true.
ACKNOWLEDGEMENTS

I would like to thank my committee Chair, Dr. Rafael Lara-Alecio, and my committee members, Dr. Beverly J. Irby, Dr. Hector Rivera, Dr. Fuhui Tong, and Dr. Summer Odom, for their guidance and support throughout the course of this research. I am grateful to Drs. Lara, Irby, and Tong for granting me permission to use the data from their Project ELLA-V.

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Dr. Rivera, thank you for the helpful guidance along the way. It has been a real joy to share with you the mission of learning how to serve newcomers better.

Dr. Tong, you are always a breath of fresh air to talk to. I have immense respect for your intelligence and capabilities as a researcher, statistician and professor.

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To Dr. Hall who taught me stats, thank you. You made it enjoyable.
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To my buddy, Nahed Abdelrahman, “As iron sharpens iron, so one [wo]man sharpens another.” That describes you and me. You have made the dissertation writing experience feel more like fun than work. Your work ethic inspires me to push through the difficult moments when I feel like taking a break.

Thank you Granny and Dad for always believing in me, and for seeing me through to this moment in my life. Granny used to tell me, “I’m excited about your future.” Dad taught me, “I am not to be trifled with today.” My love for other people, world geography, and the immigrant spirit come from you. Thank you to Uncle Jay and Aunt Janet for your prayers and constant encouragement, and to the rest of my Stanka and Lynch families for your encouragement and love.

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This work was supervised by a dissertation committee consisting of Dr. Rafael Lara-Alecio, Department of Educational Psychology, and Dr. Beverly J. Irby, Department of Educational Administration, as well as Dr. Héctor Rivera, Department of Educational Psychology, Dr. Fuhui Tong, Department of Educational Psychology, and Dr. Summer Odom of the Department of Agricultural Leadership Education and Communications.

All work for the thesis (or) dissertation was completed by me, in collaboration with Maria Henri and Jui-Teng Li, from the Department of Educational Psychology, and well as Nahed Abdelrahman, from the Department of Educational Administration and Human Resources, and Gabriela Arriaga of the Department of Political Science. Sean Roberson of the Thesis Office helped me prepare my document for submission.

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CHAPTER I
INTRODUCTION

The percentage of growth among school-aged Hispanic English learners in the United States increased rapidly from 2009 and 2013, from 10.9 million to 12.4 million – or 13.6% (National Center for Education Statistics, 2015). The trend in rising numbers of newcomer students has only increased since then. A recent phenomenon regarding the immigration of school-aged children is the migration of tens of thousands of children from Central America. According to United States Customs and Border Protection (2016), in 2013, 38,045 children came to the United States as unaccompanied minors from the countries of El Salvador, Guatemala, Honduras, and Mexico. The next year that number escalated to humanitarian crisis proportions, totaling 67,339 before assuaging to a still considerable number, 39,399 in 2015. Recently, news reports convey that 2016 is shaping up to look much like 2014 in terms of numbers, since smugglers have found new routes through which to penetrate the border (Markon & Partlow, 2015). Table 1 shows the last seven-year trend in immigrant student arrivals.
Table 1

*Unaccompanied Alien Children Encountered by Fiscal Year*

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<tbody>
<tr>
<td>El Salvador</td>
<td>1,221</td>
<td>1,910</td>
<td>1,394</td>
<td>3,314</td>
<td>5,990</td>
<td>16,404</td>
<td>9,389</td>
<td>5,017</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1,115</td>
<td>1,517</td>
<td>1,565</td>
<td>3,835</td>
<td>8,068</td>
<td>17,057</td>
<td>13,589</td>
<td>6,474</td>
</tr>
<tr>
<td>Honduras</td>
<td>968</td>
<td>1,017</td>
<td>974</td>
<td>2,997</td>
<td>6,747</td>
<td>18,244</td>
<td>5,409</td>
<td>2,772</td>
</tr>
<tr>
<td>Mexico</td>
<td>16,114</td>
<td>13,724</td>
<td>11,768</td>
<td>13,974</td>
<td>17,240</td>
<td>15,634</td>
<td>11,012</td>
<td>2,881</td>
</tr>
<tr>
<td>Total</td>
<td>19,418</td>
<td>18,168</td>
<td>15,701</td>
<td>24,120</td>
<td>38,045</td>
<td>67,339</td>
<td>39,399</td>
<td>17,144</td>
</tr>
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</table>

Note: Numbers below reflect Fiscal Years 2009-2015, FY 2016 (October 1, 2015 - January 31, 2016). Adapted from “United States Border Patrol Southwest Family Unit Subject and Unaccompanied Alien Children Apprehensions Fiscal Year 2016” by United States Customs and Border Protection, para. 5.

Children who have come to the United States unaccompanied have often experienced traumatic events (Carlson, Cacciatore, & Klimek, 2012). Most of these Unaccompanied Alien Children (UACs) (as the government defines them) are eligible to receive asylum (Refugee and Immigrant Center for Education and Legal Services, 2014), based on the requirements that they were abandoned, face imminent threat in their country, or were abused (United States Citizen and Immigration Services, 2016), and can therefore receive U-Visas or T-Visas if granted by an immigration judge.

We [Refugee and Immigrant Center for Education and Legal Services] have carefully peer-reviewed the intakes of 925 children so far, and our assessment is that 63 percent of these 925 children are likely to be found eligible for relief by a U.S. Immigration Judge. In RAICES’ twenty years of experiences, the cases that
our staff screens and determines to be eligible for relief ultimately have a success rate of 98 percent in proceedings before immigration judges. Thus RAICES’ preliminary legal determinations are supported by hundreds of favorable adjudications on behalf of our unaccompanied minor clients. (RAICES, 2014, p. 1)

Even if they do not receive asylum via U-visa or T-visa, immigration court cases are taking two to three years due to the overcrowded immigration court system (Kriel, 2016).

Another new aspect to the surge the United States has experienced in the past few years is that tender-age children (under the age of 12) are coming (Retrepo & Garcia, 2014). Reno v. Flores (1993) mandates that these children be released to a parent, relative, or guardian, rather than held in custody. Plyler v. Doe (1982) allows these children to be enrolled in school while going through immigration court hearings. Whether these children stay in the country for months or the rest of their lives, it is their legal right and duty to enroll in school while in the United States, however, the educational system in the United States is not prepared to provide the educational instruction these students need.

According to Texas Education Agency’s Public Education Information Management Systems (2015-2016) data, a total of 85,108 Title III Immigrant students were enrolled in Texas schools in the fiscal year of 2015-2016. Over 32,000 of these students were enrolled in elementary, over 16,000 were enrolled grades 6-8, and over 24,000 were in high school. This total number of immigrant students enrolled was an astounding 20% increase from the year prior (Texas Education Agency, 2015-2016).
While not all of these numbers, shown in Table 2, reflect immigrant students coming from Central America, it is the group from Central America that is likely most influencing this trend in growth. Table 2 shows a five-year trend in the number of immigrant students enrolled in Texas schools.

Table 2

*Immigrant Students in Texas by Fiscal Year*

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<tr>
<td></td>
<td>78,243</td>
<td>70,422</td>
<td>68,986</td>
<td>70,761</td>
<td>85,108</td>
</tr>
</tbody>
</table>

The impact of the immigrant student influx has arguably had the most impact on small, rural districts without the infrastructure to support their academic needs. For some small districts, such as one in Region VII (to use as an example), growth rates of over 100% in the ELL population most likely caused for a stressful school year for teachers and administrators. According to the 2014-2015 Texas Academic Performance Report, an example district had sixty-two students enrolled in Bilingual / ESL education as compared to thirty-one from the previous year, but zero teachers registered as Bilingual / ESL (Texas Education Agency, 2015-2016). While some may not consider the influx of thirty students to be a significant challenge, it certainly is for a small district whose teachers are not prepared to meet the needs of ELLs in terms of curriculum and scaffolding strategies being used. There are hundreds of districts like these across Texas. Per Texas Administrative Code, Title 19, Chapter 89 regarding adaptations for special populations, districts that have enrollment of twenty or more English language learners...
who speak the same language within the same grade must offer a bilingual education program, and to seek certified teaching personnel so as to ensure competent service to this population (Texas Education Agency, 1996). Due to this policy, the state’s number of districts that should offer a bilingual education have grown (Texas Education Agency, 2013-2014; 2014-2015).

While there has been an increase in pedagogical practice that meets the needs of English language learners over the past 10 years, helping to close the achievement gap between ELLs and mainstream students (Calderon, Slavin, & Sanchez, 2011), the immigrant subset of ELLs have specific needs that Texas schools must be prepared and equipped to provide (Suarez-Orozco, Bang, & Onaga, 2010). These students’ greatest chance for success in the educational system is English language and literacy acquisition (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006; Suarez-Orozco, Bang, & Onaga, 2010;). The lack of preparedness on behalf of schools across the United States meets with a lack of school-readiness and formal education that this new wave of immigrant students brings (Takanashi, 2004).

Oral language development is foundational to success in reading and writing especially for students after Grade 2 (Aldridge, 2005; Whitehurst & Lonigan, 2001). In fact, oral language precedes literacy (Lesaux & Geva, 2006). Among foundational studies that addressed these needs for language and literacy acquisition for Hispanic students was Project ELLA (English Language and Literacy Acquisition), which was a 5-year, federally funded project, for which the purpose was to evaluate alternative models of structured English immersion and transitional bilingual education for ELLs from kindergarten through third grade. For this project, Irby, Lara-Alecio, Quiros,
Mathes, and Rodriguez (2004) created an intervention component called Story Telling and Retelling and Higher Order Thinking for English Language and Literacy Acquisition (STELLA). Students participating in the treatment group employing STELLA experienced the greater gains than control group students in oral language development and vocabulary knowledge during Project ELLA (Cruz de Quiros, 2008).

Since the time of Project ELLA (2003-2008; Lara-Alecio, Irby, & Tong, 2003), the United States Department of Education awarded Investing in Innovation funds for a scaled-up version of the project to validate its findings: Project ELLA-V (U411B120047; Lara-Alecio, Irby, & Tong, 2013). The purpose of Project ELLA-V was to validate interventions from the earlier project (ELLA) by individual grade level. Investigators conducted a randomized controlled trial to validate the individual interventions of Project ELLA to determine their degree of impact on English acquisition for native Spanish-speaking students in grades K-3. ELLA-V impacted 75 elementary school campuses, 600 teachers, and 15,000 students across the state of Texas. My aim in this study was to determine the extent to which STELLA supports English language development for an immigrant student group of English language learners (ELLs).

**Title III Immigrant Students**

Of concern is the dropout rate, as well as the high-mobility rate among immigrant students. According to the National Center of Education Statistics immigrant students had a 17.6% risk of dropping out (NCES, 2013). While students at the elementary level are not likely to drop out, they do suffer from high-mobility rate (Suarez-Orozco, Darbes, Diaz, & Sutin, 2011). High mobility is detrimental in that it
disengages students from the educational process (Rumberger & Larson, 1998). Due to high mobility, it is imperative that students are taught using a highly structured curriculum that has proven its effectiveness, in which there is a high degree of (a) time on task, (b) teacher fidelity to the curriculum, and (c) high interest on part of the students. These elements decrease the time it may take a student to become familiar with protocol.

**Theoretical Framework**

In my study, Freire’s (1970) transformative social justice in education is the foundation for including and specifically monitoring immigrant students using STELLA curriculum with the intent to increase their oral language growth and comprehension in the target language in equitable parity to their non-immigrant peers. Paolo Freire (1970) in his social justice in education theory, viewed literacy as a source of raising the awareness of oppression. Freire promoted the idea of empowerment through education regardless of individual differences including age and national origin, especially literacy education, while rejecting the idea that the teacher holds all official knowledge while students do not possess funds of knowledge. Freire critiqued the view that knowledge is objective and universal, and those who held that knowledge also therefore held positions of power. Rather, he was more concerned with promoting a sense of agency for both students and teachers. The tenets of his theory have not been abandoned by modern social justice in education promoters, who are concerned with the balance of individual academic excellence and the welfare of the group, promoting both public and private good. Seven key principles undergird democratic and social justice education. All persons in a given organization shall be treated respectfully.
The education institution will ensure equitable access for all.

The education institution will promote equitable outcomes for all.

The practices of the organization should emphasize mutual benefit.

The norms and practices of the organization shall be equally inclusive of all members.

All members of a designated group (society, community, school) shall have equal civil, political, and social rights as citizens.

Competition for funds to ensure basic needs is undemocratic. (Shields, 2013, p. 1037)

The second language acquisition theories behind STELLA are well documented and common to understanding the cognitive processes that happen during second language acquisition. Cummins’ (1979) and Krashen’s (1982;1985) second language acquisition theories comprised the workings of STELLA. Principles such as cross-linguistic transfer, the input-comprehension hypothesis, and common underlying proficiency that began to develop in the late 70’s and early 80’s are still relevant and essential to basic tenets of bilingual education and underpin STELLA. Cross-linguistic transfer (Cummins, 1979) explained the way in which a person’s native language (L1) affects and interferes with the language and literacy development of their second language (L2). Another theoretical principle upon which STELLA is based on is Cummins’ (1979) principle of Common Underlying Proficiency, which distinguished Basic Interpersonal Communication Skills (BICS), which takes about two years to acquire, from Cognitive Academic Language Proficiency (CALP), which takes five to
seven years to acquire. In the course of acquiring a second language, a person draws upon the metalinguistic skills they attained while acquiring the native language. Additionally, in his Input Hypothesis, Krashen (1982, 1985) posited that input must be comprehensible, and slightly beyond the current level of competence (“i + 1” in the literature).

Building upon these principals, Lara-Alecio and Parker (1994) put forward a pedagogical model for transitional bilingual classrooms and was developed to ensure teacher classroom efficacy. This model is four-dimensional, consisting of (a) Activity Structures, (b) Language Content, (c) Language of Instruction, and (d) Communication Mode. Activity Structures are defined as “teacher-structured learning situations [that are] relatively stable, recurring periods of activity, each with a recognized purpose and opportunities for communication” (Lara-Alecio & Parker, p. 121). Language of Instruction refers to four levels of language content: (a) social routines, (b) academic routines, (c) light cognitive content, and (d) dense cognitive content (Lara-Alecio & Parker, p. 122). Language of Instruction in this model offers four combinations of native language and English: (a) content presented in L1, (b) L1 introduces L2, (c) L2 clarified by L1, and (d) content presented in L2 (Lara-Alecio & Parker, p. 124). Language Mode is a “flexible procedure [which] permits maximum progress in content curriculum coverage” (Lara-Alecio & Parker, p. 124). In other words, a student’s reading, writing, and verbal expression competency may vary, especially depending on content, and the teacher may therefore permit the student to access or produce knowledge in their L1 on certain occasions should they need the facilitation.
Definition of Terms

Annual Measurable Achievement Objectives (AMAO)

AMAO holds each “Title III-funded local education agency (LEA) accountable for meeting Annual Measurable Achievement Objectives (AMAOs) for English language learners (ELLs), also referenced in current federal statute as children who are limited English proficient (LEP). AMAOs must reflect annual increases in the percentage of ELLs making progress in learning English, attaining English proficiency, and meeting the state’s academic content and achievement standards” [Texas Education Agency, 2015, Annual Measureable Achievement Objectives (AMAO), para. 1].

English Language Learners

An English language learner is “an individual who is in the process of actively acquiring English, and whose primary language is one other than English” (American Institutes for Research, 2010, Common ELL Terms and Definitions, p. 7)

English Language Proficiency Standards (ELPS)

ELPS outlines English language proficiency level descriptors and student expectations for English language learners (ELLs) (Texas Education Agency, 2016b, § English Language Proficiency Standards).

Democratic

The word “democratic” describes a way of organizing social life that is respectful, inclusive, and mutually beneficial (Shields, 2013, p. 1036).
Democratic Social Justice Education

Democratic Social Justice Education balances individual academic excellence and the welfare of the group, promoting both public and private good (Shields, 2013, p. 1036).

No Child Left Behind Act of 2001

No Child Left Behind Act of 2001 (NCLB) is a federal legislation that enacts the theories of standards-based education reform (Bush, 2002).


Plyler v. Doe (1982) is a case in which the Supreme Court of the United States mandated that illegal aliens are protected and entitled to the benefits under the Fourteen Amendment, which includes basic education (Plyler v. Doe, 1982).

Reno v. Flores (1993)

Reno v. Flores (1993) is a case in which the Supreme Court of the United States determined that alien minors be released to a parent or lawful guardian while awaiting deportation hearings (Supreme Court Yearbook, 1992-1993).

Special Immigrant Juvenile Status

Special Immigrant Juvenile Status is a program under United States Citizenship and Immigration Services to help foreign children in the United States who have been abused, abandoned, or neglected. Certain children who are unable to be reunited with a parent can get a green card as a SIJ can receive this. Children who get a green card through the SIJ program can live and work permanently in the United States (United States Citizenship and Immigration Services, 2016a, Special Immigrant Juvenile (SIJ) Status, para. 1).
Title III Immigrant Student

This is found under Title III of the No Child Left Behind Act of 2001 (NCLB), where the term ‘immigrant children and youth’ is defined as, “individuals who are aged 3 through 21; were not born in any state; and have not been attending one or more schools in any one or more states for more than 3 full academic years. The term ‘State’ means each of the 50 States, the District of Columbia, and the Commonwealth of Puerto Rico (See P.L. 107-110 Title III, Part C, § 3301(6).) (Texas Education Agency, 2016, EO797 Immigrant Indicator Code, para. 1).

Title III, Part A: English Language Acquisition, Language Enhancement, and Academic Achievement Act

The Title III, Part A: English Language Acquisition, Language Enhancement, and Academic Achievement Act, is also cited as the 'English Language Acquisition, Language Enhancement, and Academic Achievement Act'. This Act has nine purposes, all aimed at ensuring that children who are considered English language learner, including immigrant children and youth, attain English proficiency, develop high levels of academic attainment in English, and meet the same challenging State academic content and student academic achievement standards as all children are expected to meet (U.S. Department of Education, 2002, Part A – English Language Acquisition, Language Enhancement, and Academic Achievement Act, SEC. 3012. Purposes).

Texas Essential Knowledge and Skills (TEKS)

TEKS outlines state standards for what students should know and be able to do (Texas Education Agency, 2016a, Curriculum Standards, para. 1).
T Visa

The T Nonimmigrant Status (T visa) is a set aside for those who are or have been victims of human trafficking, protects victims of human trafficking and allows victims to remain in the United States to assist in an investigation or prosecution of human trafficking (U.S. Citizenship and Immigration Services, 2016b, “Victims of Trafficking: T Non-Immigrant Status,” 2011, para. 2).

Unaccompanied Alien Children (UAC)

Children who lack lawful immigration status in the United States, who are under the age of 18, and who either are without a parent or legal guardian in the United States or without a parent or legal guardian in the United States who is available to provide care and physical custody (National Conference of State Legislatures, 2014, Child Migrants to the United States, para. 13).

U Visa

A U Visa is a visa that provides temporary immigration benefits to aliens who are victims of qualifying criminal activity, and to their qualifying family members, and cooperate with law enforcement in the investigation and prosecution of a crime (U.S. Citizenship and Immigration Services, 2016c, Victims of Criminal Activity: U Non-Immigrant Status, para. 3).

Statement of the Problem

Immigrant students make significant contributions to the United States. On the United States Department of Education (USDOE) webpage dedicated to providing information and resources for immigrant, refugee, asylee students and families, is the following statement:
As a nation of immigrants, America has benefited from the vitality and enthusiasm brought to its shores by those seeking a better life. Successful immigrant and refugee integration efforts build the capacity of schools and early learning programs, communities, organizations, and other stakeholders to support the civic, linguistic, and economic integration of immigrants. (U.S. Department of Education [USDOE], 2015, Educational Resources for Immigrants, Refugees, Asylees and other New Americans, para. 3)

Regarding K-12 students specifically, the USDOE also stated:

Young people in this country – regardless of wealth, home language, zip code, sex, race, disability, actual or perceived immigration status – should have the chance to learn and achieve. Education must provide a path to a striving middle class for all who are willing to work hard. (U.S. Department of Education, 2015, Educational Resources for Immigrants, Refugees, Asylees and other New Americans, para. 4)

In order to provide this path, researchers must fill the paucity in research regarding the effectiveness of teaching strategies for immigrant students at the elementary level. While researchers (Tong, 2006; Cruz de Quiros, 2008; Tong, Irby, Lara-Alecio, & Mathes, 2008; Cruz de Quiros, 2012; Trevino, 2012; Pei-Lin, 2015) have shown the efficacy of structured English immersion and transitional bilingual education models in teaching Spanish-speaking elementary students’ English language and literacy skills to ELLs’ oral language development, the achievement data from norm-referenced, and criterion-referenced testing had yet to be disaggregated. Disaggregating the data between the immigrant and non-immigrant participants warranted formal analysis to
ensure the curriculum’s fairness, equity, and concern for immigrant students. Not only do these children have limited exposure to formal schooling, this may be their only chance to be provided with formal schooling in the United States in the case that the court does not rule in their favor and they are returned to their home country. Therefore, it is crucial that their chance to make gains in oral language development does not go wasted. The literacy skills they gain in Grade 2 could mean the difference of leading safe and productive lives, whether they stay or return to their native countries.

**Purpose**

The purpose of this small-n, mixed-methods study was to determine if immigrant students entered Grade 2 at a disadvantage to their peers on norm and criterion referenced testing and to further determine if there was a difference in English language oral development between immigrant and native-born ELLs in Grade 2 using the intervention Story Telling and Retelling with Higher Order Thinking for English Language and Literacy Acquisition (STELLA) (Irby, Lara-Alecio, Quiros, Mathes & Rodriguez, 2004), as well as to describe the STELLA classroom learning events that promote learning for all students, including newcomer ELLs.

**Hypotheses**

There are two hypotheses that guided my quantitative component of the analysis. The two hypotheses follow.

1. Scores from newcomer ELLs will be statistically lower than ELLs who were not newcomers in the Grade 2 using the intervention Story Telling and Retelling with Higher Order Thinking for English Language and Literacy Acquisition (STELLA) as
measured on the Woodcock Muñoz Language Survey – Revised (WMLS-R) oral language subtests used in Project ELLA-V.

2. Scores from newcomer ELLs will be statistically lower than ELLs who were not newcomers in Grade 2 using the intervention Story Telling and Retelling with Higher Order Thinking for English Language and Literacy Acquisition (STELLA) on the Texas English Language Proficiency Assessment System (TELPAS) Listening and Speaking.

**Research Question**

The research question is related to the qualitative component of my study. It follows: To what extent did learning events that are known in the literature to be beneficial to immigrant students occur in STELLA classrooms?

**Limitations**

One limitation of my study was that the small-\(n\) design made it difficult to find significant relationships from the data, and a representative distribution of the general population of immigrant students cannot be ensured. Generalizability should be limited to this sample context. This small-\(n\) design in this study is due to the fact that there were not many students who were identified as immigrants who entered the country within the past three years within the sample. Another limitation of my study is that the WMLS-R was not normed on ELLs. The issue of norming of standardized language proficiency assessment may not be aligned or sensitive to the intervention or to the young newcomers. Nonetheless, these limitations make it all the more reason to study newcomers or recent immigrant students and their early academic development.
Delimitations

Archival data selected for my study were restricted to Project ELLA-V (U411B120047) participants in a district in Harris County, Texas. Data were collected from two archived sources (a) Woodcock Munoz Language Survey – Revised, and (b) Texas English Language Proficiency Assessment System. Observations were collected as part of the ELLA-V Project and are stored on a secure server housed at Texas A&M University. Part of the archival data selected for this study were collected at the beginning of the school year instruction, and the other part were collected near the end of the school year.

Assumption

One assumption of my study was that the classroom teacher followed and taught the STELLA curriculum the way it was designed to be taught with a high degree of fidelity.

Organization of my Study

Chapter I of my study includes the introduction, statement of the problem, purpose statement, hypotheses, research question, significance of the study, conceptual framework, definition of terms, limitations, delimitations, and assumption.

Chapter II of my study includes a brief introduction describing the process and value of a systematic literature review, and proceeded to synthesize the current literature available regarding immigrant students in the elementary grades and literacy outcomes.

Chapter III of my study includes sections on research design, sample, instrumentation, intervention, data collection, data analysis, and a summary.

Chapter IV of my study contains results and findings.
Chapter V includes a discussion, limitations, recommendations, and implications for practice and future research.
CHAPTER II
CRITIQUE OF THE LITERATURE

In this literature review, I conducted a systematic review of the literature to examine academic outcomes for ELLs who are elementary-aged immigrant students. Systematic literature review is a secondary method of “making sense of large bodies of information” (Petticrew & Roberts, 2006, p. 2) by applying a systematic approach to answer the specific research questions using a defined protocol.

I conducted my review via a protocol-driven procedure, customary of a systematic review employing a structured, transparent, comprehensive approach. I analyzed and mapped all studies, reviews, reports, and dissertations directly relating to my topic, providing overviews and insights of academic outcomes of immigrant ELLs in elementary school. Systematic review is a methodology which is limited in use among social scientists, but growing in demand as this is a rigorous approach to reviewing literature.

Questions for the Systematic Review of the Literature

The research questions guiding my systematic review were:

1. Is there a gap in scholarly literature on the impact of oral language development on academic achievement for English language learners, particularly the immigrant subset, in elementary school?

2. What information exists about literacy issues among English Learner newcomers in elementary school?
Relevant Publications

Inclusion / Exclusion Criteria

Selection criteria for the publications included the following:

1. The publication must have been written or translated into English.
2. Because of the recentness of the sharp influx of child immigrant to the United States, and to ensure that the material is relevant, included publications must have been published in 2006 or later.
3. Only studies conducted in the United States were considered.
4. Only literature including elementary-aged children was considered.
5. Only literature including Hispanic or Spanish-speaking immigrant students was considered.
6. The publications must have included all three variables, or synonymous variations thereof, proposed in the research question: literacy, immigrant or ELL newcomer students and elementary education (See Figure 1).
7. Studies published in journal article format, dissertations, and reports were eligible.

Figure 1 shows the variables included in the formulation of my search terms. Synonyms for these terms were also used.
Selected Publications

Search strategy. I began my search by employing the assistance of personnel at the Center for Systematic Reviews at Texas A&M University. After an initial consultation with a librarian about my study, we began our search in ERIC (EBSCO), an online library of education research and information, sponsored by the Institute of Education Sciences (IES) of the U.S. Department of Education. The librarian helped me develop the search terms and relevant synonyms available in ERIC. My study began with a search for the following:

((DE "Immigrants" OR DE "Undocumented Immigrants" OR TI(immigrant* or English language learner* or ell or esl)) OR AB(immigrant* or English language learner* or ell or esl)) or ((DE "English Language Learners") or (DE "Bilingual Education" OR DE "Bilingual Education Programs" OR DE "Second Language Learning")) and (TI (title III or title 3 or new* or recent* or immigrant*)) OR AB (title III or title 3 or new* or recent* or immigrant*)) and (((DE "Elementary Education") OR(DE "Elementary School Students" OR DE "Elementary Schools") ) OR TI (elementary or grade school or primary school or k-5 or...
kindergarten) OR AB (elementary or grade school or primary school or k-5 or kindergarten)) and (((DE "Language Proficiency") OR (DE "Listening Skills" OR DE "Language Fluency")) OR (DE "Language Acquisition") ) OR TI (language n1 (development or acquisition or proficiency or fluency) ) OR AB (language n1 (development or acquisition or proficiency or fluency))).

This search was conducted on March 21, 2016. The search resulted in 160 studies. These studies were exported into my RefWorks account. On July 6th, my committee member Dr. Tong emailed me to notify me of a tool kit for newcomers published by the U.S. Department of Education. I included this in my reports.

**Method of selection.** I searched through all titles and was able to eliminate many based on the fact that some element of the exclusion criteria made itself evident in the title, such as “among Chinese students, or among high school students.” During the second review, I read the abstracts and eliminated more studies based on my exclusion criteria. I conducted a third review, opening and scanning the full documents to make sure they fit all inclusion criteria. These studies, I placed into subfolders of “studies,” “reports,” and “dissertations.” The search process, shown in Figure 2, was created for the screening process.

**Data extraction.** After completing all screening, 16 studies, 6 reports, 4 practice pieces, and 2 dissertations fit my search criteria, as shown in Figure 2. I then extracted my final sample onto a matrix (Microsoft Excel) and then categorized the documents by type (studies, reviews, reports, dissertations) and then coded by methodology, theme, and findings. Figure 2 shows the number of findings by document type.
Various themes emerged from these documents, therefore I strove to identify a concise way of categorizing them. After perusing these articles, I wanted to answer the question: from this body of literature, what do we know about newcomer ELLs in elementary and their language development, and how do we know it? With that in mind, I categorized these documents into three categories: affective / emotive, behavioral / psychomotor, and cognitive. I defined these categories thusly, based on framework provided by Bloom’s taxonomy of learning domains (Bloom, et al., 1956): (a) Affective / Emotive – I categorized the document in the affective / emotive category if it provided attitudes, opinions, beliefs, experiences, and voices captured; (b) Behavioral / Psychomotor – I categorized the document in the behavioral / psychomotor category if it presented skills and techniques tested, utilized, and recommended for educational
professionals; and (c) Cognitive – I categorized the document in the cognitive category if it expanded knowledge in the field based on empirical data or best-evidence research. Figure 3 shows the breakdown of the documents by epistemological type.

![Figure 3. The percentage of articles by epistemological type.](image)

**Affective / Emotive Knowledge**

**Teachers.** Teachers serve as a primary point of contact between immigrant children and their new society. Therefore, it is crucial to understand teachers’ attitudes and receptiveness toward immigrant students. A few findings regarding teacher attitudes toward immigrant students include inconsistency among teachers regarding receptiveness toward them according to the student’s age, and inconsistency among teachers as to whether or not literacy among immigrant students is important in the content areas, such as math.
Allard, Mortimer, Gallo, Link, and Wortham (2014) found that while educators in the Midwest of older immigrant students view them as deficient, educators of younger immigrant students are compassionate toward them. As immigrants arrive not only to traditional destinations such as California and the Southwest, but to more monoglossic towns and schools, the language ideologies the teachers hold provide explanations as to the educational decisions that are made in schools and, in turn, student outcomes. Students perceive the language ideologies of their teachers, which affects their own language practices, opportunities, and trajectories. Allard, et al. (2014) discovered that the high school teachers viewed the immigrant teenagers in a more threatening light, seeing them as potential menaces. These perceptions are due to their monoglossic language ideologies, stemming from the feeling that immigrants should be capable of and want to strive to learn English. Elementary school teachers, on the other hand, did not perceive their students in such negative terms, but their monoglossic ideologies also caused them to not give the support they should have for immigrant students to develop academic language in Spanish. The high school students understood that the classes designed for them were remedial, and many dropped out. At the elementary school level, teachers were more concerned with their students’ English acquisition and failed to provide support for the maintenance and development of their Spanish language skills.

Solorzano (2013) examined the issues of second language acquisition, bilingualism, and teacher preparation for immigrant elementary students in Indiana. In her view, “an open and culturally sensitive teaching approach should inform teacher of English-language learners and of a diverse cultural background in the classroom” (p. 115). Following a culturally responsive pedagogy framework, she asserted that “a
teacher who works with diverse students should develop a sociocultural consciousness regarding his/her students and that he/she should learn about his/her students and their communities in order to know more about what those students bring to the classroom and how this knowledge can help them learn” (Solorzano, p. 117). In her study, the teachers did show that cultural sensitivity, respect, and caring were important to them in their interaction with immigrant students and their families. As in a model of transformative social theory, children should be allowed to analyze their situations in United States schools and a curriculum that celebrates the knowledge immigrant children bring should be implemented. In regards to teacher preparation for culturally responsive pedagogy, teachers need to advocate for themselves that they want this kind of training so they can learn their culture and communicate a positive attitude toward them, which will have a positive impact on their approaches to learning. For example, “If a teacher is committed to see beyond the one dimension a student brings to the classroom, he/she will understand better that student’s attitude in class and how to better help the student establish a relationship between what he/she already knows and what he/she must learn in the classroom” (Solorzano, p.122). The teacher and principal in the study had culturally responsive attitudes though the Culturally Responsive Pedagogy was unintended. Caring implies a need and interest to understand the family context, customs, and beliefs in an effort to reach out beyond the school.

In response to the increase in linguistic diversity due to immigration, Bunch, Aguirre, and Tellez (2015) examined preservice teachers’ attitudes toward the importance of knowing how to integrate academic language development into their mathematics lesson. In their study, they found that some teachers feel that literacy is
important for math and some do not. Language ideologies and practices influence teachers’ attitudes toward immigrant students. In their examination of math teacher candidates’ written responses which are part of the Performance Assessment for California Teachers, an exam which requires teachers to prove themselves proficient in promoting academic language development for English learners in content areas, five of the eight teachers exhibited the belief that there is an important connection between language and mathematics. However, they expressed few ways to integrate academic language development beyond teaching vocabulary even though this test emphasizes academic language development in the content areas in both the prompts and rubric. Of the three who did not stress this connection, one in particular de-emphasized the relationship, arguing there is little need to focus on language development in a mathematics lesson beyond learning new vocabulary words.

**Students.** Students perceive of the importance to learn English and are aware of the power and status of English in the United States (Monzo & Rueda, 2009). Due to this awareness, immigrant students link language and identity, and do not have positive self-concepts until they are English proficient (Rivera Maulucci, 2011). However, whether in English or Spanish, and regardless of literacy level, all children desire to have access to books (Martinez-Roldan & Newcomer, 2011). Educators must provide equitable access to books, curriculum, and other learning opportunities to immigrant students, regardless of any perceived language barriers. This is a social justice issue and concern for the welfare of these students and in the best interest of the United States (Paez, 2008).

Lack of English proficiency is a stigma in United States society that immigrant students feel immediately upon arrival and acutely throughout their schooling process.
Monzo and Rueda (2009) expressed that “the ‘press’ to learn English is real and powerful and that students are acutely aware of their language limitations and attach non–English proficiency to a variety of negative characteristics such as low intelligence” (Monzo & Rueda, 2009, p. 35). In order to overcome this stigma, many Latino immigrant children “pass” for being fluent in English – in other words, they use strategies to appear more English proficient than they actually are. The problem with this is that students who are pretending to understand are not actually comprehending nor are they asking for assistance.

In their two-year ethnography of eight Latino immigrant fifth-graders, Monzo and Rueda (2009) examined the cultural practices and ideologies these children brought home from school. These students used strategies to pass for English proficient in the classroom, on outings outside the classroom, and even in their homes in order to protect themselves from shame. Examples of strategies these students used were responding in the affirmative even when they did not understand, rather than asking for clarification, completing assignments not according to the teacher’s instructions, avoiding the work altogether, mumbling during read-alouds, and avoiding eye contact with the teacher. Outside the classroom, immigrant children are often called upon by their parents to fill the role of translator. Passing for English proficient is also problematic in this context, such as in a medical visit because their own and other’s demands on their fluency is unrealistic. Immigrant children want to feel like they are full and legitimate members of society in the United States. While these children expressed pride in speaking Spanish, and valued bilingualism, they also deeply felt the power and status issues that came with English proficiency. Immigrant children and their parents, not to mention many teachers,
do not know that it takes seven to ten years for a second language learner to develop academic language, resulting in unrealistic expectations and demands placed on the student, and low academic self-esteem on the part of the student. While passing for English proficient seems academically disadvantageous, Monzo and Rueda (2009) posited that passing for English proficient in order to maintain a sense of dignity may allow these students to develop socioemotionally while waiting for English skills to slowly strengthen.

The role of English proficiency in developing identity is also corroborated by Rivera Maulucci (2011), who provided evidence that immigrant students do not have positive identities in school until they become English proficient. This case study compared and contrasted the language experience narrative of one immigrant student’s trajectory in becoming a middle school bilingual science teacher. By considering this teacher’s early language experiences as well as her experiences as a science teacher in a dual language classroom, we can better understand how language ideologies shape school language policies, and student identities. Her conveyed experiences provide us insight into the power relations between language, content material, and education. Immigrant students must be exposed to fluent academic language models.

With the proper instructional support, students can learn the language of science in a second language, but without this support, ELLs may be placed in remedial programs and excluded from science learning. Rivera Maulucci stated, “Language conveys power in that linguistic access defines student’s access to knowledge, achievement, performance, and positive identities” (p. 414). Policies and practices must support equitable outcomes for ELLs in the content areas, especially since second
language proficiency and academic achievement are gatekeepers to upward mobility. Should schools view immigrant students as deficient, thus not providing equitable access to rigorous content material, students perceive the differentiation and develop negative school identities. Language policies must be to the advantage of immigrant youth, and foster the learning of academic science language and achievement.

One reason immigrant students are excluded from rigorous academic programming is because teachers are afraid their second language learners cannot make meaning of texts (Martinez-Roldan & Newcomer, 2011). Students must be allowed to engage with texts, independently of their language proficiency regardless of whether or not their teacher is bilingual and may have trouble communicating with and assessing students. In their interpretive study, Martinez-Roldan and Newcomer (2011) examined immigrant children’s responses to wordless texts about journeys and immigration. In an afterschool elementary school program, they discussed the ways in which the children drew upon their experiences, engaged in the inquiry process, and incorporated each other’s strategies to interpret a post-modern graphic novel about immigration. Because becoming a reader is a sociocultural process, recent immigrant students who are preliterate must have means of creating an identity of being a successful student and part of the class. Graphic novels and wordless books can mediate for preliterate students and support pre-readers. Graphic novels provide literacy elements such as character, plot, perspective, and tone allowing students to practice metacognitive comprehension strategies. Not only are students able to practice comprehension strategies, teachers are able to observe and assess students’ reasoning. As Martinez-Roldan and Newcomer argued, “by gaining a better understanding of how readers make meaning through many
strategies, including their interpretations of images, teachers may be better prepared to support students’ comprehension and interpretative work” (p. 189). In asking the children to make predictions of the story, the children in this study called upon their experiences of immigration and to “enjoy making meaning from text without struggling with the words they are still learning” (Martinez-Roldan & Newcomer, p. 196). In other words, their affective filter was low during this activity, and they were engaging with and enjoying books. All children desire and deserve to have access to books, regardless of literacy level. As a matter of social justice in education, immigrant students possess “the right to read books without words and the right to read those books by drawing upon the many experiences and capabilities each reader possesses” (Martinez-Roldan & Newcomer, p. 196).

Assessing students, understanding on the part of teachers as to how students are comprehending and interpreting work, is something educators must do when considering educational access and equity for newly arrived immigrant students. Many times there are significant gaps in education for immigrant students entering schools in the United States (Ruiz-de-Velasco, Fix, & Clewell, 2000). Although their educational needs differ depending on individual factors, “providing opportunities for these students to learn, to have access to the curriculum, and to achieve school success is a social justice issue and should be a priority for our nation” (Paez, 2008, p. 321). Though immigrant students’ language and literacy needs are varied and challenging, immigrant students deserve a chance to participate in literacy events in the classroom.

Formal and informal assessment is also important because in order to engage newly arrived students in the classroom, educators must activate and draw upon the
linguistic and experiential funds of knowledge they bring. Paez (2008) built upon Cummins’ framework that verbal academic ability in a student’s first language will predict the level of both language and conceptual proficiency they will be able to attain in their second language. Considering immigrant students’ full language abilities provides them with the appropriate access to an equitable education.

Testing bilingual students in both languages results in fairer assessments. Furthermore, immigrant students are more than just English language learners. They deserve to develop competencies in two languages as integrated individuals. In her study, Paez (2008) showed that even after four years of participation in American schools, immigrant students score very low on English proficiency, refuting policies in places like California and Arizona that claim that children can easily acquire full fluency in English after one year without first language support. Providing equal opportunities for immigrant students to succeed in school is “within our power and commitment to social justice to provide” (Paez, 2008, p. 322). These students, in turn, contribute to our classrooms and to our nation’s future.

Parents. Parents know that the best chance for their children to succeed in the United States is to develop their academic English, and yet, they worry about their children’s loss of proficiency in their native language and culture (Worthy & Rodriguez-Galindo, 2006). Parents are wonderful resources for Spanish language models in the effort of helping their children become bilingual, but schools often fail in engaging them. Parental involvement is vital for student success, however, immigrant parents are often deterred by internal and external factors when considering engagement with their
children’s school. The longer the family has been in the country, however, the more involved they become in their children’s schooling.

Worthy and Rodriguez-Galindo (2006) presented a study which revealed parents’ beliefs that “English proficiency and bilingualism were keys to social and economic advancement and that speaking Spanish represented an essential tie to familial and cultural roots” (p. 579). The reason immigrant parents wanted their children to learn English is so that they would succeed in school, be well treated, and eventually, gain meaningful employment. In addition, they wanted their children to continue developing their native language so they can continue to be able to communicate with their family, feel pride in where they came from, and maintain their culture.

Immigrant children often succumb to the pressures of speaking English at the expense of the native language development. Some programs, though bilingual in name, are not structured to help students learn to read, write and communicate beyond the basics in their native language. Such programs have become nothing more than a method of graduating ELLs into the English mainstream as soon as possible (Worthy & Rodriguez-Galindo, 2006). Worthy and Rodriguez-Galindo (2006), therefore, asked immigrant parents about their perspectives about their children’s bilingualism and language learning. These parents were aware that Spanish was becoming less necessary in their children’s worlds as time passed, but continued to encourage Spanish development in the home by encouraging their children to speak Spanish. Some parents arranged for their children to visit Spanish speaking relatives, and to read and write in Spanish. However, some parents witnessed their children’s resistance to Spanish due to the internal pressures (social conformity) and external pressure (sociopolitics) of
speaking English. Educators must establish ties with parents, and listen to them in order to understand ways in which they are willing to assist their children in bilingualism. More important than any barriers that may exist, however, is that parents are willing and able to assist their children, despite their little free time or own level of formal education or English proficiency, in gaining English proficiency.

Bilingualism has a great deal to do with socioeconomics (Worthy & Rodriguez-Galindo, 2006; Maulucci, 2011). While bilingualism is a sign of power for Whites, it is a sign of deficit for immigrants (Maulucci, 2011). One of the most important findings of Worthy and Rodriguez-Galindo (2006) was that immigrant parents, though low-income with an average of a sixth grade education, “devised innovative ways to assess their children’s knowledge and fluency and strategies for helping them improve in both languages” (p. 596). Ironically, our educational system requires students to take Spanish as a subject in middle and high school, after immigrant students may have gone through a period of linguistic loss, when they could have been bilingual all along. As Worthy and Rodriguez-Galindo stated succinctly, “while many people have to work hard to learn a second language, the deterioration of a language one already knows is a shameful waste of a child’s potential” (p. 598). The goal of bilingualism would be much more attainable were schools to collaborate with parents. Their study found that parents were willing and able to help but were not utilized as a resource of language models. The problem exists in convincing educators that bilingualism in young immigrants is a positive thing.

Turney and Kao (2010) examined race and immigrant differences in barriers to parental involvement in their children’s elementary schools, as parental involvement in school is a key component to children’s success in school and nearly 60% of Hispanic
youth are immigrants or children of immigrants. The early childhood experiences of young immigrant children is vital because children’s experiences in kindergarten and Grade 1 lay a fundamental foundation for the trajectory of their academic success. More important than schools and teachers at this early stage, “parents are key in determining their children’s experiences” (Turney & Kao, 2010, p. 257).

Parental involvement is key to children’s success in elementary both academically and behaviorally. One of the reasons children benefit from their parents’ involvement is it provides the child with social capital. Parental involvement shows children that education is important, allows parents to connect with other parents, teachers, and administration to discuss their child’s performance, and prompts parents to intervene should their child be struggling. Although, they want to be involved in schools, parental involvement among Hispanic immigrant parents is low due to cultural challenges such as being unaware of the expectation of their involvement, and work demands (Turney & Kao, 2009).

Examining a nationally representative sample of kindergarten children and parents (Early Childhood Longitudinal Study, ECLS-K) from National Center for Educational Statistics, Turney and Kao (2010) found that time in the United States and English language ability were positively associated with the school involvement of their elementary-aged children. They looked at immigrant parents’ involvement in school by race and ethnicity and found that time in the United States is more important for Hispanic parents than Whites. These parents, however, may have different ways of being involved with their children’s schooling than volunteering in school. Gaps in educational achievement can begin early, and minority and immigrant children are especially
challenged by teachers who may interpret their lack of parent’s involvement as lack of engagement and interest all together. Schools need to “take steps to make minority immigrant parents feel welcome at the children’s school or to decrease the language or other logistical barriers that these parents face” (Turney & Kao, p. 269).

**Behavioral / Psychomotor Knowledge**

The behavioral or psychomotor knowledge that is available in recent literature regarding teaching literacy to immigrant children in the elementary grades begins by recognizing that more mainstream teachers will have English learners in their classrooms due to immigration about which they have fears and questions. Whitsett and Hubbard (2009) acknowledged these fears and questions, followed by practical and technical teaching advice founded in decades of research regarding teaching ELLs. Besides these general considerations, updated methods of second language development have come about, such as Systemic Functional Linguistics (SFL), which connects functional grammar with its meanings in use (Schleppegrell, 2013), as well as teaching historical thinking, which not only teaches language through history and social studies, but also promotes students’ metacognitive skills (Salinas, Franquiz, & Guberman, 2006). Researchers such as Chia (2014) called for standardized test development that are appropriate for ELLs based on information gathered in cognitive labs which can provide developers with information on student interaction with each question. Finally, the United States Department of Education has published a Newcomer Toolkit with tips on how to serve newcomers and their families in our schools. Finally, Leaks and Stonehill (2008) provided guidance on effectively partnering with community organizations in order to help them navigate their new environment.
Capacity building for mainstream teachers. In their practical advice to getting started with English language learners in the elementary classroom, Whitsett and Hubbard (2009) acknowledged the common fears and questions mainstream teachers have, saying: “New teachers need to overcome fear, insufficient pedagogical knowledge, and lack of teaching experience; therefore, getting started can be the most overwhelming part of the process” (p. 41). Whitsett and Hubbard shared knowledge about how to accommodate ELLs in their literacy development, as well as the challenges immigrant families face. Their advice to teachers was first to access background knowledge.

Whitsett and Hubbard (2009) also advised that teachers should start increasing their own capacity by doing their homework about their newcomer students – reading their records, talking to other teachers, reviewing test scores, and reading Independent Education Plans (IEP). Teachers of newcomer students without prior records or an existing IEP must proactively search for alternative resources and begin the process for obtaining an IEP. Creating alliances with ELL instructors, learning specialists, or coaches on campus also behooves teachers who have ELL students for the first time. Regarding the student’s language proficiency level, teachers must consult ELL instructors and the proficiency tests given by the district. From there, teachers can prepare scaffolded materials in order to aid ELLs’ understanding.

Concerning background, teachers should contact ELLs and their families to learn about the values, characteristics, educational background, and cultural differences. At this time the teacher will learn about the family’s immigration history, family makeup, and will begin to develop a relationship with the family. This is especially important at the elementary level where teachers have the students all day. Teachers should let
parents know they desire their participation. If teachers do not make a point to do this, the parents may remain hesitant to become involved (Whitsett & Hubbard, 2009). As far as strategies go, slowing down, enunciating words, restating, making gestures, providing visual scaffolding such as graphic organizers and word walls with common instructions and phrases, and creating opportunities for group work are some commonly known strategies for teaching ELLs. Newcomers also need to be explicitly taught note-taking and summarization.

If possible newcomers should be placed in groups with buddies. Students from common backgrounds are especially at an advantage for helping one another. This arrangement, however, should not be overused lest the students fail to risk output in their second language, English. Teachers must create a safe environment by placing newcomers near the front where they can be observed and helped when needed. Teachers must also be aware that students from Hispanic culture are often not motivated by competition, but rather by helping each other and working collectively. One reason it is important to create a safe environment is so that the newcomer will take language risks. Whitsett and Hubbard explained, “In an equitable classroom environment, the atmosphere is open and supportive, and students are encouraged to speak without fear of ridicule or criticism” (p. 44). According to Whitsett and Hubbard, authentic communicative classroom activities help ELLs recognize when others are not understanding them. This realization helps move ELLs from being receptive listeners, to expressing themselves orally.

Whitsett and Hubbard (2009) went on to explain that when it comes to assessing student progress, teachers must formally and informally assess ELLs for mastery of
content, and frequently conduct understanding checks. They can do this by simply asking for the student’s input. Teachers need to know the language proficiency level of their student and may ask the ELL specialist for guidance and testing results. Knowing the student’s level will give the teacher patience and sensitivity when asking questions and setting expectations. Verbal interactions should be recorded and continuously updated. This information can be shared with parents. Anecdotal records, such as how well the student interacts with other students, or uses manipulatives is also valuable. Some adaptations for formal assessments are letting students draw to show understanding, providing oral questions for quizzes or shortened quizzes, and allowing more time for completing tests. Informal and formal assessments will help teachers modify their practices to ensure equitable outcomes for ELLs.

**Grammar instruction.** Schleppegrell (2013) introduced Systemic Functional Linguistics (SFL) which describes and supports second language development by connecting functional grammar with its meanings in use. According to Schleppegrell (2013), students learning a second language need frequent opportunities to practice their language in supported academic subject-area contexts in ways that are meaningful to them. Attention to language itself helps develop the student’s second language acquisition. The learner must be conscious of different aspects of the new language and pay attention to it, and teachers must make an explicit effort to increase student awareness of the connection between form of a word and its significance. In order for SFL to be effective, students must be authentically engaged in the meaning making process, and teachers must provide explicit instruction.
The explicit instruction of metalanguage involves discussing the rules of grammar not in terms of terminology, but rather, only as grammatical concepts surface within the context of a story, discussion, or the context of subject-area activities in which the students are meaningfully engaged. SFL provides the vocabulary for language awareness that helps them recognize patterns in the language. Schleppegrell explained, “Consciousness about language is developed through focused attention on patterns in language, where meaning is foregrounded as students explore how different language choices affect what is meant” (p 166). This focus on language throughout the content areas would support ELLs’ language development orally and in writing by raising the level of consciousness of language by the student.

Despite the effectiveness of SFL, many teachers are not prepared to teach grammar in meaningful ways. Knowledge of metalinguistics is not something that is part of teacher training, nor is the awareness of the importance that a focus on language plays in student achievement. Should teachers begin to implement SFL, however, they would have the potential to “stimulate extended focus on language that raises consciousness about patterns of language and engages learners in talk and writing through which both language and content learning are simultaneously supported” (Schleppegrell, 2013, p. 168).

**Historical thinking.** Because there is a heavy flow of immigrant children into public schools and a shortage of bilingual / ESL teachers, mainstream teachers in content areas such as history need effective approaches for integrating ELLs into discussions. In an approach described as “historical thinking,” the teacher begins by involving the students in a discussion based on students’ prior understanding. Salinas, Franquiz, and
Guberman (2006) promoted historical thinking in elementary classrooms where many ELLs are enrolled. They argued that “historical thinking can help immigrant children acquire English, social studies content, and the skills necessary for participatory citizenry” (p. 203). Furthermore, they indicated that content areas such as history are important because “learning history entails a complex interpretation of event that can strategically and successfully be presented to second language English learners” (p. 203). The basic tenet of this approach is to tap into the student’s prior knowledge.

One of the ways this approach is effective is that it creates a classroom environment that encourages not just a focus on history, but also the promotion of the students’ metacognitive skills. Activation of students’ historical positionality means that students’ life experiences help them interpret children’s literature, photographs, and pre-vocabulary activities. Salinas, Franquiz, and Guberman (2006) used carefully selected, multicultural children’s books, photographs, and realia multimedia that especially drew out children’s prior knowledge. Teachers participating in the program contextualized key vocabulary from these books by posting key words on a word wall in Spanish and English while previously discussed content vocabulary provided a foundation for the students to do small group and independent work. Students then described what they saw in photographs and explained why those photographs were important to the United States.

In this approach, students were able to imagine and insert themselves in the action, which disrupted students’ prior knowledge and therefore helped them see multiple perspectives, thus enhancing interaction and community. “By providing contrasting perspectives and evidentiary trails of primary sources,” Salinas, Franquiz,
and Guberman explained, “teachers can help students see that history is not merely a set of truths, but has many possible interpretations” (p. 205). In this approach, they indicated that students are encouraged, through the examination of primary sources, to corroborate, interpret, judge and conclude. Historical positionality entails epistemological stance and metacognitions. In other words, students engaged in this approach are thinking about thinking. Graphic organizers to use during discussion, and document-based questions are also used. Activating students’ prior knowledge and experiences facilitates the growth of metacognitive skills (Salinas, Franquiz, & Guberman (2006).

**Test development.** Chia (2014) posited that specific actions must be taken to produce common core state standards tests that are appropriate for ELLs. Chia said that researchers can help with this, as they can “disseminate information regarding testing ELLs to vendors, state assessment experts, psychometricians, language acquisition experts, and policymakers” (p. 311). One research measure that can be taken is to employ cognitive labs that can provide developers with information on student interaction with each question (Chia, 2014). Interviews with students post-test can also help gather information about which items ELLs find challenging and why. This can happen at the early stage of test development in a cognition lab. Other test elements such as directions should also be asked about in post-test interviews. Cultural and linguistic subgroups must be taken into account during test content development, and students in cognition labs studies must represent different instructional programs different dialects cultures and time in U.S. schools.
Accommodations also must be offered to ELLs using a computer-administered test. For example, popup glossaries and electronic dictionaries in students’ native languages are helpful in computer-based tests. One of the challenges in accommodating ELLs in standards-based testing is that states use differing ways to classify students by language ability. This is a challenge for largescale tests when considering different items or number of items being asked or what accommodations are being provided. States must work together to “improve current test accessibility through a more inclusive test development process” (Chia, 2014, p. 311). Regardless of the challenges, language and ELL experts must be included in the test development process, especially considering the translations process which must include “teachers, translators, content experts, test developers, and linguistics experts” (Chia, 2014, p. 308).

Newcomer tool kit. In their very recent publication, the USDOE (2016) published a tool kit for schools and educators serving newcomers. It includes a description of newcomers, a how-to on welcoming newcomers, provides pointers on providing high-quality instruction for newcomers, how to support their social and emotional needs, and how to establish partnerships with families. Forty-four percent of the nation’s immigrants spoke Spanish, per 2014 data (USDOE, 2016, p. 8). The tool kit begins by outlining the scientific and mathematic contributions have made, as well as the cultural and economic contributions. It highlights famous and prominent people who have immigrated to the United States.

The USDOE tool kit provides resources for teaching other students how to welcome newcomers and understanding their contributions. Teachers are given vignettes about the experiences of newcomers and are asked to reflect on how they and the school
can support these students. It gives classroom and schoolwide tools for welcoming newcomers and their families and provides professional reflection and discussion activities. It also gives tips on orienting and accommodating refugee students to school.

Included in the tool kit are discussions on how newcomers contribute to the learning among all students because of their global perspectives, as well as guidelines for instruction and ways to overcome misconceptions about instructing these students. Also provided are examples of excellent newcomer centers in the country the key elements to their success, especially in providing newcomers with core curriculum instruction. Furthermore, the tool kit addresses the needs for social and emotional support for newcomers – stressors they encounter, how to problem solve and resolve conflict, and how adults and peers can formally and informally support newcomers. When discussing parental involvement, the USDOE redefined a parent as inclusive of the legal guardian or “other person standing in loco parentis” (USDOE, 2016, p. 129). Four stages of parental involvement are mentioned, as well as cultural barriers to creating school-family partnerships. It provides stories from the field of successful newcomer parent outreach programs. Finally, it provides a conceptual model for involving parents in school.

**School – community partnerships.** Leaks and Stonehill (2008) cited the importance of partnering with community organizations which are knowledgeable of the culture, traditions, and values of the newcomer families, so as to help the children navigate their new surroundings, expectations, and relationships, saying, “Unlike historical patterns of immigration that mostly affected large urban areas, newcomers are settling in parts of the country that until recently had remained relatively homogeneous”
(p. 1). Staff from community organizations can also act as mediators between the students and their teachers who are perhaps less knowledgeable of these norms. Community staff may also be able to collect personal information that would affect the students learning and relay that information to the school. Organizations across the country have helped immigrant students to transition into school in a variety of ways such as, helping explain new norms, providing afterschool programs, acting as mediators with the school and teachers, providing translation services, providing classes for parents, providing meetups with other immigrant students and families. Districts can continue support of their end by providing professional development for teachers regarding how to include newcomers, provide opportunities for ESL and mainstream teachers to collaborate, and be culturally responsive in their curricula. This creates bonds, which is important because “creating a strong relationship between the school system and community-based organizations that provide an array of support services to students and their parents can help newcomers meet these challenges” (Leaks & Stonehill, 2008, p. 5).

**Cognitive Knowledge**

Researchers in the past several years have made important strides in expanding the knowledge base from their empirical data or best-evidence research concerning best literacy practices for immigrant students at the elementary level. Calderon, Slavin, and Sanchez (2011) identified the elements of effective instruction and appraised successful program models to find commonalities despite these state-to-state variances. Districts receiving large influxes in the ELL population need to know about these successful program models and create the infrastructure to serve their new linguistically and
culturally diverse population (Hopkins, Lowenhaupt, & Sweet, 2015). Kang, Haddad, Chen and Greenberger (2014) put forth that all districts receiving newcomers increase their efforts to enhance these students’ experiences in school, bring them to English proficiency, and to shorten their adjustment period as persistent ELL status is detrimental to their well-being. Though newcomers may going through the silent period during this time of adjustment, teachers can intentionally and actively engage them in L2 learning and ensure their access to books (Iddings & Jang, 2008).

In addition to the research for best program models, programs, and practices for building immigrant students’ literacy at the elementary grades, researchers (Bumgarner & Lin, 2014; Bumgarner, Martin, & Brooks-Gunn, 2013; Garcia & Jensen, 2009; McElvain, 2015) have also been exploring the importance of Early Childhood Education (ECE) for Hispanic immigrant children. The achievement gap between Hispanic children and their peers shows itself as early as kindergarten. Fostering English language skills among Hispanic immigrant children at an early age through intervention programs would have the greatest long-term impacts on closing the achievement gap for immigrant students (Bumgarner, Martin, & Brooks-Gunn, 2013), yet there are protective factors in place that make it unlikely for them to attend an Early Childhood Education program (Bumgarner & Lin, 2014). There continues to be lack of programs that involve Hispanic immigrant children, even though outreach and inclusion would generate profound returns if offered (Bumgarner & Lin, 2014). Garcia and Jensen (2009) corroborated with these claims, stating, “empirical evidence suggests that certain interventions during the early years are a wise investment to improving learning opportunities and outcomes for Hispanic children” (p. 1). However, McElvain (2015)
presented the problem that the achievement gap that has persisted for over 20 years among Hispanic students because they are often relegated to socioeconomically challenged neighborhoods and low-performing schools.

Depending on the school, district, and state, there is a wide variety in the ways ELLs are identified, assessed, and instructed. Calderon, Slavin, and Sanchez (2011) identified the elements of effective instruction and appraised successful program models to find commonalities despite these variances. These researchers acknowledged the debate among educators of whether these children should be taught in English, or the students’ native language while the ELL student becomes proficient in English. However, rather than focusing on the language of instruction debate, Calderon et al. turned their attention to identifying the elements of effective instruction, regardless of the language of instruction. They examined eight characteristics of successful instruction for English learners, inclusive of the elementary level: (a) school structures and leadership, (b) language and literacy instruction, (c) integration of language, literacy, and content instruction, (d) cooperative learning, (e) professional development, (f) parents and family support teams, (g) tutoring, and (h) monitoring implementation and outcomes. In essence, what they called for is increased professional development, whole-school commitment to English learner population, and home-school collaboration.

Having these elements in place may be especially critical for newcomer and refugee ELLs because they have suffered interrupted formal schooling or perhaps have never attended school and therefore have literacy and subject matter gaps. Furthermore, refugee children present needs that “go well beyond language learning” (Calderon,
Slavin, & Sanchez, 2011, p. 106). A common practice in many elementary schools is to pull these students out for thirty minutes of ESL instruction, and for the rest of the day they attend regular classes in a sink-or-swim instructional situation with teachers untrained in scaffolding techniques.

**School structures and leadership.** All of the school’s assets, including “students’ and parents’ aspirations, staff professionalism and care, and other intangibles as well as financial and physical assets” must be capitalized upon (Calderon, Slavin, & Sanchez, 2011, p. 109). Structure includes (a) ongoing collection and assessment of formative data and monitoring of their progress, (b) professional development for all staff members, (c) standards of behavior and effective strategies for classroom and school management, and (d) being highly-reliable organization in which all staff is held responsible for the progress of shared goals. Only when effective school structures are in place can effective instruction be carried out.

**Language and literacy development.** Calderon, Slavin, and Sanchez (2011) expressed that vocabulary is important for success in school for English learners and students who at socioeconomically at-promise, therefore, there must be an emphasis on vocabulary instruction. Students must be consistently exposed to being taught individual words, phrases, and idioms, as well as word-learning strategies, and word consciousness throughout the day. Teachers in all subject areas must learn these strategies, and also must show respect for students’ home language and culture, because language, culture, and identity are interwoven. Calderon, Slavin, and Sanchez (2011) also recommend paring the newcomer with a buddy who is familiar with the classroom and school to provide a safe context to practice the new language. Schools must recognize that
“because English learners begin school, or arrive in the later grades, with a wide variety of educational and literacy backgrounds, schools must assess all language and literacy domains and identify areas where a student might need an additional intervention such as tutoring” (Calderon, Slavin, & Sanchez, 2011, p. 111).

**Integrating language, literacy and content.** Though Calderon et al. provided their recommendations based on studies for adolescents, the same counsel holds true for students of all ages – teachers in the content areas must provide explicit vocabulary instruction and directly teach comprehension strategies. They also need to provide for cooperative learning so that students can discuss the interpretations and applications of the text, as well as involve writing and technology in the learning process.

**Cooperative learning.** Cooperative learning should be done in mixed-ability groups of four. This gives them safe and frequent opportunities to practice. Calderon et al. documented several studies that speak to the effectiveness of structured cooperative learning for ELLs.

**Professional development.** Teachers benefit from professional development regarding ELLs the most when they are able to use the techniques they are taught in a hands-on way with their own students or a colleague’s students, and a coach guiding them. Intensive professional development programs train teachers extensively on planning enhanced instruction, student engagement, vocabulary, oral language and literacy development, reading comprehension, family engagement, and reflective practice. An important component to effective professional development is direct observation from principals and administrators who are trained in giving feedback on teacher and student performance. Their reports can provide clearer causal links between
professional development and student performance than standardized tests. Calderon, Slavin, & Sanchez, 2011)

**Parent and family support.** Calderon, Slavin, and Sanchez, 2011 continued that parent support is especially important for immigrant students because they have to balance differences between home and school. Immigrant students and families need to feel that there is positive interaction between home and school. Some schools have organized teams that help families solve challenges that effect children outside the classroom. Parents who do not speak English also play a meaningful role in their child’s education, and their participation should be facilitated. There should be many formal and informal opportunities for staff to interact with parents. For families who have a hard time getting their children to school on time, intervention plans can be put into place. These plans can be modified for individuals if necessary, but tardiness and truancy should never be seen as normal. Finally, school staff need to know the resources in their community so they can help with outside problems.

**Tutoring and other interventions.** Training by teachers or paraprofessionals using structured phonics programs is the best intervention for ELLs who are struggling with reading. This tutoring can be conducted one-on-one, or in groups up to six students (Calderon, Slavin, & Sanchez, 2011).

**Monitoring.** Schools must pay close attention to how well their programs and initiatives are being implemented. This can be done through on-site mentors or coaches. Onsite mentors or coaches, and the use of online data tools to continuously monitor reading progress and identify students who need tutoring or other help can ensure that effective teaching is taking place. With better support for teachers, better student
outcomes will come to fruition. While Calderon et al. argued for reform and intervention in every grade, they stated, “there are compelling reasons to begin in the early grades. It is easier to build a strong foundation with quality programs in preschool to the third grade, when children’s needs are much more manageable and teachers are imparting new skills rather than remediating gaps” (p. 120).

Districts and schools in new immigrant destinations who are receiving ELLs in large numbers do not have this strong foundational structure to implement these components of quality programs (Hopkins, Lowenhaupt, & Sweet, 2015). Rather, they are developing infrastructure, consisting of “resources that support school leaders and teachers in providing high-quality instruction” to serve culturally and linguistically diverse populations for the first time (Hopkins, Lowenhaupt, and Sweet, 2015, p. 411). The rural Midwest and Southeast are emerging as new immigrant destinations due to their food processing and agricultural industries. These regions have little historical experience with English learner populations and their school districts do not have special funds allocated for newcomers. It is noteworthy to mention that immigrants from different countries tend to concentrate in particular states across the country. Therefore, states differ in the countries their newcomers represent (Hernandez, Denton, & Macartney, 2007).

Whether districts are located in newcomer destinations or traditional immigration states, Title III of the Elementary and Secondary Education Act (ESEA) under No Child Left Behind (NCLB) provides funds to districts providing programs and services to ELLs. As of a 2012 report by the USDOE on Title III, there were 4.7 million ELLs in the United States, and 4.4 million (95 percent) of those were enrolled in districts.
receiving Title III funds. Title III requires that these districts receiving funds be accountable for success, requiring states to assess ELLs in reading, speaking, listening, writing, and have ELP standards and assessments in place. In a report outlining facts about districts receiving Title III funds to serve their ELL population as of the 2009-2010 school year, the investigators concluded, “In light of the relatively small, supplementary nature of Title III funding and the limited potency of Title III accountability, Title III—in conjunction with other initiatives to serve ELLs—appears to have leveraged notable state and district activities in the areas of standards, assessments, accountability, and data systems over the past decade. However, in order to adequately serve the nation’s growing EL population, further activity and refinement appears to be needed in all these areas as well as in the areas of capacity building, teacher quality, and proven instructional programming” (Tanenbaum, Boyle, Soga, Le Floch, Golden, & Petroccia, 2012, p.127).

Funding is not the only challenge in adequately serving newcomers. ELLs coming to new immigrant destinations face a particularly complex climate as they intermingle with residents who are unaccustomed to interacting with immigrants. School is the first point of contact to the community for immigrant students, and staff at these schools are in critical need to be prepared to serve these students by having opportunities to learn about EL instruction within content areas such as math and language arts. Mainstream teachers in such schools and districts need access to not only formal, but also informal means of obtaining instructional advice in order to enhance their capacity to teach ELLs in content areas, as teachers often learn from informal interactions with colleagues (Tanenbaum, Boyle, Soga, Le Floch, Golden, & Petroccia, 2012).
In their study of a rural district in the Midwest with a rapidly increasing ELL population, Hopkins, Lowenhaupt, and Sweet (2015) found that teachers’ opportunities to learn how to teach ELLs varied by subject. Many of these schools seek to assimilate immigrant students in a subtractive way, replacing students’ existing language and culture, rather than employing an additive model. These schools do not have resources including language proficiency standards and assessments, language programs, formal ELL coaching positions, and teacher professional development. The common practice in these districts is to add ESL into the existing infrastructure in forms of pullout, push-in or co-teaching (ESL teacher and general education teacher teaching together). At these districts, ESL programs and its students and teachers are often marginalized. ESL is not thought of by some general education teachers as a discipline, but rather a strategy. In these cases, ELLs’ academic and language needs are treated separate from the core curriculum and student body. There are few opportunities for ESL and general education teachers to interact, giving mainstream teachers no occasions to learn more about teaching ELLs. Furthermore, ESL teachers do not have an opportunity to learn about what the students are doing in their subject area classes and therefore cannot support them in their academic language needs.

Hopkins, Lowenhaupt, and Sweet (2015) discovered that there were more opportunities for teachers to learn about language arts than math. ESL teachers were sought out by language arts teachers but not by math teachers because even coaches saw math as language free. ESL teachers, in turn, did not seek advice related to math. The ESL teachers were marginalized when it came to content and not afforded authority over the curriculum as core content teachers were. Furthermore, pullout ESL replaced
language arts, but math was conducted in general education classrooms. In other words, ESL teachers were viewed as language arts specialists rather than strategists for all content areas. The school staff had limited understanding of the relationship between literacy and math. Schools and districts in new immigrant destinations must provide their staff with opportunities, both formally and informally, to gain capacity regarding how to engage newcomers at all stages of literacy and language development in content areas.

It is important to increase efforts to bring ELLs to “the level of English proficiency in order to enhance their experiences in school and to shorten their adjustment period” because persistent ELL status is detrimental to their well-being (Kang, Haddad, Chen & Greenberger, 2014, p. 929). One of the many stressors children from immigrant families experience is that of not knowing English in school. Children from immigrant families who are entering into the formal schooling setting often face cultural barriers that affect their socioemotional wellbeing. The early years of schooling are especially crucial for later development. Any early negative experiences immigrant children have in school lead to poor achievement later on. The expectation of learning a new language upon entering school results in stressors that may delay their learning processes because “communication is critical to the adjustment process, and having to learn a new language in the early school years may be a stressor that negatively affects academic adjustment and well-being” (Kang, Haddad, Chen & Greenberger, 2014, p. 917).

Language status is a great contributor to acculturative stress. Without English language proficiency, ELL newcomers have a difficult time establishing relationships with peers and teachers. Unfortunately, many of these students’ experience social
discrimination due to low English language proficiency and their cultural differences. In looking at approaches to learning, self-control, interpersonal skills, internalizing behaviors (negative behaviors directed toward self), and externalizing behaviors (directed at the external environment), Kang, Haddad, Chen, and Greenberger (2014) found that being a persistent “LEP” status was detrimental to children’s well-being.

Project GLAD (Guided Language Acquisition Design) was a multi-component K-12 instructional model designed to build academic English and grade-level content knowledge for students at varying levels of English language proficiency benefitting all students, but particularly ELLs. Teachers participated in a highly structured seven-day training sequence with follow-up coaching for this sheltered instruction program with four components to this program which include five motivation strategies, six input strategies, ten guided oral practice strategies, and 14 reading and writing strategies. In a test with fifth-grade teachers, Deussen, Autio, Roccograndi, Hanita, and the Society for Research on Educational Effectiveness (2014) found marginally significant results for ELLs in reading comprehension, vocabulary, and the writing traits of “ideas” and “organization.”

Technology tools help ELLs succeed in becoming proficient in English because technology tools allow students access to the kind of rich comprehensive input, as well as the motivation, self-confidence, and decreased anxiety it provides (Diallo, 2014). Technology enables more differentiation of instruction, which lowers anxiety. Technology also covers all fields. In Diallo’s (2014) study, cartoons and films helped newcomers. Technology improves visual delivery of the content but the content students
are exposed to must be highly interesting and motivating to them and be used to give them greater access to reading materials that interest and motivate them to read.

Actively engaging immigrant students in instruction will help shorten the adjustment period. Even during the silent period, students [can be] intentionally and actively engaged in L2 learning (Iddings & Jang, 2008). In Iddings and Jang’s (2008) study of a kindergartener newly arrived from Mexico, they found that routine classroom practices of shared objects, infrastructural elements and speech patterns provided the support the student needed to understand, internalize, and eventually produce in the L2. This happened because the students were intentionally and actively engaged in the L2 during the silent period. Newly arrived children must “reconcile the daunting tasks involved in being a student in a new language and cultural context” (p. 568).

According to Iddings and Jang (2008), mainstream teachers who are encountering ELLs in their classrooms for the first time due to recent immigration fear that students who are in the silent period are not learning. Teachers mediate language learners’ perceptions and actions through the physical, symbolic and interactional practices. Language emerges through the interaction between the language-learner and their environment. Physical and symbolic aspects of the classroom provided to the student include books, pens, paper, and charts, and these objects mediate between individuals and the material. Students first understand that the teacher is speaking with the intention that the child pay attention either to a physical or symbolic object in the classroom. The learner then reverses the role of communicative intention by expressing themselves using the same symbols the teacher used through the act of imitation. The child then begins to interact in the classroom through highly structured, repetitive
practices. This helps the child to identify as a student of the class. Even though the student may be undergoing the silent phase of L2 learning, their concern with being part of the learning community in the greater ecology of the classroom affords them frequent opportunities to interact and gain more exposure and input that give them understanding in others’ communicative intentions. Students, therefore, can be highly psychologically active during the silent period. Practitioners in the elementary grades, though, must be explicit in creating routine practices that have more to do with instructional content practice and less to do with behavior expectations (Iddings & Jang, 2008).

Hispanic immigrant children, on a whole, fare as well on their approaches to learning (ATL) scores as native White children of the same socio-economic status. Approaches to learning is a set of classroom behavior and skills that are associated with academic success. These behaviors include: self-control, persistence, attentiveness, independence, and responsibility. While there is a positive association between ATL and math achievement, English language proficiency acts as a moderator. Even with generally high levels of attentiveness and persistence, learning math concepts while simultaneously learning and processing English demands a great amount of working memory (Bumgarner, Martin, & Brooks-Gunn, 2013).

In their study, Bumgarner, Martin, and Brooks-Gunn, (2013) presented the association between ATL and math achievement among Hispanic immigrant children, as well as the moderating effects of English proficiency on this association. Low scores on ATL identifiers in the spring of kindergarten, for example, is associated with lower math scores over time. While ATL is not important until Grade 1, it is very important in Grade 3, as math word problems become more complex. Educators must “identify protective
factors and early intervention programs that foster the development of English language skills among Hispanic immigrant children at an early age” (Bumgarner, Martin, & Brooks-Gunn, 2013, p. 15). Children who develop English language skills early will have the language tools they need to succeed in math later on.

The achievement gap between Hispanic children and their peers shows itself as early as kindergarten. First and second generation Hispanic immigrant students need Early Childhood Education (ECE) in order to boost their English language outcomes, but are unlikely to attend such programs because of associated costs and the cultural reluctance of parents to release their children from the home at so early an age. ECE impacts the long-term educational outcomes of all student because the skill formation they learn at this early start persists throughout their lives (Bumgarner & Lin, 2014). Bumgarner and Lin (2014) posited that “because not all children are afforded equal opportunities to engage in high-quality interactions early in life, gaps emerge between those who have these opportunities and those who do not” (p. 516). Less than half of first generation Hispanic immigrant children attend ECE even though attendance would “generate the strongest economic returns if offered to the poorest Hispanic children” (Bumgarner & Lin, 2014, p. 527). Those who do attend are more likely to be proficient in English. However, children in immigrant families are more than 10% less likely to be enrolled in preschool in Texas than non-immigrant children due to cultural preferences and socio-economic barriers (Hernandez, Denton, & Macartney, 2007).

Garcia and Jensen (2009) recommended that the government recruit and train highly-qualified bilingual teachers, fund Head Start and Early Head Start programs, and develop national and international databases to assess these students’ performance. They
stated, “Empirical evidence suggests that certain interventions during the early years are a wise investment to improving learning opportunities and outcomes for Hispanic children” (Garcia & Jensen, 2009, p. 1). Intervention for Hispanic immigrant children between the ages of three and eight for English language proficiency would eventually provide economic returns. Not only do these children need to gain proficiency in English, it would serve them well to be in bilingual programs in order to maintain and develop their native proficiency and become balanced bilinguals.

The achievement gap, however, has persisted for over 20 years among Hispanic students (McElvain, 2015). McElvain (2015) presented the problem of Mexican immigrants who are relegated to segregated and isolated school environments. One reason this problem exists is because Mexican immigrant youth are socioeconomically segregated to neighborhoods with low performing, under-resourced schools. Such schools have systemically failed to meet the needs of culturally and linguistically diverse students. One of the failures stems from a failure to connect students’ school life with their family and community life, which is problematic because learning is a social, collaborative process involving students, parents, teachers, and the community.

McElvain (2015) analyzed the effectiveness of an afterschool program to remedy this failure – an intervention program, called The Bridge Project, operating out of affordable housing venue designed to help Mexican immigrant students and families. The goal of the program was to increase relational engagement via one-on-one tutoring and family contact, thus increasing children’s confidence and sense of belonging. These socioemotional factors evolved into better reading comprehension and English language development. McElvain’s results showed that the Bridge Project participants gained an
average of a 2.8 grade level increase in reading at the end of the two-year program. McElvain found that this is due partly to the weekly tutoring, but on a greater scale, they were due to the fact that “enfolding Mexican immigrant families into a transactional learning community actively connects parents and children on several vital levels. Higher achievement and motivation to succeed in school are associated with Mexican American children who perceive high parental expectations regarding good grades, study habits, and homework completion” (p. 168). Within the framework of social educational ecology, relationships with peers, parents, and community are fundamental to an immigrant student’s success, as it increases their self-esteem, sense of belonging and community, and thus keeps them engaged in the schooling process.

It is not conclusive whether age of entry into school affects the child’s rate and ability to become fully proficient in English, but the factors are neurological, maturational, and cognitive (Conger, 2009). While older learners are less likely to become native-like speakers, they are able to gain proficiency more quickly due to their more advanced first language skills and ability to travel outside their co-national neighborhoods. Younger learners, however, are more likely to receive tutoring as well as to speak to English speaking children rather than solely co-nationals. Approximately one quarter to one third of children between the ages of five and ten reach basic proficiency within the first year after entry into the school system, and approximately half reach basic proficiency within three years. The time needed to reach proficiency increases with the age of the student. For example, more that 40% of five-year-olds reached proficiency within one year, while only 14% of ten-year-olds were able to do so (Conger, 2009, p. 394). Policy implications for this are that special consideration should be given to
children who enter school above the age of ten in regards to exemptions from standardized testing in English.
CHAPTER III

METHODS

The purpose of this study was to determine if immigrant students entered Grade 2 at a disadvantage to their peers as measured on a norm and criterion referenced test and to further determine if there was a difference in English language oral development between immigrant and native-born ELLs in Grade 2 using the intervention Story Telling and Retelling with Higher Order Thinking for English Language and Literacy Acquisition (STELLA) (Irby, Lara-Alecio, Quiros, Mathes & Rodriguez, 2004), as well as to describe the STELLA classroom learning events that promote learning for all students, including newcomer ELLs.

In this chapter, I outlined the methods used for my study. The chapter includes the following sections: research design, sample, scoring, instrumentation, intervention, classroom observation, hypotheses, research question, data collection, data analysis, and a summary.

Research Design

The research design for my small-\(n\) study was a quantitative comparative analysis using t-test and analysis of covariance (ANCOVA) (Keppel, 1991). Small-\(n\) studies are those with less than 30 participants (Purswell & Ray, 2014). To increase the power to detect difference and experimental control, I repeated measures of each assessment (Purswell & Ray, 2014). The purpose of t-test is to test the difference between the means of two independent groups while the ANCOVA design is to statistically adjust pretest scores when examining the outcome scores. I observed two groups, students whose school records indicated they immigrated three or less years ago,
and students born in the United States or had immigrated more than three years ago. I collected data from: (a) the first sampling of the scores from the Woodcock-Munoz Language Survey, which was administered during the fall of 2014, in order to detect any difference in existing knowledge (b) the second sampling of scores from the Woodcock-Munoz Language Survey, which was administered during the spring of 2015, and (c) scores from the district’s administration of the fall of 2014 TELPAS scores and (d) the summative spring TELPAS scores in order to gain understanding of achievement differences between the two groups.

The research design for the qualitative portion of my study was document analysis in which I conducted observations of archived video recordings of five STELLA teachers known to have immigrant students in their classroom. Teachers knew they were being recorded on those days by Project ELLA-V personnel. I viewed each of the three 45-minute recordings of each teacher in five minute segments as trained to do by a Project ELLA-V Coordinator. I began coding using the Four-Dimensional Pedagogical Model once the teacher began delivering the lesson. As I examined the recordings, I kept the categories of (a) Activity Structures, (b) Language Content, (c) Language of Instruction, and (d) Communication Mode (noted by Lara-Alecio and Parker, 1994) in mind in order to force myself to make decisions that narrowed the study. As Merriam and Tisdell (2015) advised, I did not attempt to provide a full description of the setting, but rather, I attempted to describe particular instances which exhibit positive examples of learning events in classrooms containing newcomers. I self-report a biased stance in favor of STELLA teachers. My coding of events that fit into the Four-Dimensional Pedagogical Model’s categorizations are my own.
Sample

Archival data for my study were retrieved from the second year’s implementation of a five-year, field-based, federally funded project: Project ELLA-V (U411B120047). The purpose of this five-year longitudinal study was to validate and scale up the findings from Project ELLA (2003-2008), for which the purpose was to investigate the “efficacy of structured English immersion and transitional bilingual education models in teaching Spanish-speaking kindergarteners English language and literacy skills” (Center for Research and Development in Dual Language and Literacy Acquisition, 2016). In my study, I examined one urban school district in Southeast Houston, Texas, in Harris County. 88.4% (Texas Academic Performance Report, 2014-2015) of the student population in this district is economically disadvantaged. The native language of 33% of the students in this district is Spanish (PEIMS, 2015). The study participants were identified as English language learners per Texas’ criteria. 22,923 students in this district had a Home Language Survey that indicated Spanish as the primary language spoken at home (PEIMS, 2015). A few others (21) were categorized as speaking “Other Languages” which may or may not include languages indigenous to Central America (PEIMS, 2015).

A sample size of seven schools and 12 classrooms was the final result as they were the schools and classrooms in this district designated to receive Treatment 2 (STELLA). The total sample of immigrant students identified in the Treatment 2 condition was nine in Grade 2 for the 2014-2015 year. While there were 179 total students in Aldine ISD in the 2014-2015 school year receiving Treatment 2 (STELLA). For simplicity of terms, I referred to these students as “immigrant” in this paper. These
students represented the countries of Mexico, El Salvador, Honduras, and Colombia. So as to not have an unbalanced sample, I matched these nine students with students born in the United States. For simplicity of terms, I referred to these students as representing the “home” group in my paper. I matched the students by the following: birth date, sex, and classroom teacher.

To answer my first research hypothesis, the dependent variables selected to measure language development were the subtests of the Woodcock-Munoz Language Survey-Revised battery including (a) Picture Vocabulary, (b) Verbal Analogies, (c) Understanding Directions, (d) Story Recall. To answer my second research hypothesis, the dependent variables used to measure language development per state standards were the TELPAS Listening and Speaking scores. To answer my research question, I observed the five teachers who had immigrant students in their classrooms at the beginning, middle, and end of the school year through video recordings housed on a secured server at Texas A&M University. I knew, through the record keeping of ELLA-V coordinators and a liaison with the school district, which teachers had immigrant students in their classrooms, and when those students immigrated to the United States. I observed three lessons for each teacher, one lesson took place in October or November of 2014, one lesson in January or February of 2015, and another lesson in April or May of 2015. The total number of lessons I observed was fifteen.

Scoring

WMLS-R Scoring

Grade-based standardized scale scores. The grade-based standardized scale score reflects the students’ performance in terms of the grade level in the norming
sample at which the average $W$ score on a test is the same as the subject’s score. For example, if the average $W$ score entering Grade 2 is X, then any student who scored X would receive an equivalent score of a student entering Grade 2 (Woodcock & Muñoz-Sandoval, p. 60, 2005). While Persinger (2002) argued that “these scores lead to inaccurate generalizations about overall performance, especially for those students who are very young or for those who attain extreme scores,” it is legitimate to use grade-based scores in order to determine if there is a statistically significant difference in performance among groups (p. 22). The grade-based score is a reflection of the student’s accuracy on the test rather than the grade-level at which the student can perform.

**TELPAS Scoring**

**Proficiency level descriptors for TELPAS.** Proficiency level descriptors provide a rubric for providing scores and placing students in each of the language domains. Descriptors for characteristics of listening and speaking are universal for K – 12.

**Technical evaluation of TELPAS.** Raters are trained via annual web-based training, where they practice and calibrate using real student examples. Texas Education Agency conducts audits to ensure the validity and reliability of the test results. (TELPAS Info Guide, p. 12). According to the Texas Education Agency’s Technical Digest 2014-2015, internal consistency estimates using the Kuder-Richardson Formula 20 for the spring 2015 TELPAS reading assessments ranged from 0.92 to 0.94, and standard error of measurement (SEM) values for TELPAS reading tests were between 2.8 and 3.1 raw score points across grades (Texas Education Agency, 2015).
Results of the TELPAS are used to:

- Help parents monitor student’s progress
- Inform instructional planning and program exit decisions for students
- Report performance to local school boards school professionals, and the community
- Evaluate programs, resources, and staffing patterns
- Evaluate districts and campuses in a variety of state and federal accountability measures. (Texas Education Agency, 2011, p. 3)

**Instrumentation**

The archival data from 179 Hispanic bilingual second graders were collected and analyzed for my study. The archival data were collected from the Woodcock-Munoz Language Survey – Revised, as well as the Texas English Language Proficiency Assessment System.

**Woodcock-Munoz Language Survey – Revised (WMLS-R)**

The WLPB-R (Woodcock, 1991; Woodcock & Munoz-Sandoval, 1995) is a standardized instrument, available in English and Spanish, which provides a broad sampling of proficiency in oral language, language comprehension, reading and writing. It can be used for ages 2-90+ (Woodcock & Muñoz-Sandoval, 2005).

Median test reliability values were calculated from Rasch error scores and fall at the desired reliability rate of .80 or higher (Shrank, McGrew, & Woodcock, 2001). The English test was translated to Spanish, which was calibrated on the English norm. The
administration of all testing in Project ELLA-V was performed by trained professionals outside the classroom (Tong, Irby, Lara-Alecio, & Mathes, 2008).

**WMLS-R Subtests Performed**

Testers performed the following six subtests of the Woodcock-Munoz, but because the focus of STELLA is on increasing listening and speaking skills, I only included calculations for the following WMLS-R subtests: (a) Picture Vocabulary, (b) Verbal Analogies, (c) Understanding Directions, and (d) Story Recall. In scoring these subtests, researchers (Tong, Irby, Lara-Alecio, & Mathes, 2008) employed item response theory with equal intervals, as well used descriptive statistics based on standard age-appropriate scores.

**WMLS-R Subtest Descriptions**

**Picture vocabulary.** On the test taker’s side are three pictures. The evaluator is given instructions of what to say and do on the other side.

**Verbal analogies.** Verbal Analogies tests the student on verbal reasoning. The tester tells the student an analogy and asks the test taker to fill in the second word with a correct corresponding ending to the analogy.

**Understanding directions.** On the Understanding Directions subtest, the student listens to a sequence of instructions from an audio recording and then follows directions the tester gives by pointing to various objects in a colored picture.

**Story recall.** On the Story Recall subtest, the test-taker listens to a story, then retells the story back to the scorer. The test-taker receives points for each correctly identified element.
Texas English Language Proficiency Assessment System (TELPAS)

The Texas English Language Proficiency Assessment System was first implemented in 2011 by Texas Education Agency. TELPAS was designed by Texas Education Agency, involving educators, assessment experts, and administrators (Texas Education Agency Technical Digest, 2014-2015, p. 163). Note: The assessment components differ for grades K – 1 and 2 – 12. This is a holistic assessment, but summative assessment is asked for in the spring based on daily teacher observation and interaction.

The TELPAS assesses the proficiency of ELL’s English in the four language domains, Listening, Speaking, Reading, and Writing, but for the purpose of my study, I only report descriptions and scores of the Listening and Speaking domains. TELPAS is aligned with the Texas English Language Proficiency Standards (ELPS), which are second language acquisition curriculum standards that districts are required to implement. The ELPS are published along with the TEKS for each subject. Teachers of a class with at least one ELL are required to implement the TEKS and ELPS in every subject area. The three instructional components are: (a) cross-curricular second language acquisition essential knowledge and skills, (b) proficiency level descriptors (PLDs) and, (c) linguistic accommodations. There is an integral relationship between the ELPS, content areas TEKS, and TELPAS to ensure that Texas’ educational goals for meeting the language and content needs of ELLs are met. Students are given a rating of beginning, intermediate, advanced, or advanced high in each of the four language domains.
**Listening.** Listening is defined in TELPAS as “The ability to understand spoken language, comprehend and extract information, and follow social and instructional discourse through which information is provided” (TELPAS Info Guide, p. 5). The expectation of the student set forth for Listening, according to TELPAS, is that the student learn new language structures, expressions, and basic and academic vocabulary heard during classroom instruction and interactions.

**Speaking.** Speaking is defined in TELPAS as “The ability to use spoken language appropriately and effectively in learning activities and social interactions” (TELPAS Info Guide, p. 5). The expectation of the student set forth for Speaking, according to TELPAS, is that the student be able to narrate, describe, and explain with increasing specificity and detail as more English is acquired (TELPAS Info Guide, p. 5).

**Administration of the test.** While TELPAS serves teachers as a tool for daily instruction in a holistic approach, districts are also federally obligated to conduct a summative spring assessment. Specific teachers are assigned the task of rating student, and other teachers often collaborate with the assessor for increased inter-rater reliability. TELPAS raters receive in-depth training before the spring assessment over the PLDs (TELPAS Info Guide, p. 11).

TELPAS is a useful tool to provide standardized support for ELLs who are on the path to English academic language proficiency so that they may become fully engaged in each of their content subjects. Should local education agencies (LEA) not prove to meet the requirements of student progress on the TELPAS set forth by the Annual Measureable Achievement Objective (AMAO) indicators, the LEA must send letters home to parents in the home language explaining that objectives were not met.

70
The formula for calculating AMAO progress is the number of current ELLs who progressed at least one proficiency level on the TELPAS Composite Rating from the most recent prior year to 2012-2013 divided by the number of current ELLs assessed with TELPAS in a prior year and in 2012-2013. Corrective measures for LEAs not progressing by at least 49.5% is for the LEA to send a letter home to parents, in the home language if possible, notifying them that the district did not meet student achievement for the year. Figure 4 shows the formula for AMAO progress.

\[
\frac{\text{Number of current ELLs who progressed at least one proficiency level on the TELPAS Composite Rating from the most recent prior year to 2012-2013.}}{\text{Number of current ELLs assessed with TELPAS in a prior year and in 2012-2013.}} = \text{LEA Rate for AMAO 1 level of Progress}
\]

Figure 4. Formula for AMAO progress.

Teacher Observations

I observed five STELLA teachers with immigrant students in their classrooms from archived video recordings. These recordings were obtained by Project ELLA-V personnel on days which teachers knew they were being recorded. I viewed each of the three 45-minute recordings of each teacher in five minute segments as trained to do by a
Project ELLA-V Coordinator using the Teacher Observation Record. Once the teacher began delivering the lesson, I coded events using the Four-Dimensional Pedagogical Model using the categories of (a) Activity Structures, (b) Language Content, (c) Language of Instruction, and (d) Communication Mode (noted by Lara-Alecio and Parker, 1994). I observed three lessons for each teacher. One lesson took place in October or November of 2014, one lesson in January or February of 2015, and another lesson in April or May of 2015. The total number of lessons I observed was fifteen. I watched for occurrences of events as stated in the literature as being beneficial for all learners, but particularly immigrant students. I also watched for what the creators of STELLA intended to occur in the classroom, in other words, I checked for fidelity of implementation. Positive classroom events I observed were the following: (a) teacher engagement of the student, including teacher questioning, teacher assistance of an individual with the content, verbal encouragement, or physical assistance with the assignment; (b) student engagement of the teacher, including students offering to answer a question, or asking for assistance or affirmation, or displaying understanding; (c) the teacher providing or referencing visual scaffolding, including elements of the storybook of the week (such as the text, pictures, and title), class experiments, word walls, word banks, and graphic organizers; (d) the teacher modelling correct grammar, consisting of the teacher negotiating a correct response from the student and repeating a correctly formed sentence to the class, or providing examples of how to use a vocabulary word in a sentence; (e) activation of the students’ prior knowledge, including the teacher giving “clues,” asking them to imagine things they likely have seen in the past or questions written into the script that activated prior knowledge; (f) taxonomized, leveled
questioning; (g) engagement in collaborative learning such as think-pair-share, choral reading, partner reading, or think-pair-write and; (h) the provision of explicit feedback from the teacher. These classroom activity and linguistic practices are consistent with the Lara and Parker (1994) Four-Dimensional Pedagogical Model for Bilingual Classrooms.

**Intervention**

In their second annual evaluation report of Project ELLA, lead researchers (Irby, Lara-Alecio, Quiros, Mathes & Rodriguez, 2004) described STELLA as a “structured story retelling component was designed to assist ELLs in the English oral language development and story comprehension. The development and implementation of STELLA was grounded with the recommendations from existing literature reviewed earlier on story reading and vocabulary development, oral language and story retelling, and story grammar” (pp.93-94).

**STELLA**

Quiros, Lara-Alecio, Tong, and Irby’s (2012) story reading protocol for STELLA for Grade 2 follows a 5-Day lesson plan format in which for 35 minutes, the teacher reads the story aloud on Days 2–5. Students read along chorally with teacher assistance on Days 3–5. On Day 4, students practice story retelling through story circle and story grammar used as strategies to assist retelling.

On Day 1, the teacher introduces but does not read the storybook of the week and generates interest among the students about the story by discussing the title and cover, and asking the students to make predictions. The teacher then introduces vocabulary selected from the story and teaches this vocabulary using explicit vocabulary instruction. This practice activates prior knowledge, provides student-friendly definitions, teacher
modelling, and teacher-guided practice. Furthermore, students are able to practice using the word both in the context as well as out of context, using other examples. As a class, the students develop a topic web organizer, allowing them to make connections to previous lessons and activate prior knowledge about the topic. After these activities, the students are sensitive to any new information or vocabulary they encounter. To close the lesson, the teacher reviews vocabulary introduced that day using word wall cards. These cards are posted on a designated classroom wall space for a 2-week period.

On Day 2, the teacher reads the story. After each page, the teacher asks levelled questions through interactive dialogue. This activity helps students make connections between text and illustrations. The teacher encourages students to answer in complete sentences. When students do not use proper English grammar, the teacher provides feedback and models correct grammar. Because students had activated prior knowledge the previous day in their first language, they were able to understand the story in English. Students also discuss story elements such as character, setting, problem and solution. The lesson closes with the vocabulary words that were introduced on Days 1 and 2.

On Day 3, the teacher reviews vocabulary introduced for the week and introduces more vocabulary for the day. All new words are posted to the word wall. The teacher then reads the story aloud again while students read along chorally. This activity assists with fluency and pronunciation. The teacher reviews the story and asks questions. The students then have a writing activity time which prompts the students to answer in one or two sentences. Students utilize the word wall as visual scaffolding to assist them.
On Day 4, vocabulary is reviewed. Students and teacher spend time on choral reading. Students then write about the story elements. Students then have interactive group retelling via story circle during which they use: (a) pre-prepared sentence strips and put them in order of the story, and (b) pre-prepared questions in which a pair of students guides each other in retelling the story.

On Day 5, the teacher reads the story again in the story circle. To conclude the week’s activities, students write a short paragraph about the story topic (Quiros, Lara-Alecio, Tong & Irby, 2012, pp.94-95).

Vocabulary. STELLA provides teachers with scripted lessons which include systematic direct and indirect vocabulary instruction to assist in story comprehension. Second grade story lessons included an average of 5-7 new words per week. The word and definition are on the front of flash cards. These words are introduced at beginning of each daily lesson then students experience the words through reading the book. At end the class revisits vocabulary. Students are then asked to produce definition and produce a sentence with the word. At the end of each daily lesson, students are asked to create sentences. They all participate simultaneously by working in pairs. The teachers negotiates meaning with the students when they struggle. Embedded questioning strategies are included in every daily lesson plan using coding.

Embedded Questioning Codes

TTPS RAN. This stands for “Time thinking, Share with partner, Randomly selects.”
SCF (**specific content feedback**). The teacher uses feedback incorporating the specific expectations. For example, the teacher might say “great job using the word ‘explore’.”

WI (**write or illustrate**). In the review on Day 2, cloze sentences have a choice of two words. Students select which fits into the sentence contextually. Each student has their own dry erase board write and show their entry to the teacher. Some prompts ask student to draw.

**STELLA Strategies**

Students’ comprehension in L2 are increased via repetition of the story read and vocabulary, cloze sentences and retelling. Students develop oral language skills thanks to repetition of stories and activities. This reduces anxiety and provides ample daily opportunities to practice their second language and create connections to their background knowledge.

**Storybook Selection**

Storybooks are provided by an ELLA-V official partner, *Steps to Literacy*. The following table shows the storybooks used in STELLA, Grade 2. The *Steps to Literacy* storybook selection for Grade 2 is displayed in Table 3.
<table>
<thead>
<tr>
<th>Week</th>
<th>Title</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Little Rabbit’s Journey</td>
<td>Beverly J. Irby &amp; Rafael Lara-Alecio</td>
</tr>
<tr>
<td>2</td>
<td>Solids, Liquids, Gases</td>
<td>Charnan Smith</td>
</tr>
<tr>
<td>3</td>
<td>Gilda the Giraffe and Pepin the Penguin</td>
<td>Lucie Paineau</td>
</tr>
<tr>
<td>4</td>
<td>Whose House is This?</td>
<td>Elizabeth Gregoire</td>
</tr>
<tr>
<td>5</td>
<td>The Golden Gate Bridge</td>
<td>Jeffrey Zuehlke</td>
</tr>
<tr>
<td>6</td>
<td>Rapunzel</td>
<td>Sarah Gibb</td>
</tr>
<tr>
<td>7</td>
<td>Sounds All Around</td>
<td>Wendy Pfeffer</td>
</tr>
<tr>
<td>8</td>
<td>Switch On Switch Off</td>
<td>Melvin Berger</td>
</tr>
<tr>
<td>9</td>
<td>Curious George Roller Coaster</td>
<td>H.A. Rey</td>
</tr>
<tr>
<td>10</td>
<td>Force Makes Things Move</td>
<td>Kimberly Brubaker Bradley</td>
</tr>
<tr>
<td>11</td>
<td>Push and Pull</td>
<td>Charlotte Gillian</td>
</tr>
<tr>
<td>12</td>
<td>Roll, Slope, and Slide</td>
<td>Michael Dahl</td>
</tr>
<tr>
<td>13</td>
<td>Motion Push and Pull, Fast and Slow</td>
<td>Darlene Stille</td>
</tr>
<tr>
<td>14</td>
<td>Stone Soup</td>
<td>Ann McGovern</td>
</tr>
<tr>
<td>15</td>
<td>Sylvester and the Magic Pebble</td>
<td>William Steig</td>
</tr>
<tr>
<td>16</td>
<td>The Magic School Bus At The Water Works</td>
<td>Joanna Cole</td>
</tr>
<tr>
<td>17</td>
<td>Where Does Garbage Go?</td>
<td>Paul Showers &amp; Randy Chewning</td>
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<tr>
<td>18</td>
<td>The Adventures of A Plastic Bottle: A Story About Recycling</td>
<td>Allison Inches</td>
</tr>
<tr>
<td>19</td>
<td>Water and the Weather</td>
<td>Rebecca Olien</td>
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<tr>
<td>20</td>
<td>Four Seasons Make A Year</td>
<td>Anne Rockwell</td>
</tr>
<tr>
<td>21</td>
<td>Did A Dinosaur Drink This Water?</td>
<td>Robert Wells</td>
</tr>
<tr>
<td>22</td>
<td>The Moon</td>
<td>Felicia Law</td>
</tr>
<tr>
<td>23</td>
<td>The Lotus Seed</td>
<td>Sherry Garland</td>
</tr>
<tr>
<td>24</td>
<td>A Story For Bear</td>
<td>Dennis Haseley &amp; Jim LaMarche</td>
</tr>
<tr>
<td>25</td>
<td>The Wolves Are Back</td>
<td>Jean Craighead George</td>
</tr>
<tr>
<td>26</td>
<td>Jack’s Garden</td>
<td>Henry Cole</td>
</tr>
<tr>
<td>27</td>
<td>Octavia And Her Purple Ink Cloud</td>
<td>Donna Rathmell &amp; Doreen Rathmell</td>
</tr>
<tr>
<td>28</td>
<td>Catching Sunlight – A Book About Leaves</td>
<td>Susan Blackaby</td>
</tr>
</tbody>
</table>
Data Collection

Data for my study were collected at two time points: Fall of 2014 and the Spring of 2015. Woodcock Muñoz Language Survey – Revised (WMLS-R) and Texas English Language Proficiency Assessment System scores were collected by ELLA-V’s research team. Observations were recorded at three time points during the 2014-2015 school year and are stored on a secured server at Texas A&M University.

Data Analysis

The first research hypothesis of whether or not there was difference in scores between immigrant ELL newcomers and ELLs either born in the United States or had immigrated more than three years prior at the beginning of Grade 2, and then at the end of Grade 2 on the Woodcock Muñoz Language Survey – Revised (WMLS-R) subtests measuring oral language was answered using first a t-test to test whether the immigrant group enters the grade with a lower level of language development than does the home group. I then conducted analysis of covariance (ANCOVA) to reduce the systemic initial difference in pretest scores that resulted from immigrant students not having prior exposure to education in the United States. The second research hypothesis of whether or not there was a difference in scores between immigrant and non-immigrant ELLs at the beginning of Grade 2, and then at the end of Grade 2 on the Texas English Language Proficiency Assessment System (TELPAS) Listening and Speaking domains was answered through a t-test with an alpha level of .05. I then conducted analysis of covariance (ANCOVA) to reduce the systemic initial difference in pretest scores. These hypotheses were analyzed with the data analysis and statistical software program STATA version SE14. My research question of how learning events for immigrant ELLs
can be described in the STELLA classroom was answered by my observing a total of 15 forty-five minute segments of video and watching for occurrences of (a) teacher engagement, (b) student engagement, (c) visual scaffolding, (d) grammar modelling, (e) activation of prior knowledge, (h) collaborative learning, (i) taxonomized questioning, and, (j) explicit feedback.
CHAPTER IV
DATA ANALYSIS AND FINDINGS

In this chapter, I present the results and findings related to my two hypotheses and one research question. I predicted that (a) immigrant ELLs in Grade 2 using the intervention of Story Telling and Retelling and Higher Order Thinking for English Language and Literacy Acquisition (STELLA) would initially score lower than the home group on the Woodcock Muñoz Language Survey – Revised (WMLS-R), but would catch up; and (b) immigrant ELLs in Grade 2 would initially score lower than the home group using the intervention of Story Telling and Retelling and Higher Order Thinking for English Language and Literacy Acquisition (STELLA) on the Texas English Language Proficiency Assessment System (TELPAS) but would catch up. My question was: To what extent did learning events that are known in the literature to be beneficial to immigrant students occur in STELLA classrooms?

For the purpose of my small-n study, to address the first two hypotheses, I first conducted t-tests of the pretest scores between the groups to test for initial differences. I then employed analysis of covariance (ANCOVA) to reduce the systemic initial difference in pretest scores that result from immigrant students not having prior exposure to education in the United States. I measured whether scores were statistically significant using ANOVA. First, I created matched samples based on date of birth, sex, and classroom teacher. Howell (2012) justified matching, saying, “The relationship between data sets does not have to be perfect – it probably never will be. The fact that we can make better-than-chance predictions is sufficient to classify two sets of data as matched or related” (p. 205). Woodcock-Munoz pretest scores for the following subtests were
used as the covariates for this study: (a) Picture Vocabulary, (b) Verbal Analogies, (c) Understanding Directions, and (d) Story Recall. The reasons these subtests were used as the covariates for this study rather than using a multiple outcome measure was because these subtests measure different aspects of oral language proficiency and therefore can be considered as different and separate outcomes measures. While each of these subtests measure different aspects of oral language, they are each unique in the tasks students are required to perform. These oral language skills students are tested on are the underpinnings of STELLA, and therefore are appropriate measures for assessment.

My second hypothesis was addressed in the same manner as the first: I first conducted t-tests of the pretest scores between the groups to test for initial differences. I then employed analysis of covariance (ANCOVA) to reduce the systemic initial difference in pretest scores that result from immigrant students not having prior exposure to education in the United States and measured whether scores were statistically significant using ANOVA. The Spring assessment for the TELPAS scores were used to covariate for this study.

To answer my research question, I observed a total number of fifteen class sessions (three observations of five teachers). I observed and reported (a) teacher engagement, (b) student engagement, (c) visual scaffolding, (d) grammar modelling, (e) activation of prior knowledge, (h) collaborative learning, (i) taxonomized questioning, and (j) explicit feedback. These components are categorized in my findings within the Four-Dimensional Pedagogical Model (Lara & Parker, 1994). I conveyed this information through vignettes.
First Hypothesis

To address my first hypothesis: Scores from newcomer ELLs will be statistically lower than ELLs who were not newcomers in the Grade 2 using the intervention Story Telling and Retelling with Higher Order Thinking for English Language and Literacy Acquisition (STELLA) as measured on the Woodcock Muñoz Language Survey – Revised (WMLS-R) oral language subtests used in Project ELLA-V, the following variables for: (a) Picture Vocabulary, (b) Verbal Analogies, (c) Understanding Directions, and (d) Story Recall were measured quantitatively and separately. The standard score scale is based on a mean of 100 and a standard deviation of 15 (Woodcock, 1991, p.65). T-tests were conducted to measure if immigrant students entered Grade 2 at a disadvantage due to lack of prior exposure to formal schooling. To reduce error variance and bias, four ANCOVAs using post-test scores as the dependent variable were then performed for this research hypothesis.

Picture Vocabulary

Picture Vocabulary tests the student on listening comprehension. The tester tells the student to point to the picture of a certain noun, and the test taker must point to the correct picture out of three. A t-test was performed using grade-based scores to determine whether the immigrant group entered Grade 2 at a disadvantage in their ability to perform on the Picture Vocabulary test. An ANCOVA using the posttest scores was then conducted to compare Picture Vocabulary standardized grade-based scores between the foreign-born group and the group born in the United States. The dependent variable is the posttest scores. The following table shows the results of Picture Vocabulary scores among the two groups.
Table 4

Scores from Picture Vocabulary

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SE</th>
<th>SD</th>
<th>95% C. I.</th>
<th>Test Statistic</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>51.66</td>
<td>11.84</td>
<td>35.53</td>
<td>24.34 – 78.19</td>
<td>t(16) = 1.04</td>
<td>.15</td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>66.22</td>
<td>7.40</td>
<td>22.21</td>
<td>49.19 – 83.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>64.22</td>
<td>10.78</td>
<td>32.34</td>
<td>39.36 – 89.08</td>
<td>F(2, 15) = .05</td>
<td>.82</td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>75.88</td>
<td>4.18</td>
<td>12.54</td>
<td>66.24 – 85.53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Results of the ANCOVA based on Posttest as DV and Pretest as Covariate.

The one-tailed t-test with equal variances between groups on the pretest for Picture Vocabulary produced \( t(16) = 1.04, p = 0.15 \), which is not statistically significant at \( p < .05 \). These results suggest that the immigrant group entered Grade 2 with a comparable capability for performance on the Picture Vocabulary subtest as the home group. Controlling for pretest and using posttest scores as the outcome through ANCOVA, the ANCOVA produced a \( p \) value of .82. There was no significant effect of immigration status on the post-test after controlling for the effect of the pre-test: \( F(2, 15) = .05, n.s. \) These results suggest that the immigrant group performed at a relatively comparable rate in their ability to listen and point to the correct picture in the Picture Vocabulary subtest. When including the pretest score as the covariate in my model, there was no significant effect of the independent variable on the dependent variable after
controlling for the effect of the covariate: \( F(2, 15) = .05, p < .82. \) Figure 5 shows the growth experienced by both groups in their ability to identify Picture Vocabulary.

![Picture Vocabulary Chart](image)

**Figure 5.** Rate in growth on Picture Vocabulary.

Although there was no statistically significant difference between the home and immigrant groups’ pretest scores, notable results from looking at Picture Vocabulary pre and post-test scores for both groups are: (a) both groups experienced growth, and (b) the immigrant group caught up to the level where the home group began in their achievement. The immigrant group entered the grade at more than three standard deviations below the standard scale mean of 100, but ended the grade at two standard deviations below the mean.

**Verbal Analogies**

Verbal Analogies tests the student on verbal reasoning. The tester tells the student an analogy and asks the test taker to fill in the second word with a correct corresponding ending to the analogy. A t-test with equal variances was conducted to
compare Verbal Analogies standardized grade-based pretest scores between the foreign-born group and the U.S.-born. The following table shows the results of Verbal Analogies results among the two groups.

Table 5

Scores from Verbal Analogies

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SE</th>
<th>SD</th>
<th>95% C. I.</th>
<th>Test Statistic</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pretest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>80.22</td>
<td>8.98</td>
<td>26.94</td>
<td>59.51 – 100.93</td>
<td>$t(16) = 1.43$</td>
<td>.17</td>
</tr>
<tr>
<td>Home</td>
<td>89.88</td>
<td>4.61</td>
<td>13.83</td>
<td>79.25 – 100.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Posttest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$F(2,15) = .64$</td>
<td>.43</td>
</tr>
<tr>
<td>Immigrant</td>
<td>81.44</td>
<td>7.50</td>
<td>22.50</td>
<td>64.14 – 98.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>91.44</td>
<td>2.21</td>
<td>6.63</td>
<td>86.34 – 96.54</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Results of the ANCOVA based on Posttest as DV and Pretest as Covariate.

The one tailed t-test with equal variances between groups on the pretest for Verbal Analogies produced $t(16) = 1.43$, $p = .17$, which is not statistically significant at $p < .05$. These results suggest that the immigrant group entered Grade 2 with a relatively equal understanding of Verbal Analogies as the home group. Regardless of the lack of statistically significant difference in pre-test scores, controlled for pretest and then used gain score as the outcome through ANCOVA for the Verbal Analogies post-test. These results suggest that by the time both groups took the posttest nine months later in Grade 2, the immigrant group still had a relatively equal understanding as the home group in their understanding of Verbal Analogies. When including the pretest score as the covariate in my model, there was no significant effect of the independent variable on the
dependent variable after controlling for the effect of the covariate: F(2, 15) = .64, p < .43. Figure 6 shows the growth experienced by both groups in their ability to complete Verbal Analogies.

![Verbal Analogies Graph]

*Figure 6. Rate in growth on Verbal Analogies.*

Although no statistically significant differences were found among the home and immigrant groups’ scores on Verbal Analogies, some noteworthy points of interest in examining these results are: (a) both groups experienced slight growth, and (b) by the end of Grade 2, the home group fell within the “Average” ability range, and the immigrant group progressed to the “Low Average” ability range (Woodcock, 1991, p. 67).

**Understanding Directions**

On the Understanding Directions subtest, the student listens to a sequence of instructions from an audio recording and then follows directions the tester gives by pointing to various objects in a colored picture. A t-test with equal variances was
conducted to compare standardized grade-based pretest scores between the foreign-born group and the U.S.-born for Understanding Directions. The following table shows the results of Understanding Directions results among the two groups.

Table 6

*Scores from Understanding Directions*

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SE</th>
<th>SD</th>
<th>95% C. I.</th>
<th>Test Statistic</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>63.66</td>
<td>11.87</td>
<td>35.62</td>
<td>36.28 – 91.04</td>
<td><em>t</em>(16) = .78</td>
<td>.22</td>
</tr>
<tr>
<td>Home</td>
<td>74.22</td>
<td>6.17</td>
<td>18.51</td>
<td>59.98 – 88.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>67.77</td>
<td>12.35</td>
<td>37.05</td>
<td>39.29 – 96.26</td>
<td><em>F</em>(2,15) = .61</td>
<td>.44</td>
</tr>
<tr>
<td>Home</td>
<td>82.88</td>
<td>6.23</td>
<td>18.69</td>
<td>68.51 – 97.26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Results of the ANCOVA based on Posttest as DV and Pretest as Covariate.

The one-tailed t-test with equal variances between groups on the pretest for Understanding Directions produced *t*(16) = .78, *p* = .22, which is not statistically significant at *p* < .05. These results suggest that the immigrant group entered Grade 2 with a comparable ability for Understanding Directions as the home group. I used Understanding Directions post-test scores as the dependent variable through ANCOVA, for which results suggest that by the time both groups took the posttest nine months later in Grade 2, the immigrant group still had similar capacity as the home group in their ability for Understanding Directions. When including the pretest score as the covariate in my model, there was no significant effect of the independent variable on the dependent variable after controlling for the effect of the covariate: *F*(2, 15) = .61, *p* < .44. Figure 7
shows the growth experienced by both groups in their ability for Understanding Directions.

![Understanding Directions graph]

*Figure 7. Rate in growth on Understanding Directions.*

Although no statistically significant differences were found among the home and immigrant groups’ scores on Understanding Directions, some noteworthy points of interest in examining these results are: (a) both groups experienced growth, and (b) the immigrant group began the grade with a ranking of “Very Low” ability, which according to Woodcock-Johnson is any score below a 69, while the home group began with a ranking of “Low” (Woodcock, 1991, p. 67). By the end of Grade 2, the home group fell within the “Low Average” ability range, but the immigrant group did not progress to the “Low” ability range (Woodcock, 1991, p. 67).

**Story Recall**

On the Story Recall subtest, the test-taker listens to a story, then retells the story back to the scorer. The test-taker receives points for each correctly identified element. A
two sample t-test with equal variances was conducted to compare standardized grade-based pretest scores between the foreign-born group and the U.S.-born for Story Recall. The following table shows the results of Story Recall results among the two groups.

Table 7

Scores from Story Recall

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SE</th>
<th>SD</th>
<th>95% C. I.</th>
<th>Test Statistic</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pretest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>58.77</td>
<td>12.95</td>
<td>38.86</td>
<td>71.16 – 102.61</td>
<td>$t(16) = 1.92$</td>
<td>.03</td>
</tr>
<tr>
<td>Home</td>
<td>86.88</td>
<td>6.81</td>
<td>20.45</td>
<td>28.90 – 88.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Posttest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$F(2,15) = .00$</td>
<td>.97</td>
</tr>
<tr>
<td>Immigrant</td>
<td>73.55</td>
<td>6.65</td>
<td>34.14</td>
<td>47.30 – 99.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>86.00</td>
<td>11.38</td>
<td>19.96</td>
<td>70.65 – 101.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Results of the ANCOVA based on Posttest as DV and Pretest as Covariate.

The one-tailed t-test with equal variances between groups on the pretest for Story Recall produced $t(16) = 1.92$, $p = .03$, which is significant at $p < .05$. These results suggest that the immigrant group entered Grade 2 at a disadvantage in their ability of Story Recall as the home group. Accounting for these initial scores, I controlled for pretest and then used the Story Recall posttest score as the outcome through ANCOVA. These results suggest that by the time both groups took the posttest nine months later in Grade 2, the immigrant group caught up to the home group in their ability for Story Recall. When including the pretest score as the covariate in my model, there was no significant effect of the independent variable on the dependent variable.
after controlling for the effect of the covariate: $F(2, 15) = .00, p < .97$. Figure 8 shows the growth experienced by both groups in their ability for Story Recall.

![Figure 8. Rate in growth on Story Recall.](image)

An analysis of Story Recall pretest showed the immigrant group at a statistically significant disadvantage to the home group. By the time of the post-test, however, the immigrant group was approaching the home group in achievement, while the home group has not experienced progress. The immigrant group was performing at the ranking of “Low” and the home group was performing at the level of “Low Average” by the end of the grade (Woodcock, 1991, p. 67). The immigrant group began at a disadvantage of almost three standard deviations below average, but ended the grade approaching only one standard deviation below the mean average.

**Analysis of Results for First Hypothesis**

T-tests of the pretests indicated there were no differences among the immigrant group and the home group on the following tests: (a) Picture Vocabulary, and (b) Verbal
Analogies, and (c) Understanding Directions. There was a statistically significant difference, however, on Story Recall, with the immigrant group scoring lower. This indicates that the immigrant group entered Grade 2 with a lower ability than the home group in the speaking domain, as this test requires the student to produce verbal output in retelling a story. However, by the time the posttests for this subtest was conducted 9 months later, the immigrant group showed no statistically significant difference between scores for Story Recall, indicating that the immigrant group ended Grade 2 with a relatively similar capacity level in these areas as did the home group. These findings regarding Story Recall are consistent with the purpose and practice of STELLA, which require students to practice their oral expression by retelling a story. STELLA students have the opportunity to practice their verbal production by retelling a story on a weekly basis in a structured and safe manner.

Both groups, the home group and immigrant group, benefited from STELLA. While I hypothesized that there would be a difference in pretest scores on all of the subtests, I found there to only to be a difference on the Story Recall subtest. Although there was no statistically significant difference on the other test Picture Vocabulary, Verbal Analogies, and Understanding Directions tests, the scores from the immigrant student group showed them to be lagging behind the home group. STELLA provides sustained quality instruction that is much needed for all students.

**Second Hypothesis**

To address the second hypothesis: Scores from newcomer ELLs will be statistically lower than ELLs who were not newcomers in Grade 2 using the intervention Story Telling and Retelling with Higher Order Thinking for English Language and
Literacy Acquisition (STELLA) on the Texas English Language Proficiency Assessment System (TELPAS) Listening and Speaking, t-tests were conducted to test for initial differences between groups for each of the subtests, then, ANCOVAs were conducted to adjust for initial differences between groups.

**TELPAS Listening**

TELPAS Listening measures “the ability to understand spoken language, comprehend and extract information, and follow social and instructional discourse through which information is provided” (TELPAS Info Guide, p. 5). A one-tailed t-test with equal variances was conducted to compare TELPAS Listening pretest scores between the foreign-born group and the U.S.-born. The following table shows the results of TELPAS Listening results among the two groups. There were seven in the home group and seven in the immigrant group.

Table 8

*Scores from TELPAS Listening*

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>SE</th>
<th>SD</th>
<th>95% C. I.</th>
<th>Test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>1.85</td>
<td>.14</td>
<td>.75</td>
<td>2.01-3.41</td>
<td>$t(12)=2.68$</td>
<td>.01</td>
</tr>
<tr>
<td>Home</td>
<td>2.71</td>
<td>.28</td>
<td>.37</td>
<td>1.50-2.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Spring 2015 |      |     |     |           | F(2,13)=1.11  | .31 |
| Immigrant   | 3.14 | .34 | .89 | 2.31-3.97 |               |     |
| Home        | 3.71 | .18 | .48 | 3.26-4.16 |               |     |

*Results of the ANCOVA based on Posttest as DV and Pretest as Covariate.
The one-tailed t-test with equal variances between groups on the Fall 2014 TELPAS Listening produced \( t(12) = 2.68, p = .01 \), which is statistically significant at \( p < .05 \). These results suggest that the immigrant group entered Grade 2 with a lower ability in Listening than did the home group. Since there was difference in the beginning with the immigrant group performing lower, I controlled for that difference as they were more likely to grow faster due to regression to the mean in statistics. Accounting for these initial scores, I controlled for pretest and then used the Spring 2015 score as the outcome through ANCOVA for Listening. These results suggest that by the time both groups were assessed for the Spring 2015 TELPAS Listening nine months later in Grade 2, the immigrant group caught up to the home group in their Listening ability. When including the pretest score as the covariate in my model, there was no significant effect of the independent variable on the dependent variable after controlling for the effect of the covariate: \( F(2, 13) = .28, p = .60 \).

**TELPAS Speaking**

TELPAS Speaking measures “the ability to use spoken language appropriately and effectively in learning activities and social interactions” (TELPAS Info Guide, p. 5). A two sample t-test with equal variances was conducted to compare TELPAS Speaking scores between the foreign-born group and the U.S.-born. The following table shows the results of Fall 2014 TELPAS Speaking results among the two groups.


Table 9

Scores from TELPAS Speaking

<table>
<thead>
<tr>
<th>Group</th>
<th>Fall 2014</th>
<th>Spring 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SE</td>
</tr>
<tr>
<td>(n=14)</td>
<td></td>
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</tr>
<tr>
<td>Immigrant</td>
<td>1.42</td>
<td>.20</td>
</tr>
<tr>
<td>Home</td>
<td>2.57</td>
<td>.36</td>
</tr>
<tr>
<td>Immigrant</td>
<td>2.85</td>
<td>.34</td>
</tr>
<tr>
<td>Home</td>
<td>3.28</td>
<td>.28</td>
</tr>
</tbody>
</table>

*Results of the ANCOVA based on Posttest as DV and Pretest as Covariate.

The one-tailed t-test with equal variances between groups on the pretest for Fall 2014 TELPAS Speaking produced \( t(12) = 2.71, p = .01 \), which is statistically significant at \( p < .05 \). These results suggest that the immigrant group entered Grade 2 with lower speaking ability than the home group. I then controlled for pretest scores and Spring 2015 TELPAS Speaking test as the outcome score using ANCOVA. These results suggest that by the time both groups were assessed for the Spring 2015 TELPAS Speaking nine months later in Grade 2, the immigrant group had not yet caught up to the home group in their speaking ability, according to the TELPAS Speaking test.

Analysis of Results for Second Hypothesis

T-tests of the pretests indicated differences among the immigrant group and the home group on the following tests: (a) Fall 2014 TELPAS Listening, and (b) Fall 2014 TELPAS Speaking with the immigrant group scoring lower. This indicates that the immigrant group entered Grade 2 with a lower ability than the home group in these
language domains being tested. However, by the time the students were assessed in the Spring of 2015, the immigrant group showed no statistically significant difference in the listening domain, but had not caught up to the home group in speaking.

**Research Question**

My research question: To what extent do learning events that are known in the literature to be beneficial to immigrant students occurring in the classroom? I observed the five teachers who had immigrant students in their classrooms three times for 45-minute segments. The first lesson which I observed took place in October or November of 2014, the second lesson in January or February of 2015, and another lesson in April or May of 2015. The total number of lessons I observed was fifteen. I categorized the classroom events within the Four-Dimensional Pedagogical Model (Lara & Parker, 1994) consisting of (a) Activity Structures, (b) Language Content, (c) Language of Instruction, and (d) Communication Mode.

**Activity Structures**

Within STELLA, the components of (a) teacher engagement, (b) student engagement, (c) collaborative learning, and (d) explicit feedback fit within the definition of Activity Structures in the Four-Dimensional Pedagogical Model (FDPM) as they are structured situations designed to promote positive teacher-student or student-student communication.

**Teacher engagement.** This category includes the teacher questioning a student, assisting an individual with content, verbally encouraging an individual student, or giving physical assistance with the assignment. Teachers questioned students with the leveled questioning per the STELLA script only after students had the opportunity to
formulate the answer after considering the question and practicing the answer using think-pair-share. Providing students with this time to formulate their answers created a low-anxiety, supportive atmosphere. After the allotted think-pair-share time, students were randomly engaged in questioning as a name was pulled from a cup in which there were Popsicle sticks with students’ names written on them. If a student struggled in answering, the teacher negotiated a response with them, often by giving them a clue or asking the student if they needed more time. The following excerpt is an example of this scaffolding:

Teacher 1: “Explain why people long ago used drums.” The student struggles to answer.

The teacher then directs the student to look for the answer in the book. As the student still struggled, the teacher repeated the question. The student continued to struggle after that and the teacher asked him if he needed more time. The student said yes, and answered the question with some verbal help from the teacher. This process took approximately 90 seconds. [O.M.1.11/21.16:30]

On several occasions, a student would begin to answer in Spanish in which case the teacher would restate the student’s thought in English and ask the student to repeat. The teacher worked with the student and allowed plenty of time for the student to formulate a complete sentence. At times, the teachers worked with struggling students for up to two minutes. Teachers also verbally encouraged the student, or went around the room asking individual students the question posed to the entire class during think-pair-share time. In some cases, teachers assisted the students by helping them with tasks such as cutting and gluing items into their notebooks.
Individual time spent between teacher and student is important for immigrant students. This individualized time helps immigrant students move beyond being receptive only, and will help them to begin taking language risks and engaging with content. When teachers spend individual time with students in this way, the teacher can assess the student’s progress in an ongoing manner. This classroom practice of individualized attention and engagement is consistent with Iddings and Jang (2008) that elementary teachers be explicit in creating routine practices that have more to do with instructional content practice and less to do with behavior expectations. Because of the highly routinized structure of STELLA, the behavior expectations on behalf of the student are presumably easy to adjust to, and the student and teacher interaction can be more focused on language practice and content instruction. The STELLA teachers’ individualized attention also creates an environment in which students are not afraid to speak (Whitsett & Hubbard, 2009).

**Student engagement.** Student engagement refers to any time a student offered to answer a question, asked for assistance or affirmation, or indicated to the teacher that they were actively involved in the learning process (such as giving a thumbs up when they heard a vocabulary word). While most questions were posed to students using random selection, students often raised their hands, eager to be selected to answer the question. Furthermore, students raised their hand to help other students who were struggling to answer a question, in which case the struggling student was asked if they wanted to give a “shout out” to a classmate. Students also raised their hand if they needed assistance with materials, had a question about the content, or wanted to show the teacher their work. Students also gave a thumbs up when they heard the vocabulary
word presented at the beginning of the lesson being used in the text. Taking language risks is important for immigrant students entering school with low English proficiency because as Whitsett and Hubbard (2009) mention, these authentic communication activities help students move from being merely receptive to orally expressing themselves. The following vignette is an example of student engagement in the STELLA classroom:

Teacher 2 refers to page of “Jack’s Garden.”

Teacher 2: “Which one of these is your favorite ladybug and why?”

Students begin to answer in think-pair-share format. As the teacher passes by a table of students, one engages with him and responds verbally.

Student: “I like this one because it looks beautiful.” [O.M.2.4/29.8:00]

In this exchange, the student offered his response to the teacher, speaking out to him as he passed by. The student was not obligated to do so, but seemingly wanted to show his capacity to create a complete sentence to his teacher. Though the student’s response was simply put, it was complete, and grammatically correct. The student wanted to engage the teacher and show him his verbal skills.

Collaborative learning. Collaborative learning refers to any time students were asked to collaborate on oral or written language production, including choral reading, partner reading, or think-pair-share. In presenting the daily vocabulary words and their definitions, the teacher would first read the word and its definition, and students would repeat chorally. This type of choral language production allowed for a low-anxiety reading aloud experience. At times, students would practice reading the text again as partners, one partner reading one page while the other partner expressed active listening
by following the text with their finger. Partners changed roles each page. Questions were posed to the class as a whole. Students were allowed time to think. They then shared their answers orally with their partners. The teacher would then either call on a student randomly to share their sentence, or, all students were asked to write their sentence in their notebooks or on their individual whiteboards. Collaborative learning provides students with frequent, safe opportunities to practice (Calderon, Slavin, & Sanchez, 2011). On average, students in the STELLA classroom engaged in collaborative learning 1.83 times per five-minute instructional period. The following vignette exemplifies how teachers utilized collaborative learning in the STELLA classroom:

Teacher 3: “I really like this page because it has a lot of insects on it. If you guys take a look there’s a lot of insects.”

Student A: “There’s a lot of spiders.” *Student tries to sound out specific type of spider and says... “Arigope.”*

Student B: “There’s only two type of spiders.”

All students continue to talk during think-pair-share, discussing the insects on the page.

Teacher: *As the teacher points to the Praying Mantis she says, “One of my favorite insects is a Praying Mantis.”* [O.F.3.4/28.23:30]

In this vignette, students and the teacher are engaged with each other in a discussion that includes academic language (the specific names for insects). Each of their comments encourages or challenges the other to think further about their response. Student B challenged Student A’s declaration that there were a lot of spiders on the page. The teacher shared her personal interest with student while remaining on task.
**Explicit feedback.** Explicit feedback refers to any time the teacher provided explicit feedback to the student, meaning they thanked or encouraged the student for using a complete sentence, or using the vocabulary word in their writing sample, for example, I included the event in this category. There were missed opportunities to provide students with explicit feedback, but there were also fine examples of its use. The times it was used usually focused on a certain student’s learning behavior. This student was acknowledged for the positive behavior, and usually rewarded with additional points from the class’s internal point system as well. For example, one teacher said, “I liked the way [student] let her partner read, and then helped her sound out the word she couldn’t understand.” The types of behavior encouraged can be included in what Bumgarner, Martin, and Brooks-Gunn (2013) referred to as approaches to learning, which expresses itself as self-control, persistence, attentiveness, independence, and responsibility, for example. The STELLA teacher’s employment of this explicit feedback in rewarding positive behavior, coupled with the development on English language proficiency will be valuable to these students’ academic success. Explicit feedback is displayed in the following vignette:

Teacher 2: “When you see a stone, what color is it?”

Student A: “Gris”

Teacher 2: “What is that in English?”

Student B: “Grey”

Teacher 2: “Grey. Thank you for helping him.” [O.M.2.1/26.5:00]

In this example, a student attempted to answer but only knew the word in Spanish. The teacher acknowledged his answer, but also challenged him to respond in English.
Another student helped the first student, and for that the teacher provided praise to Student B in the form of explicit feedback. As helping each other collaboratively is valued in the STELLA classroom, this learning behavior was rewarded by the teacher explicitly.

**Language Content**

Within STELLA, (a) grammar modelling, (b) activation of prior knowledge, and (c) taxonomized questioning fall within the dimension of Language Content, in that these components of STELLA operate in the light cognitive or dense cognitive levels.

**Grammar modelling.** Grammar modelling refers to any time the teacher negotiated a correct response from the student and repeating a correctly formed sentence to the class, or providing examples of how to use a vocabulary word in a sentence. Grammar modelling was usually prompted when a student struggled forming a complete sentence in English to answer the question posed to them as they were randomly selected. At that point the teacher negotiated with the student, often referring to visual scaffolding, to complete the sentence. Once the sentence was fully formed, the teacher would then repeat the entire sentence fluidly. Sometimes the teacher had the student repeat this after them. Grammar modelling was also prompted as students worked on writing activities. At times, they would begin a question to the teacher in Spanish, at which point the teacher would tell the student how to ask their question in English. If students were being asked to write a complete sentence using one of the vocabulary words of the day, the teacher would orally provide several models while the students formulated their own. Because connecting the meanings of vocabulary word in use increased awareness of the connection between the form of a word and its meaning in
use. As words surface within the context of a story, discussion, or the context of subject-area activities in which the students are meaningfully engaged is the best time to teach grammar (Schleppegrell, 2013). The following vignette exemplifies how teachers employed grammar modelling in the STELLA classroom:

Teacher 4: “What would happen if there was no gravity?” Teacher then calls on student after pulling popsicle stick and repeats the question. She says, “Complete sentence please.”

Student: “Everything would just go flying in the air.”

Teacher 4: “If there was no gravity…”

Student: “If there was no gravity, it would just go flying.”

Teacher 4: “It would go flying up in the sky.” [O.F.4.1/21.15:13]

In this excerpt, the student attempted to answer the question but did not use a complete sentence as was instructed. The teacher then modelled how to answer the question in a complete sentence using a stem. The student attempted again, but the second time did not finish the sentence. The teacher then helped him finish the sentence.

**Activation of prior knowledge.** Activation of prior knowledge includes any time the teacher gave “clues,” asking them to imagine things they likely have seen in the past or questions written into the script that activated prior knowledge, I included that event in this category. Activating prior knowledge honors immigrant students’ past experiences and calls upon their metacognitive skills (Salinas, Franquiz, & Guberman, 2006) and honors the experiences with which they come. On one STELLA script, for example, students were asked to imagine a plant and describe where they have seen that plant grow. Children hailing from Central American countries, particularly if they are
from rural areas, would have plenty to say and share with the rest of the class. This may ignite the other children’s imagination, provide something for the immigrant student to be proud of, and add dimension to the classroom. The following vignette exemplifies how teachers activated prior knowledge in the STELLA classroom:

Teacher 1: “If you could not hear, how would you know a firetruck was coming?

The teacher then randomly selected a student, who in turn could not readily answer the question. In order to help the student answer the question, the teacher activated the student’s prior knowledge and asked: “Have you ever seen a firetruck coming through traffic?” After a few second’s thought, the student answered.

Student: “I would see the lights.” [O.M.1.11/21.16:30]

While questions are written into the STELLA curriculum that activate prior knowledge, this is an example of activation of prior knowledge that was not written into the STELLA curriculum. The fact that the teacher knew to activate the student’s prior knowledge in order to help him answer may either come from exposure to the STELLA curriculum, or likely from the teacher training teacher’s in the ELLA-V project receive.

**Taxonomized questioning.** Within STELLA, Bloom’s taxonomy of higher order thinking is employed in the questions based on the storybooks’ text. The levels are: (a) remembering, (b) understanding, (c) applying, (d) analyzing, (e) evaluation, and (f) creating. Because students were randomly selected to participate in answering, teachers asked all levels of these questions to students possessing all difference English language proficiency levels. For the more abstract higher order thinking questions, students were significantly scaffolded when grappling with how to answer. This aspect of
differentiation in the difficulty level of the question along with the randomization of
questioning and subsequent scaffolding when needed creates a socially and
democratically just classroom environment. In other words, low-proficiency students are
also given the opportunity and expected to answer the more difficult or abstract higher
order thinking questions. If students needed help with questions asking them to
remember or understand, they were directed to look on specific pages in the text for the
information. This is a learning strategy that will be of value to them throughout their
academic careers. The following table exemplifies Bloom’s Taxonomy Analysis. These
questions are from Week 10 in the STELLA curriculum. The storybook for Week 10 is
“Force Makes Things Move.”
### Table 10

**Example of Bloom’s Taxonomy Analysis**

<table>
<thead>
<tr>
<th>Preview: Explain what you know about forces.</th>
<th>Creating / Evaluation</th>
<th>Creating / Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pages 4-5</strong></td>
<td>Creating / Evaluation</td>
<td>After reading pages 4-5, how would you explain force?</td>
</tr>
<tr>
<td><strong>Pages 6-7</strong></td>
<td>Applying / Analyzing</td>
<td>If you have a race with your big brother, why do you think it takes more force to make him move?</td>
</tr>
<tr>
<td><strong>Pages 8-9</strong></td>
<td>Creating / Evaluation</td>
<td>Compare the amount of force needed to move heavy things with the force needed to move things that do not weight very much.</td>
</tr>
<tr>
<td><strong>Pages 10-11</strong></td>
<td>Applying / Analyzing</td>
<td>What would happen if you tried to push your desk?</td>
</tr>
<tr>
<td><strong>Day 2</strong></td>
<td>Creating / Evaluation</td>
<td>What would happen if three men pushed the car?</td>
</tr>
<tr>
<td><strong>Pages 12-13</strong></td>
<td>Remembering / Understanding</td>
<td>On page 14, what can stop the car from rolling?</td>
</tr>
<tr>
<td><strong>Pages 14-15</strong></td>
<td>Applying / Analyzing</td>
<td>What would happen if you rubbed your foot on a rug or carpet?</td>
</tr>
<tr>
<td><strong>Pages 16-17</strong></td>
<td>Applying / Analyzing</td>
<td>What happens when a car drives on grass? Why?</td>
</tr>
<tr>
<td><strong>Day 3</strong></td>
<td>Remembering / Understanding</td>
<td>Tell me something about forces we have learned. What else?</td>
</tr>
<tr>
<td><strong>Pages 20-23</strong></td>
<td>Creating / Evaluation</td>
<td>Why do you think that if you throw a toy car in space, it will keep going forever?</td>
</tr>
<tr>
<td><strong>Pages 24-25</strong></td>
<td>Remembering / Understanding</td>
<td>Explain what gravity is.</td>
</tr>
<tr>
<td><strong>Pages 26-27</strong></td>
<td>Creating / Evaluation</td>
<td>Why do think that when you spill a glass of milk it does not go onto the ceiling?</td>
</tr>
<tr>
<td><strong>Day 4</strong></td>
<td>Applying / Analyzing</td>
<td>Explain what forces do.</td>
</tr>
</tbody>
</table>

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Language of Instruction and Communication Mode

The visual scaffolding component of STELLA fits within both the Language of Instruction and Communication Mode dimensions of the FDPM. Having the information the student needs to understand and communicate be readily accessible, the student’s cognitive load is thereby reduced. Visual scaffolding occurred in the STELLA classrooms in both L1 and L2. If students’ contributions to a graphic organizer were in Spanish, they were included. Otherwise, vocabulary cards and text from the storybooks were referred to in English.

Visual scaffolding. Visual scaffolding refers to any time the teacher referred to displays of visual scaffolding material, such as elements of the book (such as the text, pictures, and title), class experiments, word walls, word banks, and graphic organizers. As the teacher introduced the vocabulary words, he or she discussed the pictures provided on the vocabulary cards. Teachers typically underlined the text with their finger as they read the text. Similarly, as the teacher introduced the story, he or she discussed the pictures in the book at length, and then went through the text while underlining it with their finger. Word walls, word banks, and pages with sentence stems were pointed to by the teacher whenever a student struggled to create a complete sentence, or spell a word. Graphic organizers were displayed and branches were added when students created sentences that had to do with the topic in discussion. In instances when experiments were done in class, the teacher continuously walked through the classroom and displayed the experiment, asking questions having to do with the content as he or she went. The following vignette exemplifies how teachers employed visual scaffolding in the STELLA classroom:
As students view the flashcard for the vocabulary word “droplets,” the teacher points to the droplets in a three depictions on the flashcard and says, “See the droplets on the flower, and also on the counter, and here on the leaf? Those are droplets.”

Teacher 5: “Today we learned a new vocabulary word: Droplets. As we continue with the lesson, I want you to practice using this word. This will help us remember what it means.” [O.F.5.10/23.2:40]

In this example, the teacher did not just display the flashcard, she pointed to and drew the students’ attention to the examples of droplets and then followed up with giving the students instructions to use the word as much as possible. This combination of providing students with visual examples and explicit instructions communicated to students the importance of their learning the new vocabulary word.

**Analysis of Results for Research Question**

These observations are useful in the sense that they give an administrator an idea of what types of learning events and environment are taking place within the classroom should they be conducting a daily walkthrough of the school, for example. An administrator in a school supporting immigrant students should witness: (a) teacher engagement, (b) student engagement, (c) visual scaffolding, (d) grammar modelling, (e) activation of prior knowledge, (h) collaborative learning, (i) taxonomized questioning, and (j) explicit feedback. These components improve classroom instruction and fit within the FDPM, which provided me with a model for providing objective feedback to STELLA teachers, administrators, and researchers on the efficacy of the activity structures conducted and how L1 and L2 were used during classroom instruction.
CHAPTER V

DISCUSSION, IMPLICATIONS, FUTURE RESEARCH, AND CONCLUSIONS

As of 2016 in the state of Texas, there were over 32,000 students designated at Title III Immigrant enrolled in the elementary grade levels. Improvements in the pedagogical practices have closed the achievement gap between ELLs and mainstream students over the past decade (Calderon, Slavin, & Sanchez, 2011). There are, however, various subsets of English learners, one of them being the immigrant subset, who have specific challenges and needs. English language literacy skills will give these students the greatest chance of success in school both immediately, and over the course of their schooling (Suarez-Orozco, Bang, & Onaga, 2010; Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). While Cruz de Quiros (2008) showed the effectiveness of the literacy curriculum known as STELLA (Storytelling and Retelling and Higher Order Thinking for English Language and Literacy Acquisition) for gains in ELLs’ oral language development, the data had not previous to this study been disaggregated to measure its effectiveness for newcomer ELLs in particular.

Because of the significant growth of newcomer ELLs experienced in Texas schools in the school year 2014, and the lack of studies addressing the needs of newcomer ELLs, I examined language development components of the Woodcock Munoz Language Survey – Revised subtests, Picture Vocabulary, Verbal Analogies, Understanding Directions, and Story Recall. I also examined Fall 2014 and Spring 2015 scores of the TELPAS Listening and Speaking tests. All students in the cohort used in my sample received structured story reading instruction in which implicit and explicit vocabulary instruction was given every day. Students were made to engage in critical
thinking in order to increase language and literacy development. The purpose of my study with a sample size of 18 Hispanic bilingual students participating in STELLA was to investigate whether the immigrant group entered Grade 2 with lower language abilities than the home group, and whether they caught up to the home group by the end of the grade.

**Discussion**

The data collected for my study came from a school district in Houston and had two data collection points: Fall 2014, and Spring 2015. In the Fall of 2014, pretests were conducted to test for the listening and speaking language domain abilities using the Woodcock Muñoz Language Survey – Revised (WMLS-R) that measure capabilities in these domains, as well as the Texas English Language Proficiency Assessment System (TELPAS) Listening and Speaking tests. In the Spring of 2015, posttests were given to measure the same competencies for these tests. Data from these students were disaggregated into two groups, those who immigrated to the United States, and those who were born in the United States. All participants in my sample were enrolled in schools participating in Project ELLA-V in the Treatment 2 condition, which utilized an intervention component called Story Retelling with Higher Order Thinking for English Language and Literacy Acquisition (STELLA) (Irby, Lara-Alecio, Quiros, Mathes & Rodriguez, 2004). Data were collected from three sources (a) Woodcock Munoz Language Survey – Revised, and (b) Texas English Language Proficiency Assessment System. Woodcock Muñoz Language Survey – Revised (WMLS-R) which provides a sampling of proficiency in oral language and language comprehension, as well as teacher observations from the observation portal at Texas A&M University. The TELPAS
assesses the proficiency of ELL’s English in the four language domains, listening, speaking, reading, and writing but for the purpose of my study, I only examined outcomes for students’ listening and speaking capability. TELPAS is aligned with the Texas English Language Proficiency Standards (ELPS). Explanations of each hypothesis, and the research question directing my study are provided below.

**Summary**

In my study, the results of my t-tests demonstrated that the immigrant group of students entered Grade 2 with a similar capability as the home group in the following: (a) Picture Vocabulary, (b) Understanding Directions, and not (c) Verbal Analogies, but not (d) Story Recall which are subtests of the Woodcock-Munoz Language Survey-Revised. T-tests were also conducted for (a) TELPAS Listening, and (b) TELPAS Speaking. The immigrant group entered Grade 2 at a statistically significant disadvantage on these assessments.

The results of the ANCOVAs on the assessments examined indicate that STELLA allowed the immigrant group to catch up to the home group on Story Recall, which was the only WMLS-R subtest analyzed on which they entered at a statistically significant disadvantage. STELLA also enabled the immigrant group to catch up to the home group on TELPAS Listening, but not (d) TELPAS Speaking. The results of my t-tests concur with the literature that immigrant students lag in scoring due to interrupted formal schooling (Calderon, Slavin, & Sanchez, 2011; Takanashi, 2004), or limited access to Early Childhood Education (Bumgarner & Lin, 2014; Bumgarner, Martin, & Brooks-Gunn, 2013; Garcia & Jensen, 2009; McElvain, 2015). The fact that the immigrant group did not catch up to the home group in TELPAS Speaking also is
consistent with researchers (Tong, Lara-Alecio, Irby, Mathes, Kwok, 2008) that state that ELLs need time to develop their English speaking skills.

The finding that the immigrant group caught up to the home group on Story Recall aligns with the STELLA curriculum, in which students are called upon weekly to retell the story. The fact that the immigrant group did not catch up to the home group on TELPAS Speaking could be based on the fact that for TELPAS Speaking, students’ oral language production is holistically assessed during authentic, performance-based learning such as cooperative group work, presentations, informal interaction with peers, etc. In other words, students, during TELPAS ratings, do not always know when they are being assessed; whereas Story Recall is a performance for which they know the expectations and practice weekly within STELLA.

In observations of STELLA classrooms, (a) teacher engagement, (b) student engagement, (c) visual scaffolding, (d) grammar modelling, (e) activation of prior knowledge, (h) collaborative learning, (i) taxonomized questioning, and (j) explicit feedback occurred with regularity. These are practices backed by literature as being beneficial for English learners of low proficiency, such as newcomer ELLs are. By conducting these observations, I was also able to ensure a certain level of fidelity in the employment of the STELLA curriculum.

The positive Story Recall and TELPAS Listening test scores could be predicted by the literature for effective language development instruction for ELLs. STELLA provides the following: (a) activation of prior knowledge (Martinez-Roldan & Newcomer, 2011; Salinas, Franquis, & Guberman, 2006), (b) high structure and repetition (Iddings & Jang, 2008), (c) attention to grammar (Schleppegrell, 2013), (d)
authentic communication and student engagement (Monzo & Rueda, 2009; Whitsett & Hubbard, 2009), (e) visual scaffolding (Whitsett & Hubbard, 2009), (f) group work / collaborative learning in a supportive environment (Calderon, Slavin & Sanchez, 2011; Kang, Haddad, Chen & Greenberger, 2014; Whitsett & Hubbard, 2009), (g) home-school connection (Calderon, Salvin & Sanchez, 2011; Leaks & Stonewall, 2008; McElvain, 2015; Turney & Kao, 2010; United States Department of Education, 2016; Whitsett & Hubbard, 2009; Worthy & Rodriguez-Galindo, 2006), (h) incorporation of content language (Bumgarner, Martin & Brooks-Gunn, 2013; Bunch, Aguirre, and Tellez, 2015; Hopkins, Lowenhaupt & Sweet, 2015; Iddings & Jang, 2008).

Components of Effective Language Instruction - STELLA

**Activation of prior knowledge.** As the teacher employing STELLA introduces the storybook on the first day of the week, asking the students to make predictions and say what they know about the subject in their first language, the teacher is activating the students’ prior knowledge. Even as Second-graders, these students have had many experiences, and have capacities to draw upon. As Martinez-Roldan and Newcomer (2011) explain, students are allowed to enjoy engaging with a book without having to struggle with text, which creates an enjoyable connection with books and lowers the students’ anxieties. Tapping into the students’ prior knowledge employs their metacognitive skills (Salinas, Franquis, & Guberman, 2006) that enable them to interpret the children’s literature presented to them in STELLA.

**High structure and repetition.** The highly repetitive nature and practices of STELLA through the use of shared objects, infrastructural elements and speech patterns provide the support the students need to develop language skills in English. The frequent
repetition makes the task of learning English less daunting, keeps learners who are going through the silent period psychologically engaged, and makes them feel like part of the class. This sense of belonging gives them more exposure and opportunities to try out and practice their new language. STELLA, beyond providing the structure students need to in order to know what the expectations for behavior are, it also provides them with instructional content practice (Iddings & Jang, 2008).

**Attention to grammar.** The teacher, using STELLA, models correct grammar when correcting students who have attempted sentences, but have used incorrect grammar. This attention to grammar, as grammatical meanings in use and increases awareness of the connection between form of a word and its significance. Students in STELLA are authentically engaged in the meaning making process, and teachers provide explicit instruction metalanguage, discussing the rules of grammar as grammatical concepts surface within the context of a story, discussion, or the context of subject-area activities in which the students are meaningfully engaged. This is what must happen for students to recognize language patterns (Schleppegrell, 2013). Teachers in STELLA also are trained, through the professional development component, to provide the vocabulary for language awareness in all feedback, including encouragement when the student has answered correctly with specific content feedback.

**Authentic communication and student engagement.** STELLA features authentic communication in that students work in pairs both speaking and writing, all students are called upon evenly with the employment of random selection, and the teacher negotiates meaning with students as they struggle. Rather than spending an inordinate amount of time lecturing students, STELLA teachers engage the students in
conversation during story circle, and students engage each other by working collaboratively. The authentic communication and engagement STELLA creates prevents students from passing for being English proficient (Monzo & Rueda, 2009) and students are encouraged to speak without fear of criticism (Whitsett & Hubbard, 2009).

**Visual scaffolding.** The word wall and graphic organizers utilized in STELLA scaffold students as they are attempting to employ new vocabulary words. These visual tools relieve some demand on students’ working memory and frees them to take language risks, and helps to create a supportive environment in which they feel the teacher is there to help (Whitsett & Hubbard, 2009).

**Group work / collaborative learning in a supportive environment.** The group work and collaborative learning opportunities STELLA provides is congruent with Hispanic culture, which is more collaborative than competitive (Whitsett & Hubbard, 2009). These practices also allow students to create relationships amongst each other, which can reduce the stress caused by the pressure to learn English. Positive school identities and attitudes toward school will be of socioemotional, and academic benefit to these students in the long run (Kang, Haddad, Chen & Greenberger, 2014). The frequent and safe opportunities cooperative learning allows forms effective learning for all ELLs, as documented by several studies (Calderon, Slavin & Sanchez, 2011).

**Home-school connection.** Within the greater ecology of STELLA, Project ELLA-V provides home-school connection opportunities, such as weekend GED and ESL classes, as well as structured opportunities for parent volunteers. Students and their parents (including legal guardians) who are involved in Project ELLA-V do not have to feel like there is a disconnection between school and home and feel a positive interaction
between the two (Calderon, Slavin, & Sanchez, 2011). As detailed in the USDOE’s Newcomer Tool Kit, “parent and family engagement is critical to ensure newcomer students’ success in school. It is important for schools to reach out to parents in multiple ways and offer multiple means of participation” (United States Department of Education, 2016, p. 5). ELLA-V effectively manages to do this. Programs serving ELLs are unsuccessful when they fail to connect students’ school life with their family life in a social, collaborative process involving students and their parents (McElvain, 2015). Parental involvement is key in children’s success in school because it provides the child with social capital, sets expectations for the child both behaviorally and academically, and conveys to the child that school is important (Turney & Kao, 2010). Immigrant parents desire for their children to learn English so they may succeed in school, and they want for their children to maintain their Spanish (Worthy & Rodriguez-Galindo, 2006).

Project ELLA-V utilizes parents as a resource of language models.

Incorporation of content language. With a selection of storybooks in STELLA to include topics such as “Solids, Liquids, and Gasses,” “Force Makes Things Move,” “Push and Pull, “Water and Weather,” and the like, students encounter content-specific language. While Hispanic students score as well on Approaches to Learning assessments as Caucasian students, they need English proficiency in content areas to mediate their learning (Bumgarner, Martin, & Brooks-Gunn, 2013). Teachers do not automatically know ways to integrate academic language development beyond teaching vocabulary (Bunch, Aguirre, and Tellez, 2015), STELLA gives them explicit instructions on how and when to do this in every lesson by providing levelled questions throughout every text.
Implications

Whatever the reason for leaving the home country may be, any child who comes to the United States needs to be placed in a classroom where the components of effective language development combine to create an integrated curriculum that is inclusive of and effective for all students. STELLA was founded on research-based principles and has stood the test of time of more than a dozen years. It is also congruent with Freire’s (1970) transformational social justice in education theory in that the language and literacy skills STELLA students gain are at a decreased risk for future oppression. Students and teachers alike are empowered through STELLA regardless of individual differences including age and national origin. STELLA also holds to the Four Dimensional Pedagogical Model (Lara & Parker, 1994) in that it is highly structured in its activities, yet it is flexible enough to allow the teacher and students to use L1 if they need it, while maximizing capacity for growth in English. In the STELLA classroom, all students are involved, as they are engaged in collaborative learning. All STELLA students are included and come with all levels of proficiency, yet STELLA challenges all students in higher order thinking, and through randomized questioning, even the students who have low proficiency must occasionally answer these questions. These students, however, are scaffolded and supported appropriately, and feel safe in the highly structured environment STELLA provides. For these reasons, the many districts across the United States lacking the necessary infrastructure to serve newcomer ELLs, should consider implementing STELLA as their curriculum. Rather than trying to build a language instruction program from the ground up, it would behoove districts to adopt
STELLA as their curriculum, because the effective elements of instruction it includes must work together in conjunction, and will not function in the same manner should only one or a few of these elements be present. Furthermore, STELLA would serve as an excellent curriculum for Pre-Kindergarten, which is much needed for Hispanic immigrant ELLs.

**Limitations**

The sample size of 18 for the WMLS-R scores and 14 for the TELPAS scores in this study is a limitation, as is the sample size of 5 teachers for the observations. The small sample size is due to the fact that only 9 students in the treatment 2 condition were enrolled. To estimate the parameters of the immigrant student population in elementary school enough to be able to generalize to other settings, a larger sample size would be needed in order to lessen the margin of error and increase the level of confidence. Regardless of the small-\(n\) design, I suggested an upward trend is evident in the scores to measure the Newcomer students’ listening and speaking abilities. Furthermore, this study is meant to exemplify the sort of questions researchers must ask if we are to provide equitable outcomes for immigrant students, as well as to prompt the discussion of the need to disaggregate achievement data among the ELL subgroups. Though this is a small-\(n\) study, may it serve as a source of suggestion for researchers, who must begin the practice of data disaggregation. In addition, may this study allow researchers a greater understanding and more accurate picture of what individual differences among ELLs provide the most daunting educational challenges for ELLs. Another limitation of this study was that I used grade-based scores rather than age-based scores, as the dates of birth indicated in ELLA-V records are suspected to be approximate for some children.
Another limitation of my study is that the WMLS-R was not normed on Newcomer ELLs. The issue of norming of standardized language proficiency assessment may not be aligned or sensitive to the intervention.

**Future Research**

Future research is needed to attain the qualitative experiences of teachers using this curriculum from their point of view. This mixed-methods study approaches an answer to the question of whether STELLA is an effective curriculum for immigrant ELLs in Grade 2 while providing some qualitative insight into its workings. However, providing a follow-up qualitative study, interviewing teachers, would attempt to answer the question: What were teachers’ experiences and perceptions working with immigrant students using STELLA? That study would provide better understanding as to the experiential workings of STELLA as opposed to the stance this current study assumes. Another subsequent quantitative study following these same immigrant students to Grade 3 would provide us with clarity as to whether the gains these students experienced at the end of Grade 2 using STELLA were maintained in Grade 3. In that study, a 2x2 design is suggested in order to enhance the statistical power of the study and control for comparisons of multiple outcome measures.

**Conclusion**

I attempted to address my hypotheses related to language norm-referenced and criterion-referenced scores regarding language development for immigrant students in Grade 2, and a question regarding fidelity of implementation and to provide a picture of the learning events that should be occurring in a classroom housing immigrant students. Although I had hypothesized that there would be statistically significant differences in
all of the WMLS-R subtest pretests I examined, the newcomers only performed lower initially in the Story Recall, which places a high demand on oral expression. I also anticipated that the newcomer students would thrive in the STELLA environment, and close the gap that may exist between them and their home-group peers. It was the case that the newcomer group, as well as the home group experienced growth, evidencing that this is indeed a highly structured, inclusive curriculum. The subtest on which both groups experienced least growth was in Understanding Directions. This test operates at a low level of Bloom’s taxonomy, and while questions checking for understanding are included in STELLA, the more elevated goal of STELLA is to get students thinking at the higher levels.

I hypothesized that there would be a statistically significant difference for between immigrant students and their home-group peers on the TELPAS Listening and Speaking TELPAS assessments for the Fall of 2014, and that the immigrant students would close the achievement gap on the TELPAS Spring of 2015 tests. Indeed, it was the case that the immigrant students entered Grade 2 at a statistically significant disadvantage for these tests. Although the immigrant students caught up on the Story Recall of the WMLS-R, the fact that the students did not catch up to the home group on the TELPAS Speaking test has to do with the fact that TELPAS Speaking measures student performance on speaking tasks while the student is operating in the classroom on various authentic tasks that are not necessarily repeatedly practiced, as story retell within STELLA demands.

After analyzing these data, as well as having identified elements of instruction that prove effective for language instruction for Hispanic immigrant ELLs in elementary
that are present in STELLA and / or Project ELLA-V, researchers, practitioners, and policymakers can conclude that this is a curriculum that may aid in closing gaps present between immigrant students and their native-born peers. The achievement gaps immigrant students face due to a variety of factors, including limited or interrupted formal schooling, socioeconomic and emotional factors relating to immigration, and cultural barriers are not obstacles that cannot be overcome. STELLA provides an integrated curriculum within the holistic programming that Project ELLA-V provides. STELLA and ELLA-V were founded on the tenets that education is a basic human right, and a commitment to provide socially just programming for any and every student participating in the United States educational system.
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