READ 180: Is It an Effective Reading Intervention for English Language Learners?

by

Carissa Gober

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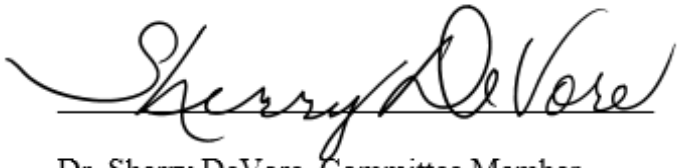
Dr. Trey Moeller, Dissertation Chair — 9.18.14 — Date



Dr. Sherry DeVore, Committee Member — 9.18.14 — Date

Dr. Anthony Rossetti, Committee Member — 9/8/14 — Date

Dr. Terry Reid, Committee Member — 9/18/14 — Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree.

Full Legal Name: Carissa Lynn Gober

Signature: Carissa Lynn Gober

Date: 9/8/14

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Abstract

The purpose of this quasi-experimental study was to determine if READ 180 is an effective reading intervention program for English Language Learners (ELLs). School districts nationwide are seeking effective programs to close the achievement gap between ELLs and the general population in order to fulfill federally established Title III requirements. This study examined the results of the 2011-2013 Assessing Comprehension and Communication in English State-to-State (ACCESS), an English Language Proficiency assessment tool specifically designed for ELLs. At the time of this study, 35 states, including Missouri utilize the ACCESS test to measure proficiency levels of their ELLs in partial fulfillment of Title III requirements. Two rural Missouri schools, with ELL populations that exceeded 10%, participated in the study. Both school districts utilize Scholastic's READ 180 program, an intervention program specifically designed for struggling readers. The seventh and eighth grade ACCESS scale scores from both school districts were compiled and analyzed through multiple *F*-tests, *z*-tests, and *t*-tests. The research questions were designed to determine if there was a significant difference in the mean gain in ACCESS reading, writing, literacy, and overall scale scores of those ELLs enrolled in READ 180 and those ELLs not enrolled in READ 180. The results of the study yield mixed results. In nine of the 12 subtests, there was no significant difference in the mean gain in ACCESS scale scores. However, those ELLs who were enrolled in READ 180 for two consecutive years demonstrated the most significant differences in mean gain scores.

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Chapter One: Introduction

> According to Verdugo (2006), recipient of the 2003 Fulbright Award:
>
> ...language and culture have been described as a 'wall' that Hispanic students in the U.S. must get over to enter the society of the school. And if they do not overcome it in the early years of schooling, the wall grows higher and thicker with each succeeding year. (xii)

The difficulty of scaling the educational wall of literacy and academic success is an accurate depiction of the plight of most English Language Learners (ELLs) regardless of their native language, nationality or race (Boyle, Taylor, Hurlburt, & Soga, 2010: Davies, 2007; Goldenberg & Coleman, 2010; Lesaux, 2012; MacDonald, 2012; McKenzie, 2012; Padrón, Waxman, & Riviera, 2002; Rubinstein-Avila, 2003).

The phrase "typical ELL" does not exist in the United States. Each state has its own definition and criterion for the English Language Learner (ELL) (Ramsey & O'Day, 2010). In recent years, there has been a movement for standardization of testing and programs, but there is still vast diversification between school districts (Zacarian, 2011). ELLs may have been born in the United States or in a foreign country (Tanenbaum et al., 2012; Van Roekel, 2011). They may have immigrated to the United States before they started formal schooling but could have recently immigrated (Zacharian, 2011). These students are comprised of multiple linguistic, cultural, and social characteristics who often encounter additional academic obstacles (National Board for Professional Teaching Standards, 2010). Therefore, Romanova (2009) concluded, "The acquisition of advanced literacy, even in the native language, is a long process, and is even more challenging for

ELL [English Language Learner] children" (p. 3). Language acquisition is an onerous task for ELL and educators.

A common misconception among the public and educators alike is all ELLs are immigrants; however, the majority of ELLs were born in the United States (Fortuny & Chaudry, 2011; National Education Association, 2008; Ramsey & O'Day, 2010). More than 75% of ELLs are second or third generation descendants of immigrants but still enter school with little or no English skills (Grantmakers for Education, 2010). Albeit the vast majority of ELLs are native Spanish speakers, more than 400 other languages are represented in English As a Second Language (ESL) programs nationwide (Boyle, Taylor, Hurlburt, & Soga, 2010).

Historically, only certain states were significantly impacted by the challenges of educating students whose first language was not English; however, the ELL population growth is no longer confined to a few states and regions (Boyle et al, 2010; Costenino de Cohen, Deterding, & Chu Clewell, 2005; Goldenberg & Coleman, 2010; Lesaux, 2012; Ramsey & O'Day, 2010; Zacarian, 2011). The National Clearinghouse for English Language Acquisition (2011) reported, from 1997-2009 the number of ELLs enrolled in public schools increased by 51%, while the non-ELL population only grew by 7.2%. According to the National Center for Education Statistics (NCES), there were 4.7 million students classified as ELLs nationwide during the 2009-2010 school year, which represented about 10% of the total student population ("English-Language Learners," 2011). Of the school districts who received funding for ELLs, 35% reported their ELL enrollment had increased by more than 25% since September 2004 (Tanenbaum et al., 2012). Consequently, the urgency to address the educational needs of the fastest growing

student subgroup in the nation is garnering national attention (American Youth Policy Forum, 2009; Barron & Oxnam, 2012; Costenino de Cohen et al., 2005; Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006; Goldenberg & Coleman, 2010; Lesaux, 2012).

Background of the Study

The Economic and Social Research Institute (ESRI) (2012) predicted if current population trends continue, non-Hispanic Whites will be the minority by the year 2035, and the "minority-to-majority flip will happen much sooner among the demographic of children under age 18" (p. 4). Recent immigration is not the only cause for the increase in minority populations; minority families have a propensity to have more children than non-Hispanic White families (Fortuny & Chaudry, 2011; Tang, 2011). The ESRI (2012) noted in 110 of the metropolitan cities in the United States more minorities births were reported than Caucasian births in 2010.

Parts of Missouri have experienced rapid minority and immigrant population growth (Blank & Lieb, 2011; "Hispanic population," n.d.; "Missouri Minority," n.d.; Tang, 2011). The Migration Policy Institute reported, of the foreign-born population living in Missouri in 2011, 26.3% entered the state between 1990 and 1999, and 48% entered Missouri between 2000 and 2009 (Migration Policy Institute, 2011). Missouri experienced a 166% growth in number and share of children of immigrants from 1990-2009, ranking it 21, among the states, in percentage of children of immigrant growth (Fortuny & Chaudry, 2011).

The minority growth rate has not just affected metropolitan cities (Zacarian, 2011). Historically, Southwest Missouri was a predominately mono-linguistic region, essentially unaffected by the challenge of educating ELLs; however, the area has

experienced tremendous minority population growth since the 1990s (Lazos Vargas, 2002; Walker, Dollar, & Amonker, 2007). Numerous school districts in Southwest Missouri have encountered changes in multiple languages, learning styles, and cultures in a relatively short amount of time ("Missouri 2010," 2011).

Factors that affect achievement. Typically, ELLs are impoverished, which further exacerbates the challenge of academic success (Ballantyne, Sanderman, & Levy, 2008; Barron & Oxnam, 2012; Lesaux, 2012; Ramsey & O'Day, 2010; Rubin, Abrego, & Sutterby, 2012; Zacarian, 2011). In the *National Evaluation of Title III Implementation-Report on State and Local Implementation*, high poverty districts reported an average of 38% ELL enrollment, while low poverty districts only reported 7% (Tanenbaum et al., 2012). ELLs have to learn and become proficient in a second language while simultaneously striving for proficiency in math, science, and social studies skills (Gottlieb, 2012). The combination of poverty and limited proficiency compounds the obstacles ELLs have to overcome (Lesaux, 2012).

From 2000 to 2010, the number of school-aged students living in poverty increased from 10% to 21% (Lesaux, 2012). Academic achievement is difficult for many students; however, it is even more formidable for children of poverty to obtain (Gibbons, 2009; Lesaux, 2012). Jensen (2009), author of *Teaching with Poverty in Mind*, asserted impoverished children's "brains have adapted to suboptimal conditions that undermine good school performance" (p. 14). Consequently, many ELLs do not achieve academic success, and leave school in order to help support the family (Ballantyne et al., 2008).

In consonance with Maslow's Hierarchy of Needs, if the basic needs of people are not met, they cannot see the benefits of an advanced education (Poston, 2009). Students

who are part of the lowest socioeconomic quartile are seven times more likely to drop out of school (Rumberger, 2006). In addition to poverty, researchers Daggett and Hasselbring (2007) asserted, “Most of the 3,000 secondary students who drop out of school every school day in the U.S. are poor readers” (p. 4). Is it any wonder Missouri reported a 67% graduation rate in four years among ELLs during the 2010-2011 school year ("Missouri 2010-2011 Four-year,” 2012)?

Many ELLs and their families are struggling to overcome assimilation, war, long-term stress, lack of background education, legal issues, separation from family members, alienation and language barriers, which complicate academic achievement (Abedi & Dietel, 2004; Calderón, 2007; Gottlieb, 2012; Ramsey & O'Day, 2010; Zacarian, 2011). Despite the obstacles, ELLs are expected to achieve the same proficiency levels as their native-English speaking peers but often fall short and score in the below basic and basic levels (Francis et al., 2006; Lesaux, 2012).

School accountability. The administrators of school districts are continually seeking answers to improve the instructional methods used to teach ELLs and ways to improve student achievement (Fratt, 2007; Goldenberg & Coleman, 2010). In compliance with The Education and Secondary Education Act (ESEA) and The No Child Left Behind (NCLB) Act, 2001, each state must annually test ELLs for English Language Proficiency (ELP) using a statewide ESL assessment . In addition, in 2003, each state was required to establish Annual Measurable Achievement Objectives (AMAOs) to measure the annual progress of ELLs systematically (Missouri Department of Elementary and Secondary Education [MODESE], 2013c). These AMAOs include: 1) percentage of ELLs making progress on state ESL proficiency test, 2) percentage of ELLs scoring

proficient on state ELP test and thereby exiting ESL program, and 3) percentage of ELLs making Annual Yearly Progress (AYP) on state-wide assessment in the areas of math and Communication Arts (Boyle et al., 2010; Cook, Linquanti, Chinen, & Jung, 2012).

Under the auspice of NCLB, school districts are continually analyzing and scrutinizing student performance data and must make data-driven curriculum decisions. Title III requires ESL instruction to be high quality and scientifically researched (MODESE, 2013c) Schools cannot afford to keep a program out of teacher preference or tradition; therefore, administrators must annually evaluate programs based on their effectiveness.

Curriculum companies, such as Scott Foresman, National Geographic, Saddleback, National School Products, Delta Publishing, and many other publishing companies have seen the demand for ESL materials and supplements to help the classroom teachers narrow the achievement gap. According to González, the director of legislative affairs for the National Council of La Raza, although districts know they need materials for their ELL population, they are still struggling to figure out what is best (as cited in Maxwell, 2012). Most of these materials and programs come with an expensive price tag, and each has its own research, which touts its superiority to the competition. School districts are willing to invest in curriculum because of the advertised results. Many of these districts are in improvement cycles and are willing to try anything that promises improvement of subgroups on state performances (Kim, Capotosto, Hardy, & Fitzgerald, 2011).

More than 40,000 classrooms nationwide have implemented READ 180, a reading program specifically designed to close the achievement gap of struggling readers

(Scholastic, 2013b). This program evolved out of research done at Vanderbilt University by Dr. Hasselbring in collaboration with Dr. Allen of the University of Central Florida (Scholastic, 2014). In 1994, Hasselbring and Allen founded the Orange County Literacy Project in Central Florida, to aide struggling readers and incorporated the use of researched best practices (Scholastic, 2014). Scholastic joined the endeavor in 1997 and launched the READ 180 model in 1999 (Shawgo, 2005). The intention of READ 180 is to differentiate instruction while addressing the five main components of reading: phonemic and phonological awareness, fluency, vocabulary and reading comprehension (Kim et al., 2011).

The READ 180 program requires the employment of two certified and trained teachers for a group of 15 to 20 students. These students need access to computers to use the included software, headphones with microphones and access to a library of books, which are published by Scholastic, in addition to the standard curriculum. The program is costly and is determined by the number of students and classrooms being served. The basic cost is $43,000 for a Stage of READ 180 service, which includes 60 student licenses (American Institutes for Research, n.d.). The model also requires 90 minutes of instruction each day. Some districts only use 40 to 50 minutes of instruction for a typical Communication Arts period, so the program can be a logistical challenge. The proscriptive model of the program requires specialized training of the teachers, which increases the expense.

Statement of the Problem

Despite school districts attempts to narrow the achievement gaps between ELLs and the mainstream population, recent reports indicate the gap is widening (Barron &

Oxnam, 2012; Lesaux, 2012). Schools are purchasing and implementing intensive reading programs such as READ 180 and other interventions; however, there is still a vast disparity in achievement nationwide. Two of the largest gaps in ability levels of non-ELLs and ELLs are in the areas of reading and writing. In 2011, only 29% of ELLs performed at or above basic levels in reading with only 3% of those at or above proficient (August, Estrada, & Boyle, 2012). Due to the accountability requirements of NCLB and subsequently Title III requirements, the disparity in achievement is currently a political and fiscal issue. Schools are now legally responsible for increasing the English Language Proficiency (ELP) of each ELL, and schools in Southwest Missouri are not exempt from this challenge (Costenino de Cohen et al., 2005).

There have been several research projects conducted to measure the improvement in reading scores of ELLs who were enrolled in READ 180; however, many of these studies were conducted by Scholastic (Kim et al., 2011; Lang, Torgesen, Vogel, Chanter, Lefsky, & Petscher, 2009; Papalewis, 2002; Sprague, Zaller, Kite, & Hussar, 2011). Researchers, Kim et al. (2011) contended that while many districts have implemented READ 180, "there is limited empirical evidence to support its effectiveness" (p. 183). Conversely, Scholastic (2013a) claimed that, "Studies have conclusively shown that when schools implement and follow the Instructional Model, significant gains can be expected after one or two years of program participation" (para. 2). Kim et al. (2011) countered, "Collectively, the most recent experimental studies suggest that READ 180 has differential effects on students of varying grades and reading achievement" (p. 187).

Typically, these studies use the respective state assessment for all students as the measurement instrument instead of an instrument specifically designed to measure ELP

(Scholastic, 2014). According to Scholastic (2013b), their program improves reading achievement for minorities as well as ELLs and Individual Education Plan (IEP) students and is specifically designed for students who score in the bottom 25th quartile. In 2004, Scholastic added structured engagement routines and support components in Vietnamese, Hmong, Cantonese, and Haitian Creole in addition to Spanish (Scholastic, 2014). Additionally, there is a companion book, the L Book, specifically designed for ELLs at different levels of proficiency (Scholastic, 2014). Scholastic asserted READ 180 is an effective program to increase reading levels of ELLs (Scholastic, 2014).

Purpose of the Study

The purpose of this project was to examine the progress of ELLs, enrolled in the READ 180 programs, in two school districts, A and B, in southwest Missouri to verify if Scholastic's claims to improve the proficiency levels of ELLs are conclusive. Has READ 180 benefitted ELLs in these districts when evaluated under the Assessing Comprehension and Communication in English State-to-State (ACCESS) for ELLs assessment tool?

This study analyzed the ACCESS test scores. Missouri is one of 35 states using this assessment to measure ELP (World-Class Instructional Design and Assessment [WIDA], 2014c). As part of the WIDA consortium, the ACCESS test is given to every ELL in the state of Missouri on an annual basis. It measures the student's ability to read, write, listen, and speak English. The ACCESS test was administered to 975,441 ELLs in the 2011-2012 academic year (WIDA, 2014c).

In order for students to exit the ESL program, the state of Missouri has set a recommended minimum overall score of a five on the ACCESS test. However, each

district has the freedom to set its own exit criterion. The scores from the ACCESS test are used to measure AMAOs for state and federal accountability purposes and to determine placement and services of ELLs within the school districts. Districts must increase the proficiency levels of each ELL in their district every year in order to fulfill AMAOs.

Importance of the Study

When analyzing the effectiveness of READ 180, school districts A and B have used some assessments to aid in their programming decisions regarding READ 180. READ 180 employs the use of the Scholastic Reading Inventory (SRI), which a framework to measure lexile levels developed by Dr. Jack Stenner (Scholastic, 2014). Administrators and teachers use the SRI scores for READ 180 placement and benchmark performances throughout the school year. The READ 180 teachers, along with their administration, analyze routine reports of these scores as part of the program. The districts have also evaluated READ 180 students' performance on the Missouri Assessment Program (MAP) test. These two assessments are valuable tools when evaluating the program's effectiveness with all students. However, these school districts have not specifically analyzed the results READ 180 students on an ELP assessment.

This research project would be one of the first studies to use the ACCESS, a test specifically designed for ELLs, to measure proficiency levels of ELLs enrolled in READ 180. Since 35 states have adopted the ACCESS test and are part of the WIDA consortium, it would be beneficial to use this national test as an instrument to measure progress of ELLs in READ 180 instead of an individual state assessment, which is used for non-ELLs (WIDA, 2014c).

Research Questions and Hypotheses

The following research question guided the study: What is the difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled in READ180?

Null hypothesis. This is designated by the symbol H_0.

H_0: There is not a significant difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled.

Alternative hypothesis. This is designated by the symbol H_a.

H_a: There is a significant difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled.

The subquestions were:

1. What is the difference in the mean gain in reading scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
2. What is the difference in the mean gain in writing scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
3. What is the difference in the mean gain in literacy scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
4. What is the difference in the mean gain in overall proficiency scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?

5. What is the difference in the mean gain in reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

6. What is the difference in the mean gain in writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

7. What is the difference in the mean gain in literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

8. What is the difference in the mean gain in overall proficiency scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

The following research questions were posed for students who had been enrolled in two years of READ 180:

9. What is the difference in the mean gain in reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

10. What is the difference in the mean gain in writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

11. What is the difference in the mean gain in literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

12. What is the difference in the mean gain in overall proficiency scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

Limitations of the Study

The following limitations were identified in this study:

Participants. A factor that could influence the findings in this project is the broad title of ELLs. The study did not account for demographic information exclusive of grade level and program participation. ELLs are of different ethnicities, socioeconomic levels, and levels of educational background. Some students included in the study were schooled in the United States entirely, while others immigrated at some point during their educational career. Moreover, students in the study could have experienced unreported disruptions in their education.

Population sample. Another factor to consider is the students enrolled in READ 180 are initially struggling readers. Each school district uses the READ 180 program differently and has different criteria for enrollment in the program. In order for a student to be a viable candidate for the READ 180 program, Scholastic (2013b) suggests choosing students who are behind grade level in reading ability, preferably in the lowest 25th percentile for the program. Since these students are academically delayed to begin with, there could be other factors, such as cognitive ability, behavior, attendance, and/or motivation that impede scholastic improvement that were not reported in the study.

Program implementation. The study focused on quantitative measures (Slavin, Cheung, Groff, & Lake, 2008) and did not analyze implementation or fidelity. The READ 180 program is proscriptive; however, not all school districts may implement the

program with utmost fidelity, which could influence the test scores. Teachers may omit or supplement parts of the program and give it more instructional time due to personal preference. No class observations nor implementation criterion were evaluated during the study.

Instrument and assessment. The validity and reliability of the ACCESS test were not considered in the project. The publisher modifies the test each year. Typically, the ESL teachers administer the test, so the students in this study could have been given the test by different test administers each year. Additionally, the written part of the test is hand-scored by those employed by MetriTech (2013), the scoring company. Although a rubric has been designed to assess the writing portion, human subjectivity could be a factor in reported scores.

Assumptions

The following assumptions were made in this study:

Participants. The researcher assumed the school districts properly identified the ELLs in their program according to the criteria set forward by the MODESE and the local school district. Each of the two districts currently has the same identification and exit criteria for ELLs; hence, the language needs of the students should be comparable. The design of the study does not delineate for primary language, educational background, socioeconomics, or cultural factors.

Instrument and assessment. The study assumed each district properly administered the ACCESS test in its full design by the WIDA consortium with utmost fidelity and reliability. The ACCESS test is deemed a reliable and valid instrumentation

for the proficiency levels of ELLs. The researcher presumed ELLs completed the ACCESS test to the best of their abilities in optimal conditions.

Programming. It is the assumption that each district properly trained the READ 180 staff in the program's model and implementation. The researcher surmised that each district daily uses the three rotations of the READ 180 program as intended, and the students fully participate in the program.

Definition of Key Terms

The following terms are included in this study:

Assessing Comprehension and Communication in English State-to-State for ELLs (ACCESS). An English language proficiency test designed by World-Class Instructional Design and Assessment (WIDA) to determine proficiency levels in the areas of speaking, listening, reading, and writing (WIDA, 2013a).

Adequate Yearly Progress (AYP). Goals established by the federal government for schools receiving Title I money. Schools must show improvement for specified demographic subgroups, including major ethnic/racial groups, economically disadvantaged students, ELLs, and students with disabilities (GreatSchools, 2013).

Education and Secondary Education Act (ESEA). This act was passed by Congress in 1965 to equalize education and reauthorized, in 2001, as the No Child Left Behind Act. It includes specific requirements for ELLs in Title III (Cook et al., 2012).

English Language Learner (ELL) or English Learner (EL). A student who has been identified as having a language, other than English, spoken in his or her home and has received a score on a screening test, which indicates the student will need additional support to be academically successful (Zacarian, 2011).

English Language Proficiency (ELP). A measurement of the ability of ELLs to read, write, listen, and speak English. Proficiency is measured by ESL tests.

English as a Second Language (ESL). This is "...a program of techniques, methodology and special curriculum designed to teach ELLs English language skills, including listening, speaking, reading, writing, study skills, content vocabulary and cultural orientation" (Zacarian, 2011, p. 174).

***F*-test.** This is "a statistical test used to compare two variances or three or more means" (Bluman, 2010, p. 665).

Limited English Proficiency (LEP). A term typically used by the federal government to refer to a student with restricted understanding of English. The term is interchangeable with ELs or ELLs (Echevarria, Vogt, & Short, 2012).

MetriTech. Provides "manual and online performance assessment scoring" for standardized testing, including the ACCESS test (MetriTech, 2013, para.1).

Missouri Department of Elementary and Secondary Education (MODESE). This agency functions as the "administrative arm of the State Board of Education. It is primarily a service agency that works with educators, legislators, government agencies, community leaders and citizens to maintain a strong public education system" (MODESE, 2013, para.1).

No Child Left Behind Act (NCLB). The act is a "federal mandate whose purpose is to improve the performance of K-12 schools by making states and schools more accountable for student progress and allowing parents more flexibility in choosing which schools their children will attend" (Zacarian, 2011, p. 177).

READ 180. A comprehensive reading intervention program for struggling

readers who are behind academically (Scholastic, 2013a).

***t*-test.** As defined by Bluman (2010), "...a statistical test for the mean of a population, used when the population is normally distributed and the population standard deviation is unknown" (668).

World-Class Instructional Design and Assessment (WIDA). A consortium of 32 states whose primary mission is to advance "academic language development and academic achievement for linguistically diverse students through high quality standards, assessments, research, and professional development for educators" (WIDA, 2014c, para. 1).

***Z*-test.** "is a statistical test for the mean of a population. It can be used when $n \geq 30$, or when the population is normally distributed and σ is known" (Bluman, 2010, p. 411).

Summary

Small towns and rural communities, such as those found in southwest Missouri, have experienced a rising ELL population since the 1990s (Johnson, 2006; Tang, 2011). School districts are responsible to teach ELLs English acquisition and academic content using scientifically-researched methods under Title III of the NCLB, 2001 (United States Department of Education [USDOE], 2011). State educational agencies hold school districts accountable for annual ELP progress through AMAOs (Cook et al., 2012).

Unfortunately, many ELLs face obstacles that impede academic success such as poverty, lack of background knowledge and illiteracy in native language (Lesaux, 2012). Two of the largest gaps in ability levels of non-ELLs and ELLs are in the areas of reading and writing. In 2011, only 29 % of ELL performed at or above basic levels in reading

with only 3% of those at or above proficient (August et al., 2012). Scholastic International developed READ 180, a comprehensive program to increase literacy of students including ELLs (Scholastic, 2013a).

This quantitative study examined the gains in proficiency on the ACCESS test. The subjects of the study were ELLs in two southwest Missouri school districts. This study analyzed the results of the ACCESS scores during the 2010-2013 school years. ACCESS scores of ELLs enrolled in READ 180 were compared to ACCESS scores of ELLs not enrolled in READ 180 to determine if there was a significant difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled in the program.

Chapter Two will include the review of the literature. Specifically, the following chapter includes legal history and implications, ESL programming and professional development, and research on READ 180.

Chapter Two: Review of Literature

Legal History and Implications

ESL programs were developed to assist students whose primary language was not English. However, in the late 1960s, many school districts were not meeting the needs of ELLs (Goldenberg & Coleman, 2010). The lack of programming precipitated Pottinger, of the Office of Civil Rights, to issue a memorandum to school districts on May 25, 1970, entitled, *Identification of Discrimination and Denial of Services on the Basis of National Origin*, which stated, in part:

> Where inability to speak and understand the English language excludes national origin-minority group children from effective participation in the educational program offered by a school district, the district must take affirmative steps to rectify the language deficiency in order to open its instructional program to these students. (para. 3)

The memorandum further stipulated to be compliant with Title VI of the Civil Rights Act of 1964, schools with more than 5% national origin-minority students must provide equal educational opportunities for their ELLs (Rodriguez, 2010). Additionally, schools could not place language minority students in classes for the mentally retarded due to their lack of English abilities, nor permanently track them in ESL programs (Pottinger, 1970).

Even after the memorandum was issued, there were still school districts, such as the San Francisco Unified School District, that were not providing ELLs with adequate services and support, subsequently leading to a legal battle known as *Lau v. Nichols* (1974). In the case of *Lau v. Nichols*, the U.S. Supreme Court ruled that 1,800 Chinese ancestry students had their civil rights violated when they were not given supplemental

English support and services in the San Francisco Unified School District upon their enrollment (USDOE, 2005). It was further determined that it was not sufficient or meaningful to provide students with the same textbooks, facilities, teachers, and curriculum if they did not speak English, but the decision did not specify specific programs of English language instruction or programming stipulations (Smith, 1990; USDOE, 2005).

On August 11, 1975, the year following the landmark decision of *Lau v. Nichols*, the U.S. Commissioner of Education, Terrel Bell, published, *Task Force Findings Specifying Remedies Available For Eliminating Past Educational Practices Ruled Unlawful Under Lau versus Nichols*, which later became known as the "Lau Remedies" (Smith, 1990). These recommendations evolved into *de facto* compliance standards and gave federal government guidelines for identifying and assessing children with limited English proficiency skills and appurtenant ESL education (Rodriguez, 2010; Smith, 1990).

Regarding ESL programming in school districts during the 1980s and 1990s, The Office of Civil Rights (OCR) maintained:

> In providing educational services to language minority students, school districts may use any method or program that has proven successful, or may implement any sound educational program that promises to be successful. Districts are expected to carry out their programs, evaluate the results to make sure the programs are working as anticipated, and modify programs that do not meet these expectations. (Smith, 1990, para. 10)

The OCR expected each district to do what was necessary to educate their language minority population and only evaluated a district's performance through a formally filed complaint or compliance review (Smith, 1990). School districts were inherently unaccountable for the English proficiency achievement of ELLs until the federal legislation of No Child Left Behind (NCLB), 2001.

Federal Requirements

NCLB required each state to develop standards, administer assessments in the areas of reading /language arts and math for grades 3-8 and high school, and create Annual Yearly Progress (AYP) criteria (Public Education Network, n.d.). Science was added to the requirements for the 2007-2008 school year. The science assessments were to be administered at least once during elementary, middle, and high school (Public Education Network, n.d.).

The federal government requires each state to establish three cut scores at minimum (USDOE, 2013b). Two of the scores are in the high range and one in in the low range. States created their own terminology for these ranges and could design more than three if desired (Public Education Network, n.d.). Each student is expected to be at least at the proficient level despite disabilities or language abilities by the year 2014 (Abedi & Dietel, 2004; Robertson, 2008). Studies by the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) of state assessment scores show ELLs score substantially lower on the language arts assessment than the math and science tests; however, if the language of the tests was modified, the students' scores improved (Abedi & Dietel, 2004). According to Abedi and Dietel (2004), CRESST predicated:

> low ELL language ability decreases ELL performance on most tests, thus influencing the test as an accurate measure of ELL content knowledge. The test becomes a measure of two skills for the ELL student, subject and language. (p. 3)

School districts are challenged to propel ELLs to the same established proficiency levels as native English speakers notwithstanding the students' English proficiency.

Under NCLB, ELLs are required to take the same state assessments as all other students. The only exemption is for students who have been in the country for less than one year are not required to take the reading/language arts assessment (American Federation of Teachers, 2007). The legislation allows students to take the language arts assessment in their native language for the first five years, if practicable, and to use accommodations, such as extended time and small groups (American Federation of Teachers, 2007; Robertson, 2008).

Despite these modifications and accommodations, the scores of ELLs have been disproportionately lower than the general population (Abedi & Dietel, 2004). Some ELLs are counted in more than one subgroup, thus having the potential to affect the scores of multiple subgroups, such as minority, free and reduced priced meals, and special education (Abedi & Dietel, 2004). Students who are exited from ESL programs due to English proficiency are no longer included in the ELL subgroup for reporting purposes; hence, the success of the subgroup is continually being undermined by arrival of non-English speaking students and the departure of proficient students (Abedi & Dietel, 2004; Francis et al., 2006). Nevertheless, if schools do not achieve AYP, they risk penalties or potential shut down, and teachers fear job loss (Calderón, 2007; Gottlieb, 2012).

In 2003, Title III, Part A was authored and enacted as a part of the NCLB legislation and encompassed English Language Acquisition. According to the USDOE (2011), "the purpose of Title III, Part A is to help limited English proficient (LEP) students attain English language proficiency and knowledge and skills to meet State academic achievement standards" (slide 4). Under the $732-million-a-year Title III program, school districts are made accountable for the English language achievement and proficiency of ELLs through scientifically researched methods and English proficiency assessments in addition to the other state assessments (Boyle et al., 2010; Tanenbaum et al., 2012; Zacarian, 2011). The English proficiency assessment adopted by each state must align with the state's standards and measure the domains of reading, writing, listening, and speaking (Tanenbaum et al., 2012).

In addition, in 2003, each state was required to establish Annual Measurable Achievement Objectives (AMAOs) to systematically measure the annual progress of ELLs (USDOE, 2011). These AMAOs include: 1) percentage of ELLs making progress on state ESL proficiency test, 2) percentage of ELLs scoring proficient on state ELP test and thereby exiting ESL program, and 3) percentage of ELLs making Annual Yearly Progress (AYP) on state-wide assessment in the areas of math and communication arts (Boyle et al., 2010; Cook et al., 2012).

Title III Implementation

Title III provides federal funding to each state based on a formula of the number of ELLs and immigrant students enrolled in school (USDOE, 2011). This amount is no less than $500,000 and has specific expenditure requirements (Tanenbaum et al., 2012). Some states receive the minimum of $500,000, while others receive as much as

$165,000,000 (Ramsey & O'Day, 2010). The purposes of the allocations are to fund programs that increase ELP, increase academic achievement in the content areas, and provide professional development to faculty and staff (Boyle et al., 2010). Even though the money is dispersed through a formula, there is vast disparity among the states of funds allocated per pupil, with a national average of $100 per pupil (Maxwell, 2012; Ramsey & O'Day, 2010).

Not only does the funding vary among the states, so do the standards and eligibility requirements for ELLs (Abedi & Dietel, 2004; Gil & Bardack, 2010). Each state and or district establishes its own Home Language Survey (HLS), identification process, definition of an ELL, ELP standards, choice of ELP assessment tool, level of proficiency for eligibility, and procedures for dismissal from services (Ramsey & O'Day, 2010; Tanenbaum et al., 2012). In the *National Evaluation of Title III Implementation—Report on State and Local Implementation,* it was noted, "Thus, a student who is considered an ELL based on one district's criteria may not be eligible for services, or may be exited from services in another district, even within the same state" (Tanenbaum et al., 2012, p. xiv). Most states have joined national consortiums such as WIDA, State Collaborative on Assessment and Student Standards, Limited English Proficient, English Proficiency for All Students, and Mountain West Assessment Consortium to help with standards, assessments, professional development, and support (Ramsey & O'Day, 2010).

James Taylor, Project Director for the *National Evaluation of Title III Implementation,* remarked in an interview (as cited in Maxwell, 2012) regarding Title III:

> Over the decade, there has been a great deal of activity and change that shows how Title III has prompted states and districts to pay a lot more attention to both

> the language and the content needs of this population. But meeting the needs of this population is still a work in progress. (para.6)

During the 2007-2008 school year, only 11 states met their AMAO goals even though each state established its own AMAOs pursuant to Section 3122 of the Title III requirements (Boyle et al., 2010).

School districts that do not meet the AMAOs after two years are required to create and implement an improvement plan and notify parents of the deficit in scores (Ramsey & O'Day, 2010). If they still do not meet the AMAOs after four years, the school must change curriculum and programming and replace personnel associated with the lack in achievement (Ramsey & O'Day, 2010). Each state determines the path of the underperforming schools and may withhold Title III funding.

In 2011, the U.S. Department of Education started allowing states to apply for Elementary and Secondary Act (ESEA) Flexibility Waivers. States that chose to apply for the waiver must have a plan in place to address four principles: college and career readiness; differentiated recognition, accountability, and support systems; effective instruction and leadership; and reduction of duplication and unnecessary burden (August et al., 2012). Currently, 42 states, including Missouri, have approved flexibility plans (USDOE, 2014a). Some states are combining subgroups in their data reporting, known as "super subgroups," thereby combining racial minorities, students with disabilities, ELLs, and other subgroups in one group (Campaign for High School Equity, 2013).

Ramsey and O'Day (2010), authors of *Title III Policy: State of the States,* reported, "Unlike other subgroups under ESEA accountability provisions, English

learners are defined primarily by their targeted outcome—English language proficiency" (p. 1). Ramsey and O'Day (2010) further asserted:

> The EL subgroup is unique in that higher-performing students (i.e., those who attain proficiency) systematically move out of the subgroup to be replaced by students with lower levels of proficiency (e.g., new immigrants). This pattern creates complications for subgroup accountability as measured by Title I and Title III. (p. 6)

Once ELLs meet the district/state English proficiency requirements, they exit from the ESL program, and their higher proficiency scores are not calculated in the subgroup; however, less-proficient students perpetually enter the program (Cook et al., 2012; Ramsey & O'Day, 2010). Some experts propose the inclusion of the scores of exited ELLs in the subgroup to help balance the influx of new immigrants who enter programs with little to no English proficiency (Cook et al., 2012; Francis et al., 2006; Ramsey & O'Day, 2010). Moreover, the inclusion of the scores of exited students would demonstrate the achievement of the subgroup from the beginning to the end of their scholastic program (Francis et al., 2006; Ramsey & O'Day, 2010).

The principal aspect of Title III funding is that it is supplemental (USDOE, n.d.). Therefore, 98% of school districts nationwide implement an ESL program to fulfill the Title III requirements of a core language program for ELLs and use Title III funds for additional materials and support of the primary program (Tanenbaum et al., 2012; USDOE, n.d.). School districts may not use Title III funds to pay the salaries of ESL teachers; therefore, the salaries must be funded through state or district monies (USDOE, n.d.). Since budgets, demographics, district sizes, student needs, and state and district

requirements vary greatly, ESL programs differ in structure and include hundreds of programming models (Goldenberg & Coleman, 2010; Helman, 2012; Rennie, 1993; Zacarian, 2011).

ESL Programming

The primary program category of ESL is Structured English immersion, which is designed to remediate English learning and includes several types of programs such as: pull-out, push-in, and content-based ESL (Collier & Thomas, 2004; Helman, 2012, Zacarian, 2011). Some schools institute a pullout program where ELLs leave the mainstream classroom, go to a separate location, and receive English instruction on speaking, reading, listening, and writing by an ESL teacher or paraprofessional (Tanenbaum et al., 2012). These classes are typically smaller than the mainstream classes and provide more intensive and individualized instruction in English in order to increase proficiency in all domains. The amount of time spent in the pullout class is typically proportional to the proficiency level. Lower proficiency-leveled students spend more time in these programs (Zacarian, 2011).

In push-in programs, ESL teachers or paraprofessionals work within the regular classroom by co-teaching or assisting the regular classroom teacher with ELLs (Tanenbaum et al., 2012). Content-based or sheltered ESL classes are specifically designed for ELLs in the areas of math, science, and social studies and follow a structured format (Hansen-Thomas, 2008). These classes are taught separately from the mainstream class and include only ELLs (Calderón, 2007; Zacarian, 2011). Mostly, districts use content-based or sheltered classes at the secondary level to make rigorous content comprehensible; however, teachers should not oversimplify content in the

process (Ballantyne et al., 2008; Calderón, 2007). Since the ESEA was established in 2001, ESL teachers must be certified in the content area or certified teachers must instruct the content classes but could co-teach with ESL teachers (Van Roekel, 2011).

Certain school districts establish resource classrooms where ELLs can receive assistance and tutoring throughout the day with whichever subject is necessary (Rennie, 1993). These resource rooms are established to complete mainstream assignments and are typically not intended for explicit English instruction (Jameson, 1998). The rooms are generally equipped with computers and programs to assist ELLs in various needs. Schools generally staff the resource room with a full-time ESL teacher or paraprofessional (Rennie, 1993). Some districts schedule the resource time into the schedule of the student, while others use the room on a needed basis.

Some states allow and implement a bilingual program for ELLs (Helman, 2012). These programs utilize the native language of the students to aid in the instruction of content and literacy while simultaneously developing English (Collier & Thomas, 2004; Turkan, Bicknell, & Croft, 2012). Bilingual programs are easier to implement in areas where there is a large population concentration of the same native language, thereby utilizing the native language of teachers, paraprofessionals, and students (Rennie, 1993). Certain bilingual models are exclusively for ELLs; conversely, others are two-way immersion programs, which educate native English-speaking students in the second language as well (Collier & Thomas, 2004; Zacarian, 2011). Bilingual programs differ from 10% to 90% in the percentage of time spent in each language (Collier & Thomas, 2004). Collier and Thomas (2004), two of the leading national ESL experts, ascertained, “This (bilingual program) is the only program for English learners that fully closes the

gap; in contrast, remedial models only partially close the gap" (p. 1). Collier and Thomas (2004) further contended that once ELLs enter the mainstream class, they can only gain one year of academic progress for each scholastic year; therefore, the gap is only maintained and never closed.

No matter which ESL program a school district implements, the primary goal of every district is to increase the ELP and academic achievement of their ELL population (Barron & Oxnam, 2012; Gándara, Maxwell-Jolly, & Driscoll, 2005; Staehr Fenner, 2013). In many cases, ELLs have developed oral skills but still struggle with reading difficulties (Calderón, 2007; Francis et al., 2006). Despite all of the efforts of districts to narrow the achievement gap between ELLs and non-ELLs, the gap is relatively unchanged and even widening in some cases (Barron & Oxnam, 2012; Collier & Thomas, 2004). The National Assessment of Education Progress (NAEP) (as cited in Barron & Oxman, 2012) reported from 2007-2011, the eighth grade reading gap between ELLs and non-ELLs remained between 30% and 31%, with a slight increase.

Federal, state, and local governments, departments of education, along with many universities and organizations are analyzing the achievement gap, English language learning, and best practices (Barron & Oxnam, 2012; Cook et al., 2012; Crouch & Zakariya, 2012; Flores, Batalova, & Fix, 2012; Grantmakers for Education, 2010; National Education Association, 2008). An obvious reason for the achievement gap is native English speaking students only have to focus on the cognitive task, while ELLs must focus on the cognitive and linguistic tasks (Fratt, 2007; Jameson, 1998). Although narrowing the gap is a daunting task, educators must be trained, purposeful, and relentless in their motivation to increase English proficiency and academic skills among ELLs.

Professional Development

There are some consensuses regarding ELLs and instruction among the experts, which resurface in most reports, briefs, books, and journal articles (Francis et al., 2006). Experts agree that it is imperative for ESL teachers to be prepared to meet the instructional, cultural, and linguistic needs of ELLs (August et al., 2012; Ballantyne et al., 2008; Barron & Oxnam, 2012; Crandall, Jaramillo, Olsen, & Krefft Peyton, 2002; Gándara et al., 2005; Gottlieb, 2012; Van Roekel, 2011; Zacarian, 2011). This type of expertise comes from developed pre-service teacher education programs, high-quality professional development, certification in ESL, advanced educational degrees, and experience with the language and culture (Ballantyne et al., 2008; Calderón, 2007; Gándara et al., 2005; Herrera, Holmes, & Kavimandan, 2011; Staehr Fenner, 2013; Van Roekel, 2011). Gándara et al. (2005) surveyed over 4,000 educators across California and found that less than half of the teachers who had more than 50% ELLs in their classrooms had more than one in-service on ESL during a five-year span. Other professional development needs expressed in the survey were teaching, reading, writing, instructional strategies, and collaboration among teachers (Gándara et al., 2005). In addition to inadequately trained mainstream teachers, there is a nationwide shortage on bilingual and ESL-credentialed teachers (USDOE, 2014b).

Although it is difficult to quantify ESL training on a national level, experts and studies agree that there is not enough training for pre-service or practicing teachers (Abedi & Linquanti, 2012; August et al., 2012; Ballantyne et al., 2008; Calderón, 2007; Staehr Fenner, 2013; Thompson, 2004; Van Roekel, 2011). The studies consistently show that most teachers surveyed feel inadequately prepared to meet the needs of ELLs

(Ballantyne et al., 2008; Dove & Honigsfeld, 2010; Reeves, 2006; Van Roekel, 2011). As of 2011, only 20 states required ESL training for pre-service teachers (Van Roekel, 2011). In fact, one study conducted by the USDOE indicated that of the teachers who were currently teaching ELLs in their classrooms, only 29.5% had received any training (as cited in Ballantyne et al., 2008). Professional development needs to target mainstream teachers in addition to the ESL instructors, since most ELLs spend the majority of their time in mainstream classes (Calderón, 2007; Cheung & Slavin, 2005; Gottlieb, 2012; Jameson, 1998; Staehr Fenner, 2013). The training should be applicable to all subject areas. Studies have shown teachers prefer hands-on approaches to professional development with readily applicable methods, classroom demonstrations, and coaching experiences (August & Shanahan, 2006). In order for professional development to be effective, it must be frequent and systematic (Calderón, 2007).

There has been a shift in the program model of many school districts towards co-teaching instead of pullout ESL programming (Dove & Honigsfeld, 2010; Fratt, 2007; Thompson, 2004). In these models, the ESL teacher and the content teacher collaboratively teach through various methods. The ESL teacher serves as the specialist in strategies to convey the specific content, and the core teacher serves as the content specialist (Dove & Honigsfeld, 2010). The national professional organization, Teachers of English to Speakers of Other Languages (TESOL), reiterated the importance of using ESL teachers as consultants to the content teachers as each district is implementing the common core (Maxwell, 2013).

Common Core State Standards: Implementation and Implications

The Common Core State Standards (CCSS, n.d.), adopted by 46 states nationwide, required more rigorous academic vocabulary and content, analytical thinking, subject matter mastery, complex texts, and language-rich tasks across content areas for all students (Abedi & Linquanti, 2012; August et al., 2012; Coleman & Goldenberg, 2012; Staehr Fenner, 2013). The standards required students, including ELLs, to read, write, listen, and speak English at a rigorous grade level expectation (CCSS, n.d.). The CCSS (n.d.) initiative released a brief regarding the implications for ELLs which stated, "However, these students may require additional time, appropriate instructional support, and aligned assessments as they acquire both English language proficiency and content area knowledge" (para.1). The CCSS (n.d.) initiative recognized that more professional development and program support are needed if ELLs are going to be successful.

Educators question future implications regarding implementation and assessment of the CCSS since they are not aligned with ELP standards (Vásquez, Hansen, & Smith, 2013). The CCSS are especially challenging for ELLs who must obtain the standards through a second language (August et al., 2012). The mandate for increasing text complexity is a cause of concern among educators who see students already struggling with reading and comprehension, including ELLs (Slavin et al., 2008; Vásquez et al., 2013).

In response to the added complexities of CCSS, WIDA and the California Department of Education (CDE) are developing English Language Development (ELD) standards to aid teachers in the language demands of the CCSS and its implications for ELLs (Staehr Fenner, 2013). According to ESL expert Staehr Fenner (2013):

> Both WIDA and the English Language Proficiency Assessment for the 21st Century (ELPA21) consortium of states have been awarded Enhanced Assessment Grants by the US Department of Education to design computer-based English language proficiency assessments that correlate to the language demands of the CCSS. (para, 9)

The USDOE recognized that ELP standards must align with the CCSS to create effective ESL programming.

In an effort to help teachers work with ELLs and adjust to the CCSS implementation, some districts have employed ESL content specialist or coaches (August et al., 2012). These coaches provide specific professional development regarding best instructional practices for mainstream teachers to employ when teaching ELLs (Cheung, 2012). Teachers would rather seek support from peers, formally and informally, than from administrators (Dove & Honigsfeld, 2010; Gottlieb, 2012). The coaching model is intended to support and improve the pedagogy of classroom teachers and not to be evaluative (Teemant & Reveles, 2012). The WIDA consortium has designed a program entitled, LADDER, specifically for ESL coaches (WIDA Consortium, 2013). According to the *LADDER Coaches Guide* (WIDA, 2013):

> Coaching is a 'job-embedded' professional development strategy that is situated in the everyday challenges educational leaders experience in implementing change, whether those challenges are the classroom, school wide leadership, or continuous improvement initiatives at the state or district level. (p. 18)

Formal ESL coaching or collaboration between ESL teachers and mainstream teachers is a relatively new concept; however, it is becoming a favored model as the ELL population continues to increase (Maxwell, 2013).

Ballantyne et al. (2008) reported the USDOE of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited English Proficient Students (OELA), in response to the need for more ESL training, established the following strategic priority in 2007: "Develop policy and program recommendations to improve the professional development of English language learner content teachers" (p. 2). One popular approach to training teachers and meeting the demands for instructional strategies of ELLs is the Sheltered Instruction Observation Protocol (SIOP) model (Bolos, 2012; Fratt, 2007). The training includes workshops, books, materials, coaches, site visits, and technical assistance ("SIOP-Learn about SIOP," 2014). The protocol, developed by Echevarria, Vogt, and Short (2012), consisted of empirically tested pedagogical methods of best practices for instructing ELLs in all content areas.

Many of the SIOP strategies incorporate cooperative learning strategies. The cooperative learning strategies consist of various group structures and activities made popular by Kagan. High and Kagan (1993) asserted that structured social interactions are needed to maximize the communication in the target language (Cheung & Slavin, 2005; Turkan et al., 2012). Students who sit in lecture style classrooms do not have the opportunity to speak the intended language. At best, even if students are called upon to answer a question, it is done sequentially one-by-one, thereby reducing the opportunities for interactions (High & Kagan, 1993). Positive interdependence occurs when students rely on each other for learning and language, which further facilitates language

acquisition (High & Kagan, 1993). Theorist Vygotsky also believed in the power of social interaction and coined the term, "Zone of Proximal Development" (Scovel, 2001). The zone indicates the area of difference between the linguistic and cognitive abilities of a child and the developmental potential he has based on interactions with others (Scovel, 2001). The more opportunities students have to socially interact, the more developed their language will become (Cheung & Slavin, 2005; Lesaux, 2012; Robertson, 2009; Turkan et al., 2012).

Theories of Language Acquisition

Unfortunately, time constraints for educating ELLs can impede development. Teachers often report there is not enough time to teach ELLs the material within the regularly scheduled day; moreover, ELP is expected too soon and may come too late (Ballantyne et al., 2008; Lesaux, 2012). Experts often cite various lengths of time needed to be academically at grade level and achieve proficiency in English. Collier and Thomas (2004) contended that it takes six to eight years to achieve grade-level proficiency and can only be accomplished at this rate with the simultaneous instruction of the second language. Another study by August et al. (2012), under the direction of the American Institutes for Research (AIR), claimed it takes three to five years for oral proficiency to develop and four to seven years to achieve academic English Language Proficiency (Gil & Bardack, 2010). Upon consideration of these timeframes, ELLs, who enter a U.S. school at the secondary level may not have enough time to become proficient in English before graduation.

Some students may have acquired the English social language, known as Basic Interpersonal Communication Skills (BICS) but may continue to lack the Cognitive

Academic Language Proficiency Skills (CALPS) (Cummins, 1979). BICS includes the social language that students use in daily conversations and interactions (Cummins, 1979). In social settings, students can rely on context, physical setting, and body language (Zacarian, 2011). ELLs typically acquire BICS within the first two years of English instruction; however, they lack opportunities to participate in meaningful and contextual discourse (Coleman & Goldenberg, 2012; Cummins, 1979; High & Kagan, 1993). Teachers may confuse the two types of discourse and ascertain that a student is proficient in a language based on social conversations, which could lead to students being prematurely exited from an ESL program (Francis et al., 2006). However, with the development of ELP assessments, teachers are able to distinguish between social and academic discourse (Coleman & Goldenberg, 2012).

ELLs need more time to acquire the CALP needed to be successful in an academic setting (Turkan et al., 2012). Authors Francis et al. (2006) professed, "Mastery of academic language is arguably the single most important determinant of academic success for individual students" (p. 7). ESL experts have contended that all content area teachers should explicitly and implicitly teach academic vocabulary to ELLs; it should not just be the responsibility of the ESL teachers (August et al., 2012; Coleman & Goldenberg, 2012; Francis et al., 2006; Gibbons, 2009; Turkan et al., 2012). In addition to academic vocabulary, syntax and text structures need to be embedded into the curriculum (Bolos, 2012; Coleman & Goldenberg, 2012; Vásquez et al., 2013). Teachers need to incorporate structured, meaningful, and high-quality conversations in class at times to facilitate CALP (Coleman & Goldenberg, 2012; Gibbons, 2009; High & Kagan, 1993; Teemant & Reveles, 2012).

Historically, second language teachers taught through rote grammar exercises, which were often isolated lessons without context or meaningful connections (Gibbons, 2009; Herrera et al., 2011; High & Kagan, 1993). In the 1980s, Krashen (1982), an esteemed second-language expert, asserted that in order for language acquisition to occur, it had to be comprehensible (Jameson, 1998). Krashen (1982) claimed that the most effective instruction is slightly more advanced than the current level of competence of the student, known as i +1 (Herrera et al., 2011; Jameson, 1998). Krashen (1982) also contended students have an affective filter, based on their motivation, personal feelings, and emotions. He theorized when students are anxious, stressed, or overwhelmed, the affective filter is elevated, and it becomes more difficult for the students to absorb the language (Ariza, Morales-Jones, Yahya, & Zainuddin, 2002; Jameson, 1998). Conversely, if the student is comfortable, supported, and encouraged, the filter lowers, and the student can acquire the language more readily (Ariza et al., 2002; Jameson, 1998; Peregoy & Boyle, 2001).

Instruction must be a comprehensive approach with cultural and linguistic awareness (Calderón, 2007; Crandall et al., 2002; Francis et al., 2006; Gil & Bardack, 2010; Peregoy & Boyle, 2001; Vásquez et al., 2013; Zacarian, 2011). Approaches that simply immerse the student in English and ignore the individualized needs of ELLs are ineffective (Helman, 2012). Teachers must take into consideration the academic background of the student, native language, literacy in the native language, cultural ideals, and development of academic language (Ballantyne et al., 2008; Bolos, 2012; Coleman & Goldenberg, 2012; Helman, 2012; Herrera et al., 2011; Lesaux, 2012; Peregoy & Boyle, 2001). If students are literate in their native language, they will learn

to read in English easier due to the transfer of skills from one language to the other (Ballantyne et al., 2008; Francis et al., 2006; Thompson, 2004; Vásquez et al., 2013). The degree of ease depends upon the similarities of the two languages (Francis et al., 2006).

In order to lower the affective filter, experts have contended teachers should promote cultural pride of their language minority students, and help them adjust to the new culture (Jameson, 1998). Jameson (1998) asserted students who have pride in their native culture and heritage are more likely to adjust to the new culture; however, if students feel alienated, they will seek others who are feeling alienated and are more at risk to drop out of school because they do not have a sense of belonging. Schumann (1986) supported the Acculturation Model, which proposed that if the socioeconomic differences, or social distance between the two linguistic cultures are too vast, the disadvantaged group will not acculturate to the advantaged group and will not be motivated to learn the language. According to Scovel (2001), there has been a shift from the theory of assimilation into the culture known as the *melting pot*, to the experience of acculturation known as the *tossed salad*. Teachers must equally esteem, develop, and preserve both languages and cultures of their students in order for the instruction to be considered culturally responsive teaching (Herrera et al., 2011). In culturally responsive teaching, teachers personalize instruction to the biography of the student and reject a one-size-fits-all approach (Herrera et al., 2011).

Levels of Language Acquisition

There are several stages or labels of language acquisition depending on the theorist; however, there is a consensus of five or six levels among most second language acquisition specialists. Level one is generally referred to as the silent, starting, newcomer, entering or pre-production period (WIDA, 2012). During this time, ELLs are absorbing the language and may experience cultural shock (Scovel, 2001). They may over-idealize the native country and detach themselves from the new one (Akhtar & Kramer, 1998; Watkins-Goffman, 2001). Children are often separated from family members in the native country and may experience profound sadness or loss of the former life, especially if they did not have a choice to immigrate (Akhtar & Kramer, 1998). Throughout the first phase, students will not typically attempt to speak more than a word or two in the second language ("TESOL Pre-k-12," 2006). They tend to use physical gestures and mimic language ("TESOL Pre-k-12," 2006; Zacarian, 2011). Timeframes vary from up to six months but could take longer (Zacarian, 2011).

The second level is known as beginning or speech emergence (WIDA, 2012). Typically, this stage lasts a year or two. During this period, students understand more than they can verbally express especially when the language is spoken slower and repeated often (Zacarian, 2011). ELLs will use general vocabulary in short phrases or sentences; however, they tend to make many errors, which impede the communication (WIDA, 2012; Zacarian, 2011). They utilize memorized phrases, common expressions, and simple structured sentences ("TESOL Pre-k-12," 2006; Zacarian, 2011). Students may respond with a mixture of both languages during this stage. ("TESOL Pre-k-12," 2006; Zacarian, 2011).

The third phase is known as developing or intermediate stage (WIDA, 2012). During this phase, students can start to use simple and expanded sentences with general and some specific vocabulary; nonetheless, they may not have acquired the academic language needed to be successful in the class (WIDA, 2012). The reading fluency and proficiency level of ELLs are greatly varied at this level and depend highly on literacy in the native language ("TESOL Pre-k-12," 2006). At this level, ELLs may not be able to express thoughts adequately due to restricted vocabulary and sentence structures ("TESOL Pre-k-12," 2006). They may still make grammatical errors, but the students are generally understood and can comprehend most English with support ("TESOL Pre-k-12," 2006).

Expanding, the fourth stage is also known as high intermediate (WIDA, 2012). Throughout this phase, students begin to utilize technical or academic language and can usually function in social and academic settings without much assistance (Zacarian, 2011). Reading is more fluent; however, students at this level may still have difficulty with complex structures and academic terminology ("TESOL Pre-k-12," 2006; Zacarian, 2011). Their discourse includes a variety of sentence structures and lengths, and errors are minimal (WIDA, 2012). Students at this level can interact in new and unfamiliar settings as well ("TESOL Pre-k-12," 2006).

The fifth stage is known as bridging or advanced (WIDA, 2012). During this level, students are approaching the competencies of native English speakers and can produce grade-level work with fluency ("TESOL Pre-k-12," 2006; WIDA, 2012). They are familiar with colloquialisms and regularly employ idiomatic expressions in a variety of sentence lengths and structures ("TESOL Pre-k-12," 2006; WIDA, 2012; Zacarian,

2011). Students at this level need very little support and are comparable to a native English speaker in most aspects. Some theorists do not include a sixth stage in their model of language acquisition and make the fifth stage the ultimate level of proficiency, while others use the sixth stage to liken students to native English proficiency.

Effective Literacy Strategies for ELLs

Francis et al. (2006) surmised most ELLs do not demonstrate significant reading difficulties during the primary grades; however, "when the emphasis shifts from learning to read to reading to learn and text becomes central to the delivery of the curriculum and to overall academic success, they perform poorly on assessments of reading comprehension" (p. 15). Cognitive and grade level reading skills are imperative for success at the secondary level (Crandall et al., 2002; Lesaux, 2012). Many students learn the rudimentary skills of reading during the primary grades; however, as language and text levels increase, they are not able to keep pace (Lesaux, 2012). Calderón (2007), further asserted, "For English language learners and struggling older readers, reading becomes an insurmountable task without explicit instruction on reading each of the subject matter texts" (p. viii).

Much research has been conducted to determine the core areas of instruction to promote development for struggling readers (National Reading Panel, 2000). The instruction has been divided into five categories: phonemic awareness, phonics, fluency, vocabulary, and comprehension (Dobbs Santos, 2012; Francis et al., 2006; National Reading Panel, 2000). Within the five categories, there are numerous strategies to improve the core reading areas; notwithstanding, some methods prevail (Bolos, 2012; Cheung & Slavin, 2005; Herrera et al., 2011; Kim, 2008; Slavin et al., 2008; Thompson,

2004; Turkan et al., 2012; Vásquez et al., 2013). No matter which strategy is employed, students must be given multiple experiences and opportunities to learn the content and must find the material applicable in the real world and engaging (Cipriani-Sklar, 2006; Francis et al., 2006; Ivey & Fisher, 2006). According to Turkan et al. (2012), "Proficient ELL readers are expected to monitor their thinking, identify problems whenever they cannot comprehend the text, and find the relevant resources (e.g., bilingual dictionaries, reading strategies) to build comprehension" (p. 13). ELLs must simultaneously apply language and reading skills to comprehend texts.

Phonemic awareness. In education, there has been an epic debate between the superiority of phonics/phonemic awareness versus sight word/whole language reading (Chall, 1967; Kim, 2008; Moustafa & Maldonado-Colon, 1999). The pendulum has continually swung from one theory to the other. Most experts agree on a reading program that consists of a balance between the two approaches of whole language and phonics (Kim, 2008; National Reading Panel, 2000; Weaver, 1998). The National Reading Panel (2000) contended, "correlational studies have identified PA (phonemic awareness) and letter knowledge as the two best school-entry predictors of how well children will learn to read during the first 2 years of instruction" (para. 2). It is possible to predict in the early years, who will struggle in the latter years with comprehensive testing and screening (Lesaux, 2012).

Most reading experts agree that students need to be able to decode words phonetically (Turkan et al., 2012). Due to the importance of phonemic skills, Francis et al. (2006) further asserted the implications for ELLs:

> Research has demonstrated that, as early as kindergarten, it is possible to identify ELLs, from varying language backgrounds, who are at risk for reading difficulties because of underdeveloped phonological awareness skills and/or difficulty learning sound-symbol correspondences. (p. 17)

However, the ability to decode words does not automatically create a fluent reader. Fluency is more than just the rate at which one is able to decode words (Francis et al., 2006). Teachers must take into consideration the orthographic features of the native language and the transference and or interference that are possible when a student is learning to read in a second language (Turkan et al., 2012).

Sight words are also referred to as high frequency, Dolch, Fry, high utility, word families, and outlaw words (Pennington, 2011). Sight-word recognition activities are essential to improving fluency and comprehension (Literacy Information and Communication System, n.d.). Fluency refers to the speed, accuracy, and proper expression used when reading (National Reading Panel, 2000). When students are not struggling to decode words, they are able to devote more cognitive skills to decipher meaning (Francis et al., 2006). Fluency is more than the automaticity in word recognition; it is the ability to construct meaning from the text while decoding and cannot be disconnected from comprehension (Francis et al., 2006).

Typically, the "knowledge-based competencies," such as phonemic awareness and sight word recognition, are not typically the stumbling blocks to successful reading comprehension for ELLs (Lesaux, 2012). According to Lesaux (2012), "Developmental research makes clear that the vast majority of children from non-English speaking and low-income households ably master procedural skills-based reading competencies within

the same time frame as their peers from middle-class, majority-culture backgrounds" (p. 77). Lesaux (2012) postulated, it is the "knowledge-based" competencies that allude and confound ELLs (p. 77). All teachers must explicitly teach and encourage the "knowledge-based" cognitive competencies and strategies to ELLs and practice these strategies until they become routine in the classroom (Lesaux, 2012; Turkan et al., 2012).

Literacy-rich classrooms and thematic units. Literacy-rich classrooms are vital for the achievement of ELLs (Bolos, 2012; Cipriani-Sklar, 2006; Common Core State Standards, n.d.; Lesaux, 2012; Peregoy & Boyle, 2001; Robertson, 2009; Urquhart & Frazee, 2012). Students should see words, print, and books all around them (Robertson, 2009; Urquhart & Frazee, 2012). Teachers can label classroom items in beginning ESL classrooms. Word walls are an integral part of literacy-rich classrooms and are not limited to ESL classrooms (Ballantyne et al., 2008; Robertson, 2009; Urquhart & Frazee, 2012). With word walls, students have a constant, visual reminder of vocabulary words, which are essential to the content, posted in a prominent place in the room. Another way to facilitate a literacy-rich classroom is for books, magazines, and other material to be readily available for students to peruse (Robertson, 2009).

Thematic units incorporate multiple concepts and skills related to one general topic and include multiple content areas, cooperative learning activities, and individual activities over a period, which increase language production (Ivey & Fisher, 2006; Krimmel, 2012; Northwest Regional Educational Laboratory, 2005). The theme serves as conceptual glue centered on an overall topic; therefore, ELLs have a meaningful conceptual framework to connect the individual lessons and concepts (Herrera et al., 2011; Northwest Regional Educational Laboratory, 2005; Peregoy & Boyle, 2001;

Turkan et al., 2012). Students can develop the four modalities of listening, speaking, reading, and writing during thematic units of study as they work with other students in the class and complete the activities, which increases academic language and content knowledge (Calderón, 2007; Peregoy & Boyle, 2001). Thematic units are more effective if they are age appropriate and relate to lives of students (Northwest Regional Educational Laboratory, 2005). Students are able to memorize concepts when they are connected and taught in context (Ballantyne et al., 2008; Thompson, 2004; Turkan et al., 2012).

Scaffolding and building background. Scaffolding instruction is another effective strategy for ELLs (Ballantyne et al., 2008; Gibbons, 2009; Robertson, 2009; Turkan et al., 2012). According to Peregoy and Boyle (2001), "Scaffolds are temporary supports, provided by more capable people, that permits learners to participate in the complex process before they are able to do so unassisted" (p. 85). In order to lower the affective filter and narrow the zone of proximal development, students need to feel supported (Peregoy & Boyle, 2001). These supports are meant to be temporary aides for ELLs as they acquire the needed language skills to be successful in the classroom. However, teachers should be careful to oversimplify the information in a way that hinders the authenticity of the material (Ballantyne et al., 2008; Robertson, 2009; Turkan et al., 2012).

Another imperative strategy for ELLs is building background knowledge through pre-reading strategies (Francis et al., 2006; Herrera et al., 2011; Lesaux, 2012; Robertson, 2009; Staehr Fenner, 2013; Turkan et al., 2012). Many ELLs have not had the same exposure to cultural or academic experiences and concepts and need schematic

connections to the material (Ballantyne et al., 2008; Crandall et al., 2002; Herrera et al, 2011; Turkan et al., 2012). For example, ELLs may not have read fairy tales as a child, or they read fairy tales from their country instead of the traditional U.S. classics. These students may not have been to an amusement park, on family vacations, or to the zoo. Moreover, they may not have experienced the same television shows, music, food, and sports as native English speakers. Textbooks and curriculum are embedded with cultural experiences from which ELLs may not relate. In these situations, teachers must frontload or pre-teach cultural concepts in order for students to make connections and for the lesson to be comprehensible (Bolos, 2012; Herrera et al., 2011; Lesaux, 2012).

Instructional and vocabulary tools. Graphic organizers, concept maps, and anticipation guides are useful tools to teach concepts in a visual manner (Ballantyne et al., 2008; Bolos, 2012; Crandall et al., 2002; Herrera et al., 2011; National Reading Panel, 2000; Urquhart & Frazee, 2012). According to Echevarria et al. (2012), graphic organizers are "schematic diagrams that provide conceptual clarity for information that is difficult to grasp" (p. 26). Graphic organizers and concept maps give students a framework to chunk the information in an organized manner and have become increasing effective strategies to use with ELLs (Crandall et al., 2002; Peregoy & Boyle, 2001). The frameworks also help teachers prioritize the vital information for beginning ELLs when making modifications (Crandall et al., 2002). There are a myriad of different concept maps or graphic organizers that students use to facilitate learning. Teachers can implement these concepts in any content area or during any time in the lesson or reading (Echevarria et al., 2012).

It is estimated that teachers only spend 5% to 10% of classroom instruction on vocabulary activities (Francis et al., 2006). Yet, research correlates poverty and non-English speaking households with lack of vocabulary development (Lesaux, 2012). Vocabulary needs to be explicitly and implicitly taught through the use of prefixes, root words, suffixes, word families, or embedded in the context of the reading to increase literacy skills (Bolos, 2012; Boyle, 2001; Calderón, 2007; Herrera et al., 2011; National Reading Panel, 2000; Peregoy & Robertson, 2009; Turkan et al., 2012). Experts suggest that 90% to 95% of vocabulary must be familiar while reading to avoid frustration (Calderón, 2007). On average, it takes a student 12-14 written, oral, or auditory exposures to a word in order to achieve successful retentiveness, (Ballantyne et al., 2008; Francis et al., 2006; Literacy Information and Communication System, n.d.; National Reading Panel, 2000; Turkan et al., 2012).

Relating new vocabulary to cognates in the native langue is a supplementary method to reinforce vocabulary (Turkan et al., 2012). Students should be encouraged to relate new words to their native language if there is a connection. Teachers do not have to be an expert in the native language to utilize cognates; nevertheless, they can encourage students to make the connections and foster classroom conversations pertaining to cognates (Turkan et al., 2012).

Teachers can monitor reading comprehension through reading inventories or logs (Francis et al., 2006; Peregoy & Boyle, 2001; Turkan et al., 2012). There are many formats of inventories and logs, yet the basic premise is for students to interact with the reading and demonstrate comprehension by recording thoughts and questions while

reading (Crandall et al., 2002; Turkan et al., 2012). Teachers can detect comprehension struggles by the information or lack of information recorded in the logs.

Reading aloud to students of all ages is an effective strategy, especially if done interactively (Bolos, 2012; Cipriani-Sklar, 2006; Francis et al., 2006; Ivey & Fisher, 2006; Peregoy & Boyle, 2001; Turkan et al., 2012). It helps students utilize the i +1 concept of Krashen (1982). Students are able to listen and comprehend material they may not be able to read alone, especially if the student struggles with decoding and fluency skills. By reading aloud, teachers are able to model pronunciation, expressive reading, and fluency (Calderón, 2007; Ivey & Fisher, 2006). During read alouds, classes should participate in discussions, and the teacher can check for understanding by employing the use of predicting, monitoring, and summarizing (Francis et al., 2006; Ivey & Fisher, 2006). Moreover, teachers can facilitate instructional conversations in which students discuss the reading, relate it to personal experiences, and thereby build the background knowledge of ELLs before, during, or after a reading (Ballantyne et al., 2008; CCSS, n.d.; Lesaux, 2012; Turkan et al., 2012; Vásquez et al., 2013). Reading aloud also serves as a way to expose students to multiple authors and genres they may not choose on their own.

Summarizing what has been read is a crucial strategy for struggling readers (National Reading Panel, 2000). If students are unable to summarize what they have read, they probably did not comprehend it. Turkan et al. (2012) contended, "the language of textbooks tends to be abstract, relying heavily on technical vocabulary and avoiding controversy by presenting ideas from a nonspecific, objectified perspective" (p. 11). In

order to check for understanding, it is imperative for ELLs to demonstrate comprehension by summarizing what they have read.

Journaling and free writing are strategies that can increase fluency, provide an outlet of expression, and serve as feedback to a teacher (Peregoy & Boyle, 2001). Some teachers do not read the students' journals, while others read the journals and may even use them to create a dialogue with the student. Collaborative writing or peer editing has become increasingly popular in mainstream classrooms (Peregoy & Boyle, 2001). Students serve as experts and work together to produce written works. Some writing projects are done in group settings, while other writings are written individually and shared with a peer or group through guided protocols, rubrics, or checklists.

As technology increases, computer-based programs, otherwise known as Computer-Aided Instruction (CAI) have become increasingly more popular to aid in reading and writing instruction (Cheung & Slavin, 2013; Peregoy & Boyle, 2001; Smith, 2010). Since software has been developed to adapt to individual student abilities, it is an appealing approach to districts that cannot afford individual tutors (Cheung & Slavin, 2013). There is still a debate over CAI and its overall effectiveness; however, most programs are typically supplementary in nature and have been proven to have at least a minimal effect in tutoring situations (Chambers et al., 2011; Cheung & Slavin, 2013; Slavin et al., 2008; Slavin et al., 2011). Reading expert, Alvermann (2004), cautioned these types of programs are no substitute for how classroom instructional methods can change to meet the individual needs of students. Nevertheless, CAI can be useful in screening and assessing reading skills, comprehension, and progress (Smith, 2010). Many school districts have implemented the use of benchmark tools to track students'

progress throughout the year instead of waiting until the summative assessments (Lesaux, 2012).

READ 180 Program Overview

READ 180 is a comprehensive 90-minute instructional model divided into 30-minute rotations (Melekoglu, 2011). The rotations are computer time utilizing Scholastic's software, whole group instruction, and reading (Slavin et al., 2008). The whole group and small group time consists of a variety of instructional strategies including fluency exercises, question stems, graphic organizers, building background knowledge, and cooperative learning techniques (Schenck, Feighan, Coffey & Rui, 2011).

Slavin et al. (2008), summarized the software component: "The READ 180 software includes videos, mostly about science and social studies topics, and students read about the video content and engage in comprehension, vocabulary, fluency, and word-study activities around this content" (p. 295). Scholastic developed the Scholastic Achievement Manager (SAM), which generates computerized work for the students based on their performances and assessments and generates reports for the teacher as well (Schenck et al., 2011). Students have access to audiobooks and books at multiple levels in a variety of genres during the independent reading rotation and are to record written responses to the readings (Melekoglu, 2011; Schenck et al., 2011; Slavin et al., 2008).

Scholastic recommends students take the Scholastic Reading Inventory (SRI) test at least three times per year, and the Scholastic Management Suite (SMS) software tracks the progress of students (Schenck et al., 2011). Teachers use this information to monitor student progress, adjust instruction, and ability group students for the group rotations

(Schenck et al., 2011). Scholastic suggests grouping students in homogeneous groups for optimal performance; however, the program allows some flexibility for teacher discretion or student conflicts (Schenck et al., 2011).

Scholastic strongly urges teachers to adhere to the design model and all of the Scholastic materials with the utmost fidelity (Schenck et al., 2011). In the independent report on READ 180 conducted by AIR, Salinger, Toplitz, Jones, Moorthy, and Rosenthal (2010) strongly suggested, "In order to effectively implement READ 180, teachers need a firm understanding of its instructional model, resources, procedures, and approaches to helping struggling readers" (p. ix). The report further contended the training should be on-going and not just in the developmental phase, and teachers needed continued in-class support and coaching for the model to be effective (Salinger et al., 2010). However, not all educators feel that being locked into the same 90-minute model each day is best for students. Whitford (2011) stated, "the reality is the program is repetitive, tedious, and mind-numbing for students" (p. 29). Whitford (2011) further asserted the program is too rigid and prescriptive and does not allow student choice, which lowers motivation. School districts must balance personal opinions, traditions, and marketing strategies regarding READ 180 and analyze their own data to determine the program's effectiveness.

Research on READ 180

According to Scholastic (2013b), READ 180 has been implemented in over 40,000 classrooms, serves more than one million students, and "is the most thoroughly researched and documented reading intervention program in the world" (para. 6). There have been hundreds of studies on READ 180, and in 2010, Scholastic released an

Executive Review of its program, entitled, "*READ180: A Decade of Proven Effectiveness.*" Scholastic (2010) asserted READ 180:

> ...has been proven to: improve performance on state test results, reduce the dropout rate, improve reading achievement for African-American, Native American and Latino students, improve reading achievement for English Language Learners, improve reading achievement for students receiving Special Education services and increase teacher retention. (pp. 2-3)

Under the auspice of NCLB, school districts are driven to continually analyze and scrutinize student performance data. School districts are compelled to make data-driven curriculum decisions. However, according to a study conducted by AIR (2012), "as of the 2009-10 school year, nearly half of Title III district officials (46 percent) reported that a lack of information on proven curricula and programs for EL was a moderate or major challenge" (para. 9). Schools can no longer aimlessly program or keep a program out of tradition. Each year, educators must evaluate and retain programs, which are effective and stimulate student growth (Rasmussen, 2010). However, program evaluation can be challenging, and many school districts do not have the time or resources to conduct their own research. They rely on sales representatives, word of mouth, neighboring districts, teacher input, and promotional materials to help guide their curricular decisions.

Scholastic has marketed the program with multiple links to research articles, news releases, and testimonials on its website. According to Scholastic (2010), "Thirty-seven studies have proven that READ 180 has a positive impact on student achievement across multiple grade levels and multiple types of student populations" (p. 2). READ 180 was included in 2012 Readers' Choice Top 100 Products in District Administration Magazine

(Williams, 2012). Because of the reported success of READ 180, Scholastic has launched the next phase of the program: READ 180 Next Generation.

READ 180 Next Generation is aligned with the CCSS and incorporates the skills of analyzing difficult informational texts and utilizing higher-order thinking skills (Scholastic, 2014). READ 180 Next Generation also includes self-monitoring tools, such as the Student Dashboard, which require students to be "self-directive," as emphasized in the CCSS (Scholastic, 2014). Scholastic (2014) asserted:

> READ 180 Next Generation meets the criteria by providing opportunities for students to write every day, including arguments that are supported with evidence, wrap-up projects that synthesize what has been read and apply it to real-world research questions and research papers. (p. 4)

Scholastic is continuously updating and improving the READ 180 program. According to Scholastic (2014), "Since the initial launch of READ 180 in 1999, years of effectiveness research, combined with reports of its practical use in classrooms around the country, have contributed to the ongoing refinement and improvement of the program" (p. 3).

What Works Clearinghouse (WWC), a central research institute, in conjunction with the USDOE (2009), reported, "One hundred one studies reviewed by the WWC investigated the effects of READ 180 on adolescent learners" (p. 1). Of those studies reviewed, none met all of the WWC evidence standards, and only seven met WWC evidence standards with reservations (USDOE, 2009). The studies were conducted in the areas of reading comprehension and general literacy achievement; there were none done in the areas of alphabetics and reading fluency (USDOE, 2009).

Summary of Scholastic's 2014 Compendium of Research

In 2014, Scholastic released a compendium of research conducted on READ 180, which included 40 studies conducted by a variety of firms, including Scholastic (Scholastic, 2014). The studies were conducted from 1999 to 2012 across the United States and include correlational, descriptive, randomized, and quasi-experimental studies (Scholastic, 2014). The following section is a summary of the information released in the report.

Scholastic (2014) conducted its own research at the Cypress-Fairbanks Independent School District in Texas during the 2008-2009 school year. The district was 43% Hispanic and 16% ELLs and included students who were in fourth through 12th grades (Scholastic, 2014). The students reading below grade level were enrolled in the READ 180 program (Scholastic, 2014). The study analyzed the Texas Assessment of Knowledge and Skills (TAKS) Reading assessment and the (SRI) data (Scholastic, 2014). Scholastic (2014) reported the middle school students yielded the highest return, with a four-fold gain in proficiency on the TAKS, and "overall 76% of elementary students and 69% of middle and high school students demonstrated 1.0 or more years of reading growth on SRI" (p. 11); however the data were not disaggregated for the ELLs.

During the 2010-2011 school year, Scholastic (2014) conducted a study at the Deer Valley Unified School District in Arizona. In this particular study, 26% of the READ 180 participants were ELLs (Scholastic, 2014). The Arizona's Instrument to Measure Standards (AIMS) assessment and the SRI were used to measure reading comprehension growth of 1,036 students in grades 4-8 (Scholastic, 2014). Scholastic (2014) reported the percentage of ELLs who met or exceeded the AIMS reading standard

increased from 6% in 2010 to 37% in 2011. Additionally, the READ 180 students gained an average of 243 Lexile points on the SRI (Scholastic, 2014).

The Lawrence Public Schools of Massachusetts in conjunction with Scholastic conducted a study during the 2008-2009 school year (Scholastic, 2014). The majority of the students (83%) were in grades 4-8, and the Massachusetts Comprehensive Assessment System English Language Arts (MCAS ELA) and Northwest Evaluation Association Measures of Academic Progress (NWEA MAP) results were analyzed (Scholastic, 2014). Scholastic (2014) reported that 47% of ELLs increased at least one proficiency level on the MCAS ELA. Of the students who were dually classified as ELLs and learning disabled, 43% increased at least one proficiency level on MCAS ELA (Scholastic, 2014). According to Scholastic (2014), results on the MWEA MAP were even better for ELLs with 56% meeting or exceeding the established target.

During the 2011-2012 school year, the Whiteboard Advisors conducted an independent study of READ 180 results in the Napa Valley School District in California (Scholastic, 2014). The district consisted of 18,078 students in grades 3-11, and the scores on the California Standards Test of English Language Arts (CST ELA) and California English Language Development Test (CELDT) were evaluated (Scholastic, 2014). According to Scholastic (2014), this study specifically analyzed a language proficiency test, the CELDT, designed for ELLs as one of the measurements in addition to the general state assessment. ELLs enrolled in READ 180, who scored Early Advanced and Above, improved from 17% to 48% on the CELDT (Scholastic, 2014).

The Policy Studies Associates conducted an independent study of the effectiveness of READ 180 in the Austin Independent School District in Texas during the

2004-2005 school year (Scholastic, 2014). Eighty-nine percent of the students were ELLs and 3% had learning disabilities (Scholastic, 2014). The seventh and eighth graders, who were placed in the program, were performing below grade level on the TAKS Reading assessment (Scholastic, 2014). The study compared the scores of READ 180 participants to nonparticipants and found participants increased by 6.6 Normal Curve Equivalency (NCE) points and non-participants increased by 4.7 points (Scholastic, 2014).

Scholastic (2014) conducted its own research of sixth, seventh, and ninth graders enrolled in READ 180 in the Desert Sands Unified School District in California during the 2006-2007 school year. Scholastic (2014) analyzed the 2006 and 2007 California Standards Test of English Language Arts (CST ELA) scores and language proficiency levels of READ 180 ELL participants and ELL non-participants. The participants gained on average 13 points, while the non-participants only gained 5 points (Scholastic, 2014).

During the 2006-2008 school years, Scholastic (2014) conducted a READ 180 study of sixth-eighth graders in the Holyoke Public Schools in Massachusetts. Scholastic (2014) reported that Holyoke was highly impoverished, and 24% of its enrollment were ELLs. The READ 180 program was adapted to a 70-minute class and coupled with and English Language Arts (ELA) class (Scholastic, 2014). Scholastic (2014) analyzed the results from Massachusetts Comprehensive Assessment System English Language Arts (MCAS ELA) and SRI. Students who were enrolled in the program for two consecutive years were identified in one cohort, and those who only participated for one year were identified in the second cohort (Scholastic, 2014). Cohort 1 students scoring proficient on the MCAS ELA increased from 2% to 19%, and conversely, those students

performing at the Warning Performance Level decreased from 39% to 21% (Scholastic, 2014). Students in Cohort 2 increased from 10% proficient to 26% and those at the Warning level were reduced 9% (Scholastic, 2014). Scholastic (2014) reported similar gains on the SRI: "Students in Cohort 1 achieved a statistically significant average gain of 147 Lexile (L) measures from 2006 to 2007 ($t = 5.87$, $p < .001$), and a statistically significant average gain of 90L from 2007 to 2008 ($t = 5.35$, $p < .001$)" (p. 40).

In New York City, Scholastic (2014) conducted a study of the READ 180 participants in grades 5-8 in the Knowledge Is Power Program (KIPP) during the 2012-2013 school year, and of the study participants, 17% were ELLs. Some schools used READ 180, and others used a hybrid of READ 180 and Scholastic's Systems 44 program (Scholastic, 2014). The instructional time varied from 45-90 minutes depending on the model, and the Northwest Evaluation Association's (NWEA) Measures of Academic Progress (MAP) scores, and SRI levels were analyzed (Scholastic, 2014). Scholastic (2014) reported the participants averaged a gain of 7 points on the MAP test; however, the ELLs' scores were not disaggregated. On the SRI, the participants were disaggregated, and ELLs averaged a 153 Lexile (L) gain (Scholastic, 2014).

Papalewis (2004) conducted a study of READ 180 participants in the Los Angeles Unified School District in California during the 2000-2001school year. She specifically examined the Stanford Achievement Test Series, Ninth Edition, (SAT-9) scores of eighth grade struggling readers as measured by the Reading and Language Arts NCEs (Normal Curve Equivalent) scores (Scholastic, 2014). The average participant gained over three NCE's in Reading and almost two in SAT-9 Language Arts (Papalewis, 2004). Papalewis (2004) reported:

> Detailed analysis of the READ 180 group revealed that the participants were primarily identified as Hispanic (78%) with 42% noted as limited English proficient (LEP) and 27% who had been recently reclassified from LEP. The gains of these students were essentially identical to the entire READ 180 participants. Clearly, the READ 180 strategies are effective for English language learners. (para. 34)

The study demonstrated that READ 180 met the needs of ELLs.

During the 2010-2011 school year, AIR conducted a study of sixth-ninth grade READ 180 participants in the Milwaukee Public Schools (Scholastic, 2014). The study evaluated the scores of participants on the Measure of Academic Promise (MAP) as well as program implementation, professional development, and fidelity (Scholastic, 2014). Eight percent of the participants were ELLs; however, their data were not disaggregated. Overall, participants in the program scored 1.8 points higher than non-participants scored (Scholastic, 2014).

Admon conducted a study of the seventh-eighth grade READ 180 participants in the St. Paul, Minnesota school district during the 2003-2004 school year (Scholastic, 2014). Of the 820 participants, 34% were classified as ELLs (Scholastic, 2014). Admon analyzed the fall and spring SRI scores to measure growth, and the average growth of an ELL was 136L, which is 61L above the 75L average (Scholastic, 2014).

Scholastic (2014) conducted its own study of the sixth-10th grade READ 180 participants in the Osceola County School District in Florida during the 2009-2010 school year. The 2009 and 2010 Florida Comprehensive Assessment Test (FCAT) Reading Test scores were analyzed (Scholastic, 2014). Scholastic (2014) reported,

"Dependent *t*-tests revealed that each grade level made significant Developmental Scale Score (DSS) gains on the FCAT Reading Test from 2009 to 2010" (p. 58). ELL data were not disaggregated.

During the 2002-2006 school years, several studies were conducted in the Clark County School District in Las Vegas, Nevada (Scholastic, 2014). Papalewis compared the 2002 and 2003 SRI scores, and READ 180 participants averaged a 119L gain (Papalewis, 2004; Scholastic, 2014). Zvoch and Letourneau (as cited in Scholastic, 2014) analyzed the ninth grade SRI scores during the 2004-2005 school year and found ELLs gained more (.5 scale score points) daily than their English-speaking peers (.25 scale score points).

Scholastic (2014) conducted a study of the James A. Garfield Senior High School in the Los Angeles Unified School District in California. According to Scholastic (2014), 30% of the ninth and 10th graders were ELLs, and scores from the 2009 and 2010 California Standards Test of English Language Arts (CST ELA) were analyzed. Scholastic (2014) reported a 28% increase in ninth grade participants, who scored Proficient or above on the CST ELA, and a 3% increase in 10th grade participants. Specific ELL data were not disaggregated.

During the 2008-2009 school year, Scholastic (2014) evaluated the effectiveness of the READ 180 program in Huntington Beach Union High School District in California Ten percent of the population were ELLs, and the Vocabulary and Comprehension Reading Subtests of the Gates-MacGinitie Reading Test (GMRT) and the California Standards Test of English Language Arts were analyzed (Scholastic, 2014). Although the ELL data were not disaggregated, overall, Scholastic (2014) reported participants

outperformed nonparticipants by 18% on posttests on the GMRT and 17% on the CST ELA.

Policy Studies Associates (PSA) and Scholastic researched the effectiveness of the READ 180 program in the Phoenix Union High School District in Arizona during the 2003-2006 school years (Scholastic, 2014). PSA analyzed three cohorts of ninth graders, and Scholastic (2014) posited from the PSA reported:

> Among ELL students, READ 180 participants in Cohort 1 and Cohort 2 performed better than the nonparticipants on their tenth-grade AIMS Reading test in 2005. Cohort 1 ELL students achieved 654 scale score points, while matched ELL nonparticipants earned 646 scale score points (Graph 1). Similarly, Cohort 2 ELL READ 180 participants averaged scores that were significantly higher on the 2006 AIMS Reading test, one year after READ 180, than matched nonparticipants (650 and 642 scale score points, respectively). (p. 74)

Scholastic (2014) analyzed the SRI scores of the Cohort 3 and reported gains but did not disaggregate the ELL data.

The Florida Center for Reading Research (FCRR) and Florida State University (FSU) conducted independent studies of reading interventions including READ 180 in Florida's Seminole County Public Schools during the 2005-2007 school years (Scholastic, 2014). The FCAT Developmental Scale Score (DSS) were analyzed, and READ 180 participants surpassed the state DSS averages and expected gains (Scholastic, 2014). The studies did not represent disaggregated ELL data.

Scholastic (2014) examined the results of the CST ELA of READ 180 participants in the Alvord Unified School District in California during the 2010-2012

school years. In this study, fourth and fifth graders used READ 180 three to four times a week as a supplemental after school program, and the students were divided into two cohorts (Scholastic, 2014). Scholastic (2014) reported 44% of the ELLs in the first cohort and 56% of the ELLs in the second cohort demonstrated at least a one level gain in performance on the CST ELA; similarly, the same students made significant gains on the SRI. Of the ELLs in the first cohort, 45% exceeded the predetermined expected growth of Scholastic during a scholastic year, and 43% of the second cohort exceeded the expected growth (Scholastic, 2014).

Results Not Included in Scholastic's Compendium of Research

If educators only read Scholastic's Compendium of Research, they would undoubtedly consider implementing the READ 180 program. Not all studies conducted on READ 180 have yielded positive effects. Additionally, Alvermann (2004) contended, "READ 180 is based on the same assumptions about students who struggle with reading: that the problem lies within the student, and that a program such as this can provide a quick fix to that problem" (p. 294).

Researchers, Kim et al. (2011,) conducted a study of approximately 300 fourth-sixth graders in an after school program, who scored below proficiency on the Massachusetts Comprehensive Assessment System (MCAS) English Language Arts (ELA) test (Cheung & Slavin, 2013). The students received a modified READ 180 Enterprise program consisting of 60-minutes and only three of the components (Cheung & Slavin, 2013; Kim et al., 2011). The results from the implementation of READ 180 demonstrated positive effects on reading vocabulary and comprehension but did not yield positive effects on spelling and oral reading fluency (Kim et al., 2011). The researchers

further asserted that READ 180 might be more effective with students who are in the 40th-45th percentile, instead of the lower 25th as Scholastic suggests (Kim et al., 2011). They also encouraged the use of the whole group and three-group rotation model and multiple measures of intended outcomes (Kim et al., 2011).

The Memphis, Tennessee School District implemented the READ 180 program as part of their Striving Readers Grant intervention (Schenck et al., 2011). As part of the grant fulfillment, an evaluative report was conducted in 2011, during the fourth year by Research for Better Schools and the RMC Corporation (Schenck et al., 2011). The study was conducted in eight middle schools, in which students were enrolled in READ 180 in addition to a language arts class (Schenck et al., 2011). The analysis of Schenck et al.'s (2011) data showed "no significant one-year impacts of participation in READ 180 were detected in Years 1, 2, or 4;" moreover, "there were no significant two-year impacts of READ 180 Years 2, 3, or 4" (p. 2). During the third year, there was one small, one-year impact observed in the sixth-grade scores of students on the Tennessee Comprehensive Assessment Program (TCAP) Reading/Language Arts test (Schenck et al., 2011). The report did not disaggregate the data for ELLs but did state the number of ELLs had doubled during the course of the grant (Schenck et al., 2011).

There are great discrepancies among and within districts in the placement of students in READ 180 (Salinger et al., 2010). Some follow the guidelines set forth by Scholastic and gear the program towards the bottom quartile, while others have students who are slightly below grade-level enrolled in the program. Gil and Bardack (2010) claimed:

> Failing to accurately make the match between the literacy needs of students and the READ 180 instructional strategies and materials can minimize the effectiveness of the program and can lead to difficulties such as classroom management issues and lack of student engagement. (p. ix)

Educators should consider promptly exiting students who are at grade level (Salinger et al., 2010).

Gil and Bardack (2010) stated, "There are contrasting perspectives on and approaches to addressing the needs of ELLs in school communities; these perspectives are often primarily reflections of personal or anecdotal experiences, with only limited research being used to inform practices" (p. 1). School districts must analyze ELL data to determine best practices and programming. Gil and Bardack (2010) also suggested that ELLs need a more "comprehensive approach in order to encourage the simultaneous achievement of academic and English language proficiency" (p. 14).

Summary

The number of ELLs in the United States is increasing at a much greater rate than the general population; moreover, school districts are faced with complying with laws and legislation in providing proper instruction and language support to all ELLs regardless of ELP (American Youth Policy Forum, 2009; Barron & Oxnam, 2012; Costenino de Cohen et al., 2005; Francis et al., 2006; Goldenberg & Coleman, 2010; Lesaux, 2012; USDOE, 2013a). In order to comply with federal and state mandates, school districts must assess student progress through state assessments and ELP assessments each year and are held accountable for these scores in the form of AMAOs (Boyle et al., 2010; Cook et al., 2012; Fratt, 2007; Goldenberg & Coleman, 2010).

For some school districts, ESL programming, instruction, and assessments are relatively new concepts (Boyle et al, 2010; Costenino de Cohen et al., 2005; Goldenberg & Coleman, 2010; Lesaux, 2012; Ramsey & O'Day, 2010; Zacarian, 2011). In order for schools to have successful programs, all teachers must be explicitly trained in strategies that are effective for ELLs (Abedi & Linquanti, 2012; August et al., 2012; Ballantyne et al., 2008; Calderón, 2007; Staehr Fenner, 2013; Thompson, 2004; Van Roekel, 2011). Additionally, educators must be aware and sensitive of factors such as cultural and linguistic differences that could influence ELLs; however, districts consistently report a need for more ESL professional development (Ballantyne et al., 2008; Calderón, 2007; Gándara et al., 2005; Herrera et al., 2011; Staehr Fenner, 2013; Van Roekel, 2011).

There are some nationally recognized professional development programs, such as SIOP, structures of Kagan, and WIDA LADDER program, which are training teachers (Cheung & Slavin, 2005; Echevarria et al., 2012; High & Kagan, 1993; Turkan et al., 2012). Much research has been conducted to determine the core areas of instruction to promote development for struggling readers, which include: phonemic awareness, phonics, fluency, vocabulary, and comprehension (National Reading Panel, 2000). Moreover, there are studies that reiterate the success of specific reading strategies, such as: utilizing graphic organizers, scaffolding instruction, building background knowledge, increasing academic language, teaching vocabulary, reading aloud, incorporating technology, using reading inventories, and writing in journals (Ballantyne et al., 2008; Herrera et al., 2011; Peregoy & Boyle, 2001; Robertson, 2009).

One program, which has emerged as a reading intervention for ELLs is READ 180 (Scholastic, 2014). This program incorporates the core areas of reading instruction

(Kim et al., 2011). There is a compelling amount of research that demonstrates READ 180 is effective in increasing the academic achievement of struggling readers, including ELLs; however, only one study uses an ELP test specifically designed for ELLs to measure progress (Scholastic, 2014). Most studies use the state academic achievement tests or Scholastic's SRI (Scholastic, 2014). READ 180 research, which specifically analyzes ELP growth, needs to be conducted to determine if the READ 180 program is an effective measurement for ELLs.

Chapter Three will include the methodology employed in this study. Specifically, the following chapter includes an overview, research perspective, context and access, participants, methods and instruments, procedure, data analysis, and summary.

Chapter Three: Methodology

Overview

The purpose of this study was to determine the effectiveness of the READ 180 program for ELLs. The study analyzed the annual results of the ACCESS assessment to determine if ELLs, enrolled in READ 180, demonstrated significant gains in scale scores compared to ELLs not enrolled in READ 180. The ACCESS test was specifically designed to measure the ELP of ELLs (MoDESE, 2014). The results of the ACCESS test were used to determine if the participating school districts met AYP and AMAOs as established by MODESE ("ACCESS for ELLs," 2014).

ELLs must annually demonstrate ELP improvement in the areas of reading, writing, listening, and speaking as measured by the ACCESS test ("ACCESS for ELLs," 2014). Under Title III regulations, school districts are required to use scientifically researched methods to teach ESL (Boyle et al., 2010; Tanenbaum et al., 2012; Zacarian, 2011). The results of this study would be beneficial for districts to use as one criterion for analyzing the effectiveness of the READ 180 program in increasing ELP as compared to a traditional classroom.

Research Perspective

For the purpose of this research, a quasi-experimental study was conducted. One of the purposes of quasi-experimental research is to observe if a treatment, such as READ 180, has an impact on the treatment group (Bradley, 2009). Since the participants were not able to be randomly assigned, a quasi-experimental study was employed (Bradley, 2009). A nonequivalent control group design with a pretest and posttest was used (Cohen, Manion, & Morrison, 2007). The pretest was the ACCESS test administered to

the student the year prior to the student's enrollment in READ 180, and the posttest was the ACCESS test administered during the year the student was enrolled in READ 180.

A nonequivalent control design is often used in educational research when the classes are already intact (Bluman, 2010; Cohen et al., 2007). The treatment groups were seventh and eighth grade ELLs who were enrolled in READ 180 programs in two rural Missouri school districts during the 2011-2012 and 2012-2013 academic years. The control groups were seventh and eighth grade ELLs who were not enrolled in READ 180 and were enrolled in traditional communication arts classes during the 2011-2012 and 2012-2013 academic years. Cluster sampling was used for the purpose of this study. Regarding cluster sampling, Bluman (2010) stated, "subjects are selected by using an intact group that is representative of the population" (p. 13).

Context and Access

The Institutional Review Board of Lindenwood University granted approval (see Appendix A) to conduct the study on November 4, 2013. Participating school districts in the Southwest Center for Educational Excellence (SCEE) consortium were considered as possible participants. There were 42 participating school districts in the consortium, which were primarily located in southwest Missouri (SCEE, 2014). The selected schools had an ELL population greater than 10%, implemented the READ 180 program in seventh and eighth grades, and were members of the SCEE (see Table 1). There were other school districts in the SCEE with an ELL percentage > 10%; however, they did not utilize the READ 180 program or implemented it as a supplemental program only. Two school districts met all of the criteria, and of the two school districts invited to participate in the study, both complied. One of the schools had just begun to pilot READ 180 as an

intervention for ELLs during the 2012-2013 school year; hence, there is only one year of data for respective school. Additionally, the other school district implemented Scholastic's Systems 44 program for seventh graders during the time of the study, and many of the ELL students were enrolled in that intervention program instead of READ 180, thereby reducing the overall population sample.

Table 1

School Districts in the SCEE Consortium with ELL Populations > 10% with READ 180

School District	Student Population	EL Population	Percentage
School District A	4,568	1027	22.48
School District B	2,395	551	23.00

Note. Adapted from Missouri Department of Elementary and Secondary Education, 2013.

On January 13, 2014, an approval request (see Appendix B) was sent via the U.S. postal service to two Southwest Missouri schools with a copy of the permission form (see Appendix C) for superintendent approval. The letter requested the 2011, 2012, and 2013 ACCESS scores in the district. Additionally, the letter requested the designation of communication arts classes for each ELL during the two years of study.

Participants in the Study

Although this study did not include student participation, the assessment scores of ELLs were gathered as secondary data. The ACCESS scores of seventh and eighth grade ELLs during the years of 2011-2013 who were enrolled in the selected school comprised the sample. In order for a student to be classified as an ELL, parents complete a Home Language Survey (HLS) upon enrollment in Missouri public schools ("Developing an English," 2014). The HLS is a questionnaire designed to identify students whose primary

language is not English, and/or students who live in a home where another language is spoken ("Developing an English," 2014).

According to Title III regulations, students whose primary language is not English or live in a home where another language is spoken, must be assessed for English proficiency upon enrollment in public schools in the United States ("Developing an English," 2014). School districts in the state of Missouri administer the WIDA-ACCESS Placement Test (W-APT) to students who qualify for testing on the HLS ("Developing an English," 2014). The test is designed to assess students' ELP in the areas of reading, writing, listening, and speaking and assist with programmatic placement ("ACCESS for ELLs developed," 2014). Individual school districts establish minimum scores on the W-APT and other district-determined criteria to identify students as ELL ("ACCESS for ELLs," 2014). Additionally, school districts are federally required to notify parents of the students' scores and ESL programming placement ("Developing an English," 2014).

The ELLs included in this study were either enrolled in a mainstream communication arts class or READ 180 and were both male and female. The research did not account for native language, gender, socio-economic level, number of years in the United States, or any other demographic information. All ELLs enrolled in the seventh and eighth grades during 2010-2013 who were in the mainstream communication arts class or READ 180 class, were included in the study (see Tables 2-6). According to Bluman (2010), "the distribution of the sample means will be approximately normal when the sample size is 30 or more" (p. 401). The students from each school were compiled into READ 180 and mainstream communication arts groups in order to create larger sample sizes for each year.

Table 2

Total Number of ELLs Enrolled in READ 180 or Communication Arts from School District A

Year	7th Grade	8th Grade
2012	21	32
2013	25	41

Table 3

Total Number of ELLs Enrolled in READ 180 or Communication Arts from School District B

Year	7th Grade	8th Grade
2012	0	0
2013	33	28

Table 4

Total Number of Seventh Grade Participants from School District A and B

Year	READ 180	Communication Arts
2012	17	4
2013	28	30

Table 5

Total Number of Eighth Grade Participants from School District A and B

Year	READ 180	Communication Arts
2012	6	26
2013	32	37

Table 6

Total Number of Eighth Grade Participants in READ 180

Year	2 years of READ 180	2 years of Communication Arts
2013	8	9

Methods and Instruments Used to Collect Data

The MODESE (2014), in conjunction with local school districts, annually administer the ACCESS test. The test, designed by the WIDA (2014a) Consortium to measure the ELP of ELL, is administered in January through March of each school year to every ELL in Missouri. Test administrators must participate in a training course and pass an online test, in order to administer the ACCESS test (WIDA, 2014a). Each year thereafter, the test administrator must recertify in order to administer the test (WIDA, 2014a).

A new series of tests are published every year, and one third of the items are refreshed annually (WIDA, 2014a). Assessment items are continually being revised, field-tested, and piloted before incorporation in the test (WIDA, 2014a). ACCESS is

comprised of social and academic material (WIDA, 2014b). According to WIDA (2014b):

> ACCESS for ELLs exceeds the requirements stipulated under Titles I and III of the 2001 No Child Left Behind Act in both its coverage and reporting. It is vertically scaled across tiers and grade-level clusters so that interpretation of scores is identical across grades. (p. 4)

Certified examiners administer the test under specific standards; moreover, the examiners have met a level of inter-rater reliability in order to administer the speaking portion (WIDA, 2014b).

The ACCESS test is divided into four domains: reading, listening, speaking, and writing and consists of selected response and performance-based tasks (WIDA, 2014b). The reading portion of the test consists of passages and multiple-choice items. In order to complete the listening subtest, ELLs must listen to a pre-recorded audio and answer multiple-choice questions. The items are only administered once. The reading, listening, and writing sections can be administered in groups of 22 or less (WIDA, 2014a). However, the speaking portion of the test is administered individually. During the speaking portion of the test, students are given visual prompts and are asked questions by a certified test examiner, who scores the responses according to the rubric included in the test booklet (WIDA, 2014a). The written portion of the test includes writing prompts, which are scored by Metritech (WIDA, 2014a).

The results are reported in the form of raw scores, scale scores, and ELP levels (WIDA, 2014a). This study analyzed the scale scores of the ACCESS results from 2011, 2012, and 2013 school years of each participating district. The analysis focused on the

seventh and eighth grade ACCESS subtest of reading, writing, literacy, and overall scale scores.

Procedure

The 2011, 2012, and 2013 ACCESS scores of ELLs who were enrolled in READ 180 and those who were not enrolled in READ180 were requested from participating school districts. Additionally, superintendents of the participating districts were ensured that procedures were in place to protect the anonymity of the schools and students. The names and identifying information of the students were expunged by the participating school districts before the information was sent. The requested information included the number of years in READ 180 and grade level of each student with the ACCESS scale scores. The data from the two participating schools were combined to create a larger sample and to further protect the anonymity of the schools and students.

The file set included a number (replacing a student's identifier) and corresponding scores. Electronic data were secured (password protected) under the supervision of the primary researcher. The data were secured in a locked file cabinet in a locked office.

Data Analysis

The students' ACCESS reading, writing, literacy, and overall scale scores were entered into a spreadsheet for each qualifying year. Only the students who had taken the ACCESS assessment for two consecutive years could be included in the study. The student data were divided into subgroups according to grade, academic school year, and method of instruction. The differences in ACCESS scale scores for each subgroup were calculated, and the averages were determined for each cohort for each year.

According to the WIDA Research Director, Cook (2009), WIDA ACCESS scale scores are psychometrically derived measures of student proficiency:

- Range from 100-600 (above 500 is rare)
- Single vertical scale applies to all grades and all test forms
- Vertically equated scale scores take into account grade level differences
- Scale scores are ideal for tracking student growth
- Scale scores have equal intervals
- Scale scores cannot be compared across domains or composites. (slide 9)

Additionally, Cook (2009) asserted, "individual student growth" and "classroom, school, or district growth" are the types of growth for educators to consider (slide 12). Classroom growth was analyzed for the purpose of this study. Cook (2009) maintained that the higher the level of proficiency of the student, the slower the growth; conversely, the lower the level of proficiency of the student, the faster the growth. According to Cook (2009), average student growth on the ACCESS assessment varies among districts and states.

Table 7

Example of Calculation of Single Year Reading Scale Scores Differences

Year	2013 Reading Scale Score	2012 Reading Scale Score	Difference between 2012-2013
2012-2013	399	375	+24

Once the differences were calculated for each subgroup and subtest, the averages of each subset of data were calculated to determine σ. According to Bluman (2010), "The z-test is a statistical test for the mean of a population. It can be used when $n \geq 30$ or when the population is normally distributed and σ is known" (p. 411). The standard normal distribution was used to approximate the distribution of sample means when $n \geq 30$ (Bluman, 2010). Although sample sizes when $n \geq 30$ are more reliable, the desired sample sizes were not available for some subtests of this study (Bluman, 2010; De Winter 2013). When the sample sizes were $n < 30$ students, a two sample t-test was utilized, and for sample sizes when $n \geq 30$ students a two sample z-test was utilized (Bluman, 2010; De Winter, 2013). In order to determine whether a t-test of equal variances or a t-test of unequal variances should be selected, an F-test was applied to test the difference between the two variances (Bluman, 2010). A two-tailed test was employed since there were gains and losses reported in ACCESS scale scores.

A t-test or z-test with a confidence interval of 95% and a significance level of $p < 0.05$ level was conducted on the mean gain of ACCESS scale scores from 2011-2012 and 2012-2013 to determine if there was a significant difference in the mean gain of those ELLs enrolled in the READ 180 program versus those not in enrolled in the program in the following areas:

1. Reading scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180

2. Writing scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180
3. Literacy scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180
4. Overall proficiency scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180
5. Reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180
6. Writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180
7. Literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180
8. Overall proficiency scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180

Additionally, a *t*-test or a *z*-test with a confidence interval of 95% and a significance level of $p < 0.05$ level was conducted on the difference in students' scale

scores from 2011-2012 and 2012-2013 to determine if there was a significant difference in mean gain of those in the program for two years versus those not in the program in the following areas:

9. Reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180
10. Writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180
11. Literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180
12. Overall proficiency scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180

Summary

The purpose of this quantitative study was to determine if READ 180 is an effective reading intervention program for ELLs or if a traditional communication arts class is sufficient in increasing the ELP of ELLs. A quasi-experimental study of secondary data was analyzed. All seventh or eighth grade ELL students enrolled in READ 180 or a traditional communication arts class and had taken the ACCESS for two consecutive years during the 2011-2013 school years were included in this study. The average gain in scale scores were calculated, and a *t*-test or a *z*-test was conducted to

answer the research questions. In Chapter Four are the findings, analysis of the data, research questions, hypotheses, and summary.

Chapter Four: Presentation of Data

The education of ELLs can be challenging for classroom teachers due to factors, such as multiple linguistics, academic backgrounds, cultural differences, and social characteristics (National Board for Professional Teaching Standards, 2010). Reading is one of the fundamental building blocks of education; yet, only 29% of ELLs performed at or above basic levels in reading in 2011 (August et al., 2012). With the impact of accountability requirements included in Title III, school districts are now legally responsible for increasing the proficiency level of each ELL (Costenino de Cohen et al., 2005). In response to closing the achievement gap of ELLs, more than 40,000 classrooms nationwide have implemented READ 180, which is specifically designed to close the achievement gap of struggling readers (AIR, n.d.; Scholastic, 2013b).

Study Design

This quasi-experimental study utilized multiple *F*-tests, *z*-tests, and *t*-tests to determine if there was a significant difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled in READ 180. Two rural school districts in southwest Missouri participated in the study. The sample population consisted of the total number of seventh and eighth grade ELLs who were enrolled in READ 180 and traditional communication arts classes during the 2011-2012 and 2012-2013 academic school years. Although sample sizes when $n \geq 30$ are more reliable, the desired sample sizes were not available for some subtests of this study (Bluman, 2010; De Winter, 2013). When the sample sizes were $n < 30$ students, a two sample *t*-test was utilized, and for sample sizes of $n \geq 30$ students, a two sample *z*-test was utilized (Bluman, 2010; De Winter, 2013). In order to determine whether a *t*-test of equal

variances or a *t*-test of unequal variances should be selected, an *F*-test was applied to test the difference between the two variances (Bluman, 2010). A two-tailed test was employed since there were gains and losses reported in ACCESS scale scores.

Research Questions and Hypotheses

The following research question guided the study: What is the difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled in READ180?

Null hypothesis. This is designated by the symbol H_0.

H_0: There is not a significant difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled.

Alternative hypothesis. This is designated by the symbol H_a.

H_a: There is a significant difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled.

The subquestions were:

1. What is the difference in the mean gain in reading scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
2. What is the difference in the mean gain in writing scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
3. What is the difference in the mean gain in literacy scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?

4. What is the difference in the mean gain in overall proficiency scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?

5. What is the difference in the mean gain in reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

6. What is the difference in the mean gain in writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

7. What is the difference in the mean gain in literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

8. What is the difference in the mean gain in overall proficiency scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

The following research questions were posed for students who had been enrolled in two years of READ 180:

9. What is the difference in the mean gain in reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

10. What is the difference in the mean gain in writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

11. What is the difference in the mean gain in literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

12. What is the difference in the mean gain in overall proficiency scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

Analysis of Quantitative Data

ACCESS scale scores were collected from two rural school districts in southwest Missouri. Scores of seventh and eighth grade students who were enrolled in READ 180 and traditional communication arts classes during the 2011-2012 and 2012-2013 academic years were compiled. Reading, writing, literacy, and overall scale scores were compared and analyzed to determine if there was a significant difference after one year and two years of enrollment in READ 180 and or communication arts. The experimental group was comprised of ELLs enrolled in READ 180 classes, and the control group was comprised of ELLs enrolled in traditional communication arts classes.

RQ1. What is the difference in the mean gain in reading scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?

Year 1. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental seventh grade reading scale scores was 10.93, and the mean difference in the pre-assessment and post-assessment of the Year 2 control seventh grade reading scale scores was 8.97. The median difference in scores for both cohorts was 9.5.

The standard deviation for the experimental group was 14.68, and the standard deviation was 21.80 for the control group.

Table 8

Year 1 Descriptive Data for Seventh Grade Reading Scale Scores Differences

	Y1 Experimental Reading	Y1 Control Reading
Mean	18.24	4.5
Median	20	11
Standard Deviation	16.66	15.86
Sample Variance	277.69	251.67
Count	17	4

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances was applied to the data (Bluman, 2010). For the *F*-test, the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 9

Year 1 Two-Sample F-Test for Variances in Seventh Grade Reading Scale Scores

	Y1 Experimental Reading	Y1 Control Reading
Mean	18.24	4.5
Variance	277.69	251.67
Observations	17	4
df	16	3
F	1.10	
P(*F* <= *f*) one-tail	0.54	
F Critical one-tail	5.20	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

The *F* value 1.10 was less than the *F* critical value of 5.20, so the null hypothesis of equal variances was not rejected, and a *t*- test of equal variances was applied to the data. Since the *t* score of 1.49 was less than the two-tailed *t* critical value of 2.01, the null hypothesis that there was not a significant difference in the reading scale scores of seventh grade ELLs enrolled in READ 180 and those seventh grade ELLs not enrolled in READ 180 could not be rejected.

Table 10

Year 1 Two-Sample t-test Assuming Equal Variances in Seventh Grade Reading Scale Scores

	Y1 Experimental Reading	Y1 Control Reading
Mean	18.24	4.5
Variance	277.69	251.67
Observations	17	4
Hypothesized Mean Difference	0	
df	19	
t Stat	1.49	
P(*T* <= *t*) two-tail	0.15	
t Critical two-tail	2.09	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Year 2. The mean difference in the pre-assessment and post-assessment of the Year 2 experimental seventh grade reading scale scores was 10.93, and the mean difference in the pre-assessment and post-assessment of the Year 2 control seventh grade reading scale scores was 8.97. The median difference in scores for both cohorts was 9.5. The standard deviation for the experimental group was 14.68, and the standard deviation for the control group was 21.80.

Table 11

Year 2 Descriptive Data for Seventh Grade Reading Scale Scores Differences

	Y2 Experimental Reading	Y2 Control Reading
Mean	10.93	8.97
Median	9.5	9.5
Standard Deviation	14.68	21.80
Count	28	30

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances was applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 12

Year 2 Two-Sample F-Test for Variances in Seventh Grade Reading Scale Scores

	Y2 Control Reading	Y2 Experimental Reading
Mean	8.97	10.93
Variance	475.21	215.48
Observations	30	28
df	29	27
F	2.21	
P(*F* <= *f*) one-tail	0.02	
F Critical one-tail	1.64	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

The *F* value 2.21 was greater than the *F* critical value of 1.64, so the null hypothesis of equal variances was rejected, and a *t*-test of unequal variances was applied to the data.

Table 13

Year 2 Two-Sample t-test Assuming Unequal Variances in Seventh Grade Reading Scale Scores

	Y2 Control Reading	Y2 Experimental Reading
Mean	8.97	10.93
Variance	475.21	215.48
Observations	30	28
Hypothesized Mean Difference	0	
df	51	
t Stat	-0.40	
$P(T <= t)$ two-tail	0.69	
t Critical two-tail	-2.01	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the *t* score of -.40 was less than the two-tailed *t* critical value of -2.01, the null hypothesis that there was not a significant difference in the reading scale scores of seventh grade ELLs enrolled in READ 180 and those seventh grade ELLs not enrolled in READ 180 could not be rejected.

RQ2. What is the difference in the mean gain in writing scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?

Year 1. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental seventh grade writing scale scores was 10.94, and the mean difference in the pre-assessment and post-assessment of the Year 1 control seventh grade writing scale scores was 19.25. The median difference in scores for the experimental group was 14, and for the control group was 18.5. The standard deviation for the experimental group was 16.43, and the standard deviation was 8.22 for the control group.

Table 14

Year 1 Descriptive Data for Seventh Grade Writing Scale Scores Differences

	Y1 Experimental Writing	Y1 Control Writing
Mean	10.94	19.25
Median	14	18.5
Standard Deviation	16.43	8.22
Count	17	4

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 15

Year 1 Two-Sample F-Test for Variances in Seventh Grade Writing Scale Scores

	Y1 Experimental Writing	Y1 Control Writing
Mean	10.94	19.25
Variance	270.06	67.58
Observations	17	4
Df	16	3
F	4	
P(*F*<=*f*) one-tail	0.14	
F Critical one-tail	5.20	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

The *F* value 3.99 was less than the *F* critical value of 5.19, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 16

Year 1 Two-Sample t-test Assuming Equal Variances in Seventh Grade Writing Scale Scores

	Y1 Experimental Writing	Y1 Control Writing
Mean	10.94	19.25
Variance	270.06	67.58
Observations	17	4
Hypothesized Mean Difference	0	
df	19	
t Stat	-0.97	
P(*T* <= *t*) two-tail	0.34	
t Critical two-tail	-2.09	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the *t* score of -.97 was less than the two-tailed *t* critical value of -2.09, the null hypothesis that there is not a significant difference in the writing scale scores of seventh grade ELLs enrolled in READ 180 and those seventh grade ELLs not enrolled in READ 180 was not rejected.

Year 2. The mean difference in the pre-assessment and post-assessment of the Year 2 experimental seventh grade writing scale scores was 15.96, and the mean difference in the pre-assessment and post-assessment of the Year 2 control seventh grade writing scale scores was 8.43 The median difference in scores for the experimental group was 14, and for the control group was 5. The standard deviation for the experimental group was 11.76, and the standard deviation was 14.85 for the control group.

Table 17

Year 2 Descriptive Data for Seventh Grade Writing Scale Scores Differences

	Y2 Experimental Writing	Y2 Control Writing
Mean	15.96	8.43
Median	14	5
Standard Deviation	11.75516	14.84
Count	28	30

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 18

Year 2 Two-Sample F-Test for Variances in Seventh Grade Writing Scale Scores

	Y2 Control Writing	Y2 Experimental Writing
Mean	8.43	15.96
Variance	220.39	138.18
Observations	30	28
df	29	27
F	1.59	
P(*F* <= *f*) one-tail	0.11	
F Critical one-tail	1.64	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

The *F* value 1.59 was less than the *F* critical value of 1.64, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 19

Year 2 t-test: Two-Sample Assuming Equal Variances in Writing Scale Scores

	Y2 Control Writing	Y2 Experimental Writing
Mean	8.43	15.96
Variance	220.392	138.18
Observations	30	28
Hypothesized Mean Difference	0	
df	56	
t Stat	-2.13	
P(*T* <= *t*) two-tail	0.037	
t Critical two-tail	-2.00	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the *t* score of -2.13 was greater than the two-tailed *t* critical value of - 2.00, the null hypothesis that there is not a significant difference in the writing scale scores of seventh grade ELLs enrolled in READ 180 and those seventh grade ELLs not enrolled in READ 180 was rejected.

RQ3. What is the difference in the mean gain in literacy scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?

Year 1. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental seventh grade literacy scale scores was 14.65, and the mean difference in the pre-assessment and post-assessment of the Year 2 control seventh grade literacy scale scores was 20.25. The median difference in scores for the experimental group was 13, and for the control group was 8. The standard deviation for the experimental group was 14.28, and the standard deviation was 35.24 for the control group.

Table 20

Year 1 Descriptive Data for Seventh Grade Literacy Scale Scores Differences

	Y1 Experimental Literacy	Y1 Control Literacy
Mean	14.64	20.25
Median	13	8
Standard Deviation	14.28	35.25
Count	17	4

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 21

Year 1 Two-Sample F-Test for Variances in Seventh Grade Literacy Scale Scores

	Y1 Experimental Literacy	Y1 Control Literacy
Mean	20.25	14.65
Variance	1242.25	204
Observations	4	17
df	3	16
F	6.09	
$P(F <= f)$ one-tail	0.01	
F Critical one-tail	2.46	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

The *F* value 6.09 was greater than the *F* critical value of 2.46, so the null hypothesis of equal variances was rejected, and a *t*-test of unequal variances was applied to the data.

Table 22

Year 1 Two-Sample t-test Assuming Unequal Variances in Seventh Grade Literacy Scale Scores

	Y1 Control Literacy	Y1 Experimental Literacy
Mean	20.25	14.65
Variance	1242.25	204
Observations	4	17
Hypothesized Mean Difference	0	
df	3	
t Stat	0.312	
$P(T <= t)$ two-tail	0.78	
t Critical two-tail	3.18	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Year 2. The mean difference in the pre-assessment and post-assessment of the Year 2 experimental seventh grade literacy scale scores was 12.5, and the mean difference in the pre-assessment and post-assessment of the Year 2 control seventh grade literacy scale scores was 9. The median difference in scores for the experimental group was 14, and for the control group was 9. The standard deviation for the experimental group was 9.78, and the standard deviation was 13.26 for the control group.

Table 23

Year 2 Descriptive Data for Seventh Grade Literacy Scale Scores Differences

	Y2 Experimental Literacy	Y2 Control Literacy
Mean	12.5	9
Median	14	9
Standard Deviation	9.78	13.26
Count	28	30

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to α

= .10 for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 24

Year 2 Two-Sample F-Test for Variances in Seventh Grade Literacy Scale Scores

	Y2 Control Literacy	Y2 Experimental Literacy
Mean	9	12.5
Variance	175.86	95.74
Observations	30	28
df	29	27
F	1.84	
P(*F* < = *f*) one-tail	0.06	
F Critical one-tail	1.64	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

The *F* value 1.84 was greater than the *F* critical value of 1.64, so the null hypothesis of equal variances was rejected, and a *t*-test of unequal variances was applied to the data.

Table 25

Year 2 Two-Sample t-test Assuming Unequal Variances in Seventh Grade Literacy Scale Scores

	Y2 Experimental Literacy	Y2 Control Literacy
Mean	12.5	9
Variance	95.74	175.86
Observations	28	30
Hypothesized Mean Difference	0	
df	53	
t Stat	1.15	
P(*T* < = *t*) two-tail	0.26	
t Critical two-tail	2.01	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the *t* score of 1.14 was less than the two-tailed *t* critical value of 2.01, the null hypothesis that there is not a significant difference in the literacy scale scores of seventh grade ELLs enrolled in READ 180 and those seventh grade ELLs not enrolled in READ 180 was not rejected.

RQ4. What is the difference in the mean gain in overall scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?

Year 1. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental seventh grade overall scale scores was 17.41, and the mean difference in the pre-assessment and post-assessment of the Year 1 control seventh grade overall scale scores was 24.25. The median difference in scores was 19 for the experimental group and 18 for the control group. The standard deviation for the experimental group was 10.91, and the standard deviation was 21.08 for the control group.

Table 26

Year 1 Descriptive Data for Seventh Grade Overall Scale Scores Differences

	Y1 Experimental Overall	Y1 Control Overall
Mean	17.41	24.25
Median	19	18
Standard Deviation	10.91	21.08
Count	17	4

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal

variances should be applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 27

Year 1 Two-Sample F-Test for Variances in Seventh Grade Overall Scale Scores

	Y1 Control Overall	Y1 Experimental Overall
Mean	24.25	17.41
Variance	444.25	119.01
Observations	4	17
df	3	16
F	3.73	
P(*F* < = *f*) one-tail	0.03	
F Critical one-tail	2.46	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

The *F* value 3.73 was greater than the *F* critical value of 2.46, so the null hypothesis of equal variances was rejected, and a *t*-test of unequal variances was applied to the data.

Table 28

Year 1 Two-Sample t-test Assuming Unequal Variances in Seventh Grade Overall Scale Scores

	Y1 Control Overall	Y1 Experimental Overall
Mean	24.25	17.41
Variance	444.25	119.01
Observations	4	17
Hypothesized Mean Difference	0	
df	3	
t Stat	0.63	
P(*T* < = *t*) two-tail	0.57	
t Critical two-tail	3.18	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the *t* score of .63 was less than the two-tailed *t* critical value of 3.18, the null hypothesis that there was not a significant difference in the overall scale scores of seventh grade ELLs enrolled in READ 180 and those seventh grade ELLs not enrolled in READ 180 was not rejected.

Year 2. The mean difference in the pre-assessment and post-assessment of the Year 2 experimental seventh grade overall scale scores was 11.32, and the mean difference in the pre-assessment and post-assessment of the Year 2 control seventh grade overall scale scores was 9.47. The median difference in scores was 12 for the experimental group and 8 for the control group. The standard deviation for the experimental group was 9.11, and the standard deviation was 11.11 for the control group.

Table 29

Year 2 Descriptive Data for Seventh Grade Overall Scale Scores Differences

	Y2 Experimental Overall	Y2 Control Overall
Mean	11.32	9.47
Median	12	8
Standard Deviation	9.11	11.113
Count	28	30

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 30

Year 2 Two-Sample F-Test for Variances in Seventh Grade Overall Scale Scores

	Y2 Control Overall	Y2 Experimental Overall
Mean	9.47	11.32
Variance	123.50	82.97
Observations	30	28
df	29	27
F	1.49	
P(*F* < = *f*) one-tail	0.15	
F Critical one-tail	1.64	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

The *F* value 1.49 was less than the *F* critical value of 1.64, so the null hypothesis of equal variances was not rejected, and a *t*- test of equal variances was applied to the data.

Table 31

Year 2 Two-Sample t-test Assuming Equal Variances in Seventh Grade Overall Scale Scores

	Y2 Experimental Overall	Y2 Control Overall
Mean	11.32	9.47
Variance	82.97	123.50
Observations	28	30
Hypothesized Mean Difference	0	
df	56	
t Stat	0.69	
P(*T* < = *t*) two-tail	0.49	
t Critical two-tail	2.00	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the *t* score of .69 was less than the two-tailed *t* critical value of 2.01, the null hypothesis that there is not a significant difference in the overall scale scores of seventh grade ELLs enrolled in READ 180 and those seventh grade ELLs not enrolled in READ 180 was not rejected.

RQ5. What is the difference in the mean gain in reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

Year 1. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental eighth grade reading scale scores was 9.67, and the mean difference in the pre-assessment and post-assessment of the Year 1 control eighth grade reading scale scores was 11.5. The median difference in scores for the experimental group was 14.5 and for the control group it was 11.58. The standard deviation for the experimental group was 17.24, and the standard deviation was 19.45 for the control group.

Table 32

Year 1 Descriptive Data for Seventh Grade Reading Scale Scores Differences

	Y1 Experimental Reading	Year 1 Control Reading
Mean	9.67	11.58
Median	14.5	8.5
Standard Deviation	17.24	19.45
Count	6	26

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 33

Year 1 Two-Sample F-Test for Variances in Eighth Grade Reading Scale Scores

	Y1 Control Reading	Y1 Control Reading
Mean	11.58	15
Variance	378.49	178
Observations	26	6
df	25	5
F	2.13	
P(*F* <= *f*) one-tail	0.21	
F Critical one-tail	4.52	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

The *F* value 2.13 was less than the *F* critical value of 4.52, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 34

Year 1 Two-Sample t-test Assuming Equal Variances in Eighth Grade Reading Scale Scores

	Y1 Experimental Reading	Y1 Control Reading
Mean	15	11.58
Variance	178	378.49
Observations	6	26
Hypothesized Mean Difference	0	
df	30	
t Stat	0.41	
P(*T* <= *t*) two-tail	0.69	
t Critical two-tail	1.70	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the *t* score of .41 was less than the two-tailed *t* critical value of 1.70, the null hypothesis that there is not a significant difference in the reading scale scores of eighth grade ELLs enrolled in READ 180 and those eighth grade ELLs not enrolled in READ 180 was not rejected.

Year 2. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental eighth grade reading scale scores was 12.47, and the mean difference in the pre-assessment and post-assessment of the Year 1 control eighth grade reading scale scores was 13.35. The median difference in scores was 15.5 for the experimental group and 16 for the control group. The standard deviation for the experimental group was 16.94, and the standard deviation was 20.69 for the control group.

Table 35

Year 2 Descriptive Data for Eighth Grade Reading Scale Scores Differences

	Y2 Experimental Reading	Y2 Control Reading
Mean	12.47	13.35
Median	15.5	16
Standard Deviation	16.94	20.69
Count	32	37

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the sample sizes were both ≥ 30, a *z*-test for two sample means was selected (DeWinter, 2013). A two-tailed test was conducted with $\alpha = .05$ (Bluman, 2010).

Table 36

Year 2 Two-Sample z-test of Eighth Grade Reading Scale Scores

	Y2 Control Reading	Y2 Experimental Reading
Mean	13.35	12.47
Known Variance	428.12	286.97
Observations	37	32
Hypothesized Mean Difference	0	
z	0.19	
P(*Z* <= *z*) two-tail	0.85	
z Critical two-tail	1.96	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the *z* score of .19 was less than the two-tailed *z* critical value of 1.96, the null hypothesis that there is not a significant difference in the reading scale scores of eighth grade ELLs enrolled in READ 180 and those eighth grade ELLs not enrolled in READ 180 was not rejected.

RQ6. What is the difference in the mean gain in writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

Year 1. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental eighth grade writing scale scores was 9.67, and the mean difference in the pre-assessment and post-assessment of the Year 1 control eighth grade writing scale scores was 11.58. The median difference in scores for the experimental group was 14.58, and for the control group was 11. The standard deviation for the experimental group was 17.24, and the standard deviation was 13.67 for the control group.

Table 37

Year 1 Descriptive Data for Eighth Grade Writing Scale Scores Differences

	Y1 Experimental Writing	Y1 Control Writing
Mean	9.67	11.58
Median	14.5	11
Standard Deviation	17.24	13.67
Count	6	26

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test the null

hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 38

Year 1 Two-Sample F-Test for Variances in Eighth Grade Writing Scale Scores

	Y1 Experimental Writing	Y1 Control Writing
Mean	9.67	11.58
Variance	297.07	186.73
Observations	6	26
df	5	25
F	1.59	
P(*F* < = *f*) one-tail	0.20	
F Critical one-tail	2.60	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

The *F* value 1.59 was less than the *F* critical value of 2.60, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 39

Year 1 Two-Sample t-test Assuming Equal Variances in Eighth Grade Writing Scale Scores

	Y1 Experimental Writing	Y1 Control Writing
Mean	9.67	11.58
Variance	297.07	186.73
Observations	6	26
Hypothesized Mean Difference	0	
df	30	
t Stat	-0.29	
P(*T* < = *t*) two-tail	0.77	
t Critical two-tail	-2.04	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the *t* score of -.29 was less than the two-tailed *t* critical value of -2.04, the null hypothesis that there is not a significant difference in the writing scale scores of eighth grade ELLs enrolled in READ 180 and those eighth grade ELLs not enrolled in READ 180 was not rejected.

Year 2. The mean difference in the pre-assessment and post-assessment of the Year 2 experimental eighth grade writing scale scores was 9.69, and the mean difference in the pre-assessment and post-assessment of the Year 2 control eighth grade writing scale scores was 5.49. The median difference in scores for the experimental group was 9, and for the control group was 6. The standard deviation for the experimental group was 17.48, and the standard deviation was 13.96 for the control group.

Table 40

Year 2 Descriptive Data for Eighth Grade Writing Scale Scores Differences

	Y2 Experimental Writing	Y2 Control Writing
Mean	9.69	5.49
Median	9	6
Standard Deviation	17.48	13.96
Count	32	37

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the sample sizes were both ≥ 30, a *z*-test for two sample means was selected (DeWinter, 2013). A two-tailed test was conducted with $\alpha = .05$ (Bluman, 2010).

Table 41

Year 2 Two-Sample z-test of Eighth Grade Writing Scale Scores

	Y2 Experimental Writing	Y2 Control Writing
Mean	9.69	5.49
Known Variance	305.58	194.87
Observations	32	37
Hypothesized Mean Difference	0	
z	1.09	

P($Z <= z$) two-tail	0.28
z Critical two-tail	1.96

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the z score of 1.09 was less than the two-tailed z critical value of 1.96, the null hypothesis that there is not a significant difference in the writing scale scores of eighth grade ELLs enrolled in READ 180 and those eighth grade ELLs not enrolled in READ 180 was not rejected.

RQ 7. What is the difference in the mean gain in literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighthth grade ELLs not enrolled in READ 180?

Year 1. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental eighth grade literacy scale scores was 12.67, and the mean difference in the pre-assessment and post-assessment of the Year 1 control eighth grade literacy scale scores was 11.58. The median difference in scores for the experimental group was 12.5, and for the control group was 12.35. The standard deviation for the experimental group was 8.60, and the standard deviation was 12.35 for the control group.

Table 42

Year 1 Descriptive Data for Eighth Grade Literacy Scale Scores Differences

	Y1 Experimental Literacy	Y1 Control Literacy
Mean	12.67	11.58
Median	12.5	12
Standard Deviation	8.59	12.35
Count	6	26

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the sample sizes were not both ≥ 30, a t-test was selected (DeWinter, 2013). A one-tailed F-test for similarities in variances was conducted with $\alpha = .05$ adjusted to α

= .10 for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test, the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 43

Year 1 Two-Sample F-Test for Variances in Eighth Grade Literacy Scale Scores

	Y1 Control Literacy	Y1 Experimental Literacy
Mean	11.58	12.67
Variance	152.57	73.87
Observations	26	6
df	25	5
F	2.07	
P(*F* < = *f*) one-tail	0.22	
F Critical one-tail	4.52	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

The *F* value 2.06 was less than the *F* critical value of 4.52, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 44

Year 1 Two-Sample t-test Assuming Equal Variances in Eighth Grade Literacy Scale Scores

	Y1 Control Literacy	Y1 Experimental Literacy
Mean	11.58	12.67
Variance	152.57	73.87
Observations	26	6
Hypothesized Mean Difference	0	
df	30	
t Stat	-0.20	
P(*T* < = *t*) two-tail	0.84	
t Critical two-tail	-1.70	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the *t* score of -.20 was less than the two-tailed *t* critical value of -1.70, the null hypothesis that there is not a significant difference in the literacy scale scores of eighth grade ELLs enrolled in READ 180 and those eighth grade ELLs not enrolled in READ 180 was not rejected.

Year 2. The mean difference in the pre-assessment and post-assessment of the Year 2 experimental eighth grade literacy scale scores was 11.06, and the mean difference in the pre-assessment and post-assessment of the Year 2 control eighth grade literacy scale scores was 9.97. The median difference in scores for the experimental group was 13.5, and for the control group was 10. The standard deviation for the experimental group was 11.89, and the standard deviation was 13.51 for the control group.

Table 45

Year 2 Descriptive Data for Eighth Grade Literacy Scale Scores Differences

	Y2 Experimental Literacy	Y2 Control Literacy
Mean	11.06	9.97
Median	13.5	10
Standard Deviation	11.89	13.51
Count	32	37

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the sample sizes were both ≥ 30, a *z*-test for two sample means was selected (DeWinter, 2013). A two-tailed test was conducted with $\alpha = .05$ (Bluman, 2010).

Table 46

Year 2 Two-Sample z-test of Eighth Grade Literacy Scale Scores

	Y2 Control Literacy	Y2 Experimental Literacy
Mean	9.97	11.06
Known Variance	182.64	11.48
Observations	37	32
Hypothesized Mean Difference	0	
z	-0.47	
P(*Z* < = *z*) two-tail	0.64	
z Critical two-tail	-1.96	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the *z* score of -.047 was less than the two-tailed *z* critical value of -1.96, the null hypothesis that there is not a significant difference in the literacy scale scores of eighth grade ELLs enrolled in READ 180 and those eighth grade ELLs not enrolled in READ 180 was not rejected.

RQ 8. What is the difference in the mean gain in overall proficiency scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

Year 1. The mean difference in the pre-assessment and post-assessment of the Year 1 experimental eighth grade overall scale scores was 16.17, and the mean difference in the pre-assessment and post-assessment of the Year 1 control eighth grade overall scale scores was 12.12. The median difference in scores for the experimental group was 14.5, and for the control group was 11. The standard deviation for the experimental group was 5.56, and the standard deviation was 10.30 for the control group.

Table 47

Year 1 Descriptive Data for Eighth Grade Overall Scale Scores Differences

	Y1 Experimental Overall	Y1 Control Overall
Mean	16.16	12.11
Median	14.5	11
Standard Deviation	5.56	10.30
Count	6	26

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 48

Year 1 Two-Sample F-Test for Variances in Eighth Grade Overall Scale Scores

	Y1 Control Overall	Y1 Experimental Overall
Mean	12.12	16.17
Variance	106.11	30.97
Observations	26	6
df	25	5
F	3.43	
P(*F* < = *f*) one-tail	0.09	
F Critical one-tail	4.52	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

The *F* value 3.42 was less than the *F* critical value of 4.52, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 49

Year 1 Two-Sample t-test Assuming Equal Variances in Eighth Grade Overall Scale Scores

	Y1 Control Overall	Y1 Experimental Overall
Mean	12.12	16.17
Variance	106.11	30.97
Observations	26	6
Hypothesized Mean Difference	0	
df	30	
t Stat	-0.92	
P(*T* <= *t*) two-tail	0.36	
t Critical two-tail	-1.70	

Note. Derived from the difference in individual 2011 and 2012 ACCESS reports.

Since the *t* score of -.92 was less than the two-tailed *t* critical value of -1.70, the null hypothesis that there is not a significant difference in the overall scale scores of eighth grade ELLs enrolled in READ 180 and those eighth grade ELLs not enrolled in READ 180 was not rejected.

Year 2. The mean difference in the pre-assessment and post-assessment of the Year 2 experimental eighth grade overall scale scores was 11.81, and the mean difference in the pre-assessment and post-assessment of the Year 1 control eighth grade overall scale scores was 8.51. The median difference in scores for the experimental group was 14, and for the control group was 9. The standard deviation for the experimental group was 10.94, and the standard deviation was 9.64 for the control group.

Table 50

Year 2 Descriptive Data for Eighth Grade Overall Scale Scores Differences

	Y2 Experimental Overall	Y2 Control Overall
Mean	11.81	8.51
Median	14	9
Standard Deviation	10.94	9.64

Count	32	37

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the sample sizes were both ≥ 30, a *z*-test for two sample means was selected (DeWinter, 2013). A two-tailed test was conducted with $\alpha = .05$ (Bluman, 2010).

Table 51

Year 2 Two-Sample z-Test of Eighth Grade Overall Scale Scores

	Y2 Experimental Overall	Y2 Control Overall
Mean	11.81	8.51
Known Variance	119.77	92.79
Observations	32	37
Hypothesized Mean Difference	0	
z	1.32	
$P(Z <= z)$ two-tail	0.19	
z Critical two-tail	1.96	

Note. Derived from the difference in individual 2012 and 2013 ACCESS reports.

Since the *z* score of 1.32 was less than the two-tailed *z* critical value of 1.96, the null hypothesis that there is not a significant difference in the overall scale scores of eighth grade ELLs enrolled in READ 180 and those eighth grade ELLs not enrolled in READ 180 was not rejected.

RQ9. What is the difference in the mean gain in reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180 for two years?

Year 2. In this part of the study the scores of sixth, seventh, and eighth grade ACCESS were examined to calculate the two-year gain in scale scores of ELLs who were enrolled in READ 180 during their seventh and eighth grade years and those who were not enrolled in the program for both years. The sixth grade year was used as the pre-assessment, and the eighth grade year was used as the post-assessment. The mean

difference in the pre-assessment and post-assessment of the two years of experimental reading scale scores was 31.75, and the mean difference in the pre-assessment and post-assessment of the two years of control reading scale scores was 16.22. The median difference in scores for the experimental group was 28.5, and for the control group was 13. The standard deviation for the experimental group was 30.07, and the standard deviation was 17.02 for the control group.

Table 52

Two Years of Descriptive Data for Reading Scale Scores Differences

	2 Years of Experimental Reading	2 Years of Control Reading
Mean	31.75	16.22
Median	28.5	13
Standard Deviation	30.07	17.02
Sample Variance	904.5	289.69
Count	8	9

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test, the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 53

Two-Sample F-Test for Variances in Two Years of Reading Scale Scores

	2 Years of Experimental Reading	2 Years of Control Reading
Mean	31.75	16.22

Variance	904.5	289.69
Observations	8	9
df	7	8
F	3.12	
P(*F* < = *f*) one-tail	.07	
F Critical one-tail	2.62	

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

The *F* value 3.12 was more than the *F* critical value of 2.62, so the null hypothesis of equal variances was rejected, and a *t*-test of unequal variances was applied to the data.

Table 54.

Two-Sample t-test Assuming Unequal Variances in Two Years of Reading Scale Scores

	2 Years of Experimental Reading	2 Years of Control Reading
Mean	31.75	16.22
Variance	904.5	289.69
Observations	8	9
Hypothesized Mean Difference	0	
df	15	
t Stat	1.29	
P(*T* < = *t*) two-tail	0.22	
t Critical two-tail	2.20	

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

Since the *t* score of 1.29 was less than the two-tailed *z* critical value of 2.20, the null hypothesis that there is not a significant difference in the reading scale scores of ELLs enrolled in two years of READ 180 and those eighth grade ELLs not enrolled in two years of READ 180 was not rejected.

RQ 10. What is the difference in the mean gain in writing scale scores on the ACCESS test of the experimental ELLs enrolled in the READ 180 program for two years and the Year 2 ELLs not enrolled in READ 180 for two years?

The mean difference in the pre-assessment and post-assessment of the two years of experimental writing scale scores was 31.75, and the mean difference in the pre-

assessment and post-assessment of the two years of control writing scale scores was 16.22. The median difference in scores for the experimental group was 28.5, and for the control group was 13. The standard deviation for the experimental group was 30.07, and the standard deviation was 17.02 for the control group.

Table 55

Two Years of Descriptive Data for Writing Scale Scores Differences

	2 Years Experimental of Writing	2 Years of Control Writing
Mean	28.25	17.56
Median	28	12
Standard Deviation	13.95	14.14
Sample Variance	194.5	200.03
Count	8	9

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test, the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 56

Two-Sample F-Test for Variances in Two Years of Writing Scale Scores

	2 Years of Control Writing	2 Years of Experimental Writing
Mean	17.56	28.25
Variance	200.03	194.5
Observations	9	8
df	8	7
F	1.028	
P(*F* <= *f*) one-tail	0.49	
F Critical one-tail	3.73	

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

The *F* value 1.02 was less than the *F* critical value of 3.73, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 57

Two-Sample t-test Assuming Equal Variances in Two Years of Writing Scale Scores

	2 Years of Control Writing	2 Years of Experimental Writing
Mean	17.56	28.25
Variance	200.03	194.5
Observations	9	8
Hypothesized Mean Difference	0	
df	15	
t Stat	-1.57	
P(*T* <= *t*) two-tail	0.14	
t Critical two-tail	-2.13	

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

Since the *t* score of -1.57 was less than the two-tailed *t* critical value of -2.13, the null hypothesis that there is not a significant difference in the writing scale scores of ELLs enrolled in two years of READ 180 and those eighth grade ELLs not enrolled in two years of READ 180 was not rejected.

RQ 11. What is the difference in the mean gain in literacy scale scores on the ACCESS test of the experimental ELLs enrolled in the READ 180 program for two years and the two control ELLs not enrolled in READ 180 for two years?

The mean difference in the pre-assessment and post-assessment of the two years of experimental literacy scale scores was 30.25, and the mean difference in the pre-assessment and post-assessment of the Year 2 of control literacy scale scores was 17. The median difference in scores for the experimental group was 31.5, and for the control

group was 12.6. The standard deviation for the experimental group was 11.67, and the standard deviation was 12.61 for the control group.

Table 58

Two Years of Descriptive Data for Literacy Scale Scores Differences

	2 Years of Experimental Literacy	2 Years of Control Literacy
Mean	30.25	17
Median	31.5	11
Standard Deviation	11.67	12.61
Count	8	9

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test, the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 59

Two-Sample F-Test for Variances in Two Years of Literacy Scale Scores

	2 Years of Control Literacy	2 Years of Experimental Literacy
Mean	17	30.25
Variance	159	136.21
Observations	9	8
df	8	7
F	1.17	
P(*F* < = *f*) one-tail	0.43	
F Critical one-tail	3.73	

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

The *F* value 1.16 was less than the *F* critical value of 3.73, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 60

Two-Sample t-test Assuming Equal Variances in Two Years of Literacy Scale Scores

	2 Years of Control Literacy	2 Years of Experimental Literacy
Mean	17	30.25
Variance	159	136.21
Observations	9	8
Hypothesized Mean Difference	0	
df	15	
t Stat	-2.24	
$P(T <= t)$ two-tail	0.04	
t Critical two-tail	-2.13	

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

Since the *t* score of -2.24 was greater than the two-tailed *t* critical value of -2.13, the null hypothesis that there is not a significant difference in the literacy scale scores of ELLs enrolled in two years of READ 180 and those eighth grade ELLs not enrolled in two years of READ 180 was rejected.

RQ 12. What is the difference in the mean gain in overall proficiency scale scores on the ACCESS test between ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180 for two years?

The mean difference in the pre-assessment and post-assessment of the two years of experimental overall scale scores was 32.25, and the mean difference in the pre-assessment and post-assessment of the two years of overall scale scores was 14.78. The median difference in scores for the experimental group was 30.5, and for the control

group was 12. The standard deviation for the experimental group was 11.07, and the standard deviation was 11.46 for the control group.

Table 61

Two Years of Descriptive Data for Overall Scale Scores Differences

	2 Years of Experimental Overall	2 Years of Control Overall
Mean	32.25	14.78
Median	30.5	12
Standard Deviation	11.07	11.46
Count	8	9

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

Since the sample sizes were not both ≥ 30, a *t*-test was selected (DeWinter, 2013). A one-tailed *F*-test for similarities in variances was conducted with $\alpha = .05$ adjusted to $\alpha = .10$ for a two-tailed result to determine whether the *t*-test for equal variances or unequal variances should be applied to the data (Bluman, 2010). For the *F*-test, the null hypothesis was there was no difference in variance, and the alternate hypothesis was there was a difference in variance.

Table 62

Two-Sample F-Test for Variances in Two Years of Overall Scale Scores

	2 Years of Experimental Overall	2 Years of Control Overall
Mean	14.78	32.25
Variance	131.44	122.5
Observations	9	8
df	8	7
F	1.07	
P(*F* <= *f*) one-tail	0.47	
F Critical one-tail	3.73	

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

The *F* value 1.07 was less than the *F* critical value of 3.73, so the null hypothesis of equal variances was not rejected, and a *t*-test of equal variances was applied to the data.

Table 63

Two-Sample t-test Assuming Equal Variances in Two Years of Overall Scale Scores

	2 Years Control Overall	2 Years Experimental Overall
Mean	14.78	32.25
Variance	131.44	122.5
Observations	9	8
Hypothesized Mean Difference	0	
df	15	
t Stat	-3.19	
$P(T <= t)$ two-tail	0.01	
t Critical two-tail	-2.13	

Note. Derived from the difference in individual 2011 and 2013 ACCESS reports.

Since the *t* score of -3.18 was greater than the two-tailed *t* critical value of -2.13, the null hypothesis that there is not a significant difference in the overall scale scores of ELLs enrolled in two years of READ 180 and those eighth grade ELLs not enrolled in two years of READ 180 was rejected.

Summary

This quantitative study analyzed the performance of seventh and eighth grade ELLs who were enrolled in READ 180 and traditional communication arts classes on the ACCESS assessment. Specifically, the quasi-experimental study analyzed the reading, writing, literacy, and overall subtests on the ACCESS during the 2011-2013 school years. The scores of ELLs in two rural southwest Missouri schools were utilized.

Due to the small population samples in some subtest areas, *z* and *t*-tests were utilized. Of the subtests analyzed, there was a significant difference in three of the 12

areas. There was a significant difference in the Year 2 seventh grade writing scores. There was also a significant difference in eighth grade ELLs who were enrolled in READ 180 for two consecutive years in the areas of literacy and overall score on the ACCESS test. In Chapter Five are the findings, implications, and recommendations for future research.

Chapter Five: Discussion and Recommendations

Overview

The purpose of this quasi-experimental study was to determine if READ 180 was an effective reading intervention program for ELLs. There have been over 100 studies conducted on READ 180 (USDOE, 2009). Scholastic (2013b) asserted READ 180:

> ...has been proven to: improve performance on state test results, reduce the dropout rate, improve reading achievement for African-American, Native American and Latino students, improve reading achievement for English Language Learners, improve reading achievement for students receiving Special Education services and increase teacher retention. (pp. 2-3)

Most of the research conducted on the performance of students enrolled in READ 180 has focused on state assessments and SRI scores (Scholastic, 2014; USDOE, 2009). Of the studies reviewed for the purpose of this study, none used the ACCESS as the measurement for improved performance among ELLs enrolled in READ 180; however, the ACCESS is the state assessment tool utilized in thirty-five states to measure English proficiency (Scholastic, 2014; USDOE, 2009; WIDA, 2014b).

State educational agencies tabulate the results from ELP assessments, such as ACCESS, to determine if school districts are fulfilling federally-mandated AMAOs (Boyle et al. 2010; Cook et al., 2012; Fratt, 2007; Goldenberg & Coleman, 2010). These AMAOs include: 1) percentage of ELLs making progress on state ESL proficiency test, 2) percentage of ELLs scoring proficient on state ELP test and thereby exiting ESL program, and 3) percentage of ELLs making AYP on state-wide assessments in the areas of math and communication arts (Boyle et al., 2010; Cook et al., 2012). The first two

AMAOs pertain specifically to student improvement and success on the state designated ELP, which is the ACCESS test in the state of Missouri.

Data Analysis

This study analyzed the 2011-2013 ACCESS results from two rural Missouri schools to determine if there was a significant difference in the results of seventh and eighth grade ELLs enrolled in READ 180 and seventh and eighth grade ELLs enrolled in traditional communication arts classes. The individual mean gain in pre-assessment and post-assessment reading, writing, literacy, and overall scale scores were calculated for ELLs enrolled in READ 180 and those ELLs enrolled in communication arts classes. A combination of *F*-tests, *t*-tests, and *z*-tests were conducted on the data from the experimental READ 180 group and the control communication arts group to determine if there was a significant difference in the mean gain in ACCESS scale scores.

Null hypothesis. The null hypothesis was rejected if the alpha level was $\leq .05$.

H□: There is not a significant difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled in READ 180.

Alternative hypothesis. H_a: There is a significant difference in the mean gain in ACCESS scores for ELLs enrolled in READ 180 and ELLs not enrolled in READ 180.

Reading scale scores. Research questions one, five, and nine addressed the different grade levels and academic years of reading scale scores:

1. What is the difference in the mean gain in reading scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
5. What is the difference in the mean gain in reading scale scores on the

ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?

9. What is the difference in the mean gain in reading scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

Although the mean scale score of ELLs enrolled in READ 180 did demonstrate gains in reading, there was not specific evidence of a significant difference in mean gain of ELLs enrolled in READ 180 in comparison to ELLs enrolled in communication arts classes. There was not a significant difference found in any of the three research questions that examined the reading scale scores in this study; notwithstanding, READ 180 is marketed as an intervention to improve the student performance of ELLs on state assessments (Scholastic, 2010).

Writing scale scores. Research questions two, six, and 10 addressed the different grade levels and years of writing scale scores:

2. What is the difference in the mean gain in writing scale scores on the ACCESS test between 7seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
6. What is the difference in the mean gain in writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?
10. What is the difference in the mean gain in writing scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

There was a significant difference in the second year of seventh grade writing scale scores addressed in question five. The mean gain for the seventh grade ELLs enrolled in READ 180 was 15.96, and for the seventh grade ELLs enrolled in communication arts the mean gain was 8.43. Hence, the *P*-value was equal to 0.04, which was less than $\alpha = .05$. The other two subtests did not demonstrate a significant mean gain difference between ELLs enrolled in READ 180 and those not enrolled in READ 180.

Literacy scale scores. Research questions three, seven, and 11 addressed the different grade levels and years of literacy scale scores:

3. What is the difference in the mean gain in literacy scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
7. What is the difference in the mean gain in literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?
11. What is the difference in the mean gain in literacy scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

There were significant findings among the students who were enrolled in READ 180 for two consecutive years in the area of literacy scale scores. The mean gain in literacy scale scores for ELLs enrolled in READ 180 for two consecutive years was 30.25, and the mean gain in overall scale scores for ELLs enrolled in communication arts was 17. The *P*-value was equal to .02, which was less than $\alpha = .05$. However, the ELLs enrolled in

READ 180 did not demonstrate a significant difference in mean gains in the other two cohorts.

Overall scale scores. Research questions four, eight, and 12 addressed the different grade levels and years of overall scale scores:

4. What is the difference in the mean gain in overall scale scores on the ACCESS test between seventh grade ELLs enrolled in the READ 180 program and those seventh grade ELLs not enrolled in READ 180?
8. What is the difference in the mean gain in overall scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program and those eighth grade ELLs not enrolled in READ 180?
12. What is the difference in the mean gain in overall scale scores on the ACCESS test between eighth grade ELLs enrolled in the READ 180 program for two years and those eighth grade ELLs not enrolled in READ 180?

There were significant findings among the students who were enrolled in READ 180 for two consecutive years in the area of overall scale scores. The mean gain in overall scale scores for ELLs enrolled in READ 180 for two consecutive years was 32.25, and the mean gain in overall scale scores for ELLs enrolled in communication arts was 14.78. The *P*-value was equal to .006, which was significantly less than $\alpha = .05$. The ELLs enrolled in READ 180 did not demonstrate a significant difference in mean gain in the other two cohorts.

Implications

There was only a significant difference found in three of the 12 research questions, which substantiates the claim of Kim et al. (2011): "Collectively, the most recent experimental studies suggest that READ 180 has differential effects on students of varying grades and reading achievement" (p. 187). Although there were some areas in which significantly different mean gains were found, the majority of the test results yielded insignificant differences. Kim et al. (2011), contended that while many districts have implemented READ 180, "there is limited empirical evidence to support its effectiveness" (p.183).

School districts must analyze their own results of ELLs enrolled in READ 180 to determine if the program is beneficial to their students instead of relying solely on Scholastic's claims of success. According to Scholastic (2010), "Thirty-seven studies have proven that READ 180 has a positive impact on student achievement across multiple grade levels and multiple types of student populations" (p. 2). Yet, this particular study did not find a significant difference in results in any of the reading subtests. It would behoove districts to conduct their own analyses of the READ program to determine if it is worth the investment.

Scholastic (2013a) claimed, "Studies have conclusively shown that when schools implement and follow the Instructional Model, significant gains can be expected after 1 or 2 years of program participation" (para. 2). The results of this study indicated the greatest gains and significant differences occurred after ELLs were enrolled in READ 180 for two consecutive years compared to ELLs not enrolled in READ 180 for two years. Districts may need to examine the length of time ELLs are enrolled in READ 180

to determine its effectiveness. It may take ELLs time to acclimate to the structure of the program model. If students were enrolled in READ 180 for two consecutive years, they would already be familiar with the model and could focus on the content. The teachers would not have to train the students on the program structure during the second year, which would increase instructional content time.

Recommendations for Further Study

In the future, the population sample size should be expanded to include more ELLs, since most of the subtests contained sample sizes of less than 30 students. Additionally, in order to broaden the study, it would be beneficial to include more school districts or larger school districts in the study that have implemented the READ 180 program and have more than 10% ELLs. Both of the school districts in this study had ELL populations that exceeded 20%, but still did not have more than 30 ELLs enrolled in a grade level of READ 180 for any given year. The study would need to include some of the other states included in the WIDA consortium to find adequate sample populations.

Other factors that may impede student achievement were not considered in this study. Students who are enrolled in READ 180 are typically reading below grade level; however, each district established its own eligibility requirements for students who would benefit from the program. Therefore, an analysis of eligibility requirements of ELLs enrolled in READ 180 in addition to other factors such as attendance, behavior, and identified disabilities that impede achievement may be constructive in the analysis of improvement in student performance.

Although the ACCESS is used as the ELP assessment in 35 states, there are other ELP assessments that could be factored into future studies (Ramsey & O'Day, 2010;

WIDA, 2014a). At the time of this study, Missouri had only been a part of the WIDA consortium for three years, and the ACCESS had been developed for nine years (WIDA, 2014a). Moreover, other assessment tools, such as grade level state tests and SRI scores, could be evaluated and included in the study to give a broader perspective of the effectiveness of the READ 180 program (Sprague et al., 2011). The third AMAO specifically stipulates a percentage of ELLs making AYP in the area of communication arts; therefore, an analysis of the results of READ 180 students on grade level state assessments would be useful (Boyle et al., 2010; Cook et al., 2012).

Classroom observations could be made to determine if sufficient fidelity to the READ 180 program is evident. READ 180 is a comprehensive 90-minute instructional model divided into 30-minute rotations (Melekoglu, 2011). The three main sessions are: computer time utilizing Scholastic's software, whole group instruction of shared reading and skills lessons, and independent reading (Slavin et al., 2008). This study did not examine the fidelity to the instructional model.

Salinger et al. (2010) strongly suggested, "In order to effectively implement READ 180, teachers need a firm understanding of its instructional model, resources, procedures, and approaches to helping struggling readers" (p. ix). He further contended the training for teachers should be on-going and that teachers needed continued in-class support and coaching for the model to be effective (Salinger et al., 2010). An analysis of READ 180 professional development was not included in this study. In the future, student and teacher surveys would also be beneficial to adequately address concerns of fidelity and preparedness of both students and teachers.

Summary

READ 180 employs reading strategies including fluency exercises, question stems, graphic organizers, building background knowledge, and cooperative learning techniques (Schenck et al., 2011). The mean scale score gains were statistically significant in three of the twelve research questions posed in this project; however, there were not significant differences in the mean gains in any of the reading scale score subtests. Two of the three statistically significant differences in mean gains were in students who were enrolled in READ 180 for two consecutive years. Due to the mixed results of these analyses, it would behoove school districts to delve further into multiple assessments results of ELLs enrolled in READ 180 to determine its effectiveness.

Appendix A

IRB Approval

LINDENWOOD

LINDENWOOD UNIVERSITY ST. CHARLES, MISSOURI

DATE: November 4, 2013

TO: Carissa Gober
FROM: Lindenwood University Institutional Review Board

STUDY TITLE: [500778-1] "READ180: Is It An Effective Reading Intervention for English Language Learners?"
IRB REFERENCE #:
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: November 4, 2013
EXPIRATION DATE: November 4, 2014
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this research project. Lindenwood University Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.
This submission has received Expedited Review based on the applicable federal regulation. Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the IRB.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the completion/amendment form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of November 4, 2014.

Please note that all research records must be retained for a minimum of three years.

f you have any questions, please contact Tameka Tammy Moore at xxx-xxx-xxxx or xxxxxxxxxxxxxx.edu. Please include your study title and reference number in all correspondence with this office.

If you have any questions, please send them to IRB@lindenwood.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Lindenwood University Institutional Review Board's records.

Appendix B

Request for Secondary Data

Permission Letter for Superintendent

January 6, 2014

Dear Superintendent _____,

I am conducting a research project entitled : *READ 180: Is It An Effective Reading Intervention for English Language Learners?* in partial fulfillment of the requirement for a doctoral degree in Instructional Leadership at Lindenwood University. The research gathered should assist in providing insights and perspectives into the effectiveness of the READ 180 program in regards to English Language Learners.

I am seeking your permission as the superintendent of the _____ School District to release ACCESS scores for all 7th and 8thgrade students during the 2011-2013 school years as part of the data collection and analysis process. I also will need which communication arts class the student was enrolled in each year.

Consent is voluntary, and you may withdraw from the study at any time without penalty. The identity of the participants, as well as the identity of the school district, will remain confidential and anonymous in the dissertation or any future publications of this study. The name and MOSIS number of each student will be expunged from the WIDA reports and assigned a random number.

Please do not hesitate to contact me with any questions or concerns about participation (phone: xxx-xxx-xxxx or electronic mail: xxxxxxxxxxxx.com. You may also contact the dissertation advisor for this research study, Dr.Trey Moeller, (phone: xxx-xxx-xxxx or electronic mail: xxxxxxxxxxx.org). A copy of this letter and your written consent should be retained by you for future reference.

Yours truly,

Carissa Gober
Doctoral Candidate

Appendix C

Research Site Approval Permission Letter

Permission Letter

I, _____, grant permission for Carissa Gober to obtain a copy of the ACCESS test scores for the school years of 2010-2013 as part of a research project entitled: *READ 180: Is It An Effective Reading Intervention for English Language Learners?*

By signing this permission form, I understand that the following safeguards are in place to protect the participants:

1. I may withdraw my consent at any time without penalty.

2. The identity of the participants, as well as the identity of the school district will remain confidential and anonymous in the dissertation or any future publications of this study.

I have read the information above, and any questions that I have posed have been answered to my satisfaction. Permission, as explained, is granted.

_____ _____

Superintendent's Signature Date

References

Abedi, J., & Dietel, R. (2004). *Challenges in the No Child Left Behind Act for English language learners* (Vol. 7, pp. 1-6, Issue brief). Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing (CRESST)/UCLA. Retrieved from http://www.cse.ucla.edu/products/policy/cresst_policy7.pdf

Abedi, J., & Linquanti, R. (2012). *Issues and opportunities in improving the quality of large scale assessment systems for English language learners* [Scholarly project]. In *Understanding Language*. Retrieved from http://ell.stanford.edu/publication/ issues-and-opportunities-improving-quality- large-scale-assessment-systems-ells

Akhtar, S., & Kramer, S. (1998). *The colors of childhood: Separation-individuation across cultural, racial, and ethnic differences*. Northvale, NJ: Jason Aronson.

Alvermann, D. (2004). Seeing and then seeing again. *Journal of Literacy Research, 36*(3), 289-302. doi: 10.1207/s15548430jlr3603_2

American Institutes for Research. (n.d.). READ 180. Retrieved from http://www.intensiveintervention.org/chart/instructional-intervention-tools/12871

American Institutes for Research. (2012, May 11). National evaluation of Title III finds wide variances in how states and districts define and implement policies and programs for English learners. Retrieved from http://www.air.org/news/press-release/ national-evaluation-title-iii-finds-wide-variances-how-states-and-districts

American Youth Policy Forum. (2009). *Moving English language learners to college and career readiness* (Issue brief). (2009). Retrieved http://www.aypf.org/documents/ELLIssueBrief.pdf

Ariza, E. N., Morales-Jones, C. A., Yahya, N., & Zainuddin, H. (2002). *Why TESOL?: Theories and issues in teaching English as a second language for K-12 teachers*. Dubuque, IA: Kendall/Hunt Pub.

August, D., Estrada, J., & Boyle, A. (2012). *Supporting English language learners a pocket guide for state and district leaders* [Scholarly project]. In *American Institute for Research*. Retrieved from http://www.air.org/files/ELL_Pocket_Guide1.pdf

August, D., & Shanahan, T. (2006). *Developing literacy in second-language learners: Report of the national literacy panel on language-minority children and youth* (pp. 1-9). Mahwah, NJ: Lawrence Erlbaum Associates. Retrieved from http://www.cal.org/projects/archive/nlpreports/Executive_Summary.pdf

Ballantyne, K. G., Sanderman, A. R., & Levy, J. (2008). *Educating English language learners: Building teacher capacity roundtable report* (Rep. No. ED-03-CO-0036). Washington, DC: National Clearinghouse for English Language Acquisition. Retrieved from http://www.ncela.us/files/uploads/3/EducatingELLsBuildingTeacherCapacityVol1.pdf

Barron, K., & Oxnam, G. (2012, June). *A difficult journey: Challenges for English language learners how two states are helping English language learners succeed* [Scholarly project]. In *Appalachia Regional Comprehensive Center at Edvantia*. Retrieved from http://sites.edvantia.org/pdta/pdf/ARCCBrief_ELL%20Equity_2012.pdf

Blank, C., & Lieb, D. (2011, February 25). Census figures show SW Mo. population

growth. *Southeast Missourian*. Retrieved from http://www.semissourian.com/story/1706157.html

Bluman, A. G. (2010). *Elementary statistics a step by step approach* (5th ed.). New York, NY: McGraw Hill.

Bolos, N. (2012). Successful strategies for teaching reading to middle grades English language learners teachers can employ a variety of classroom-tested strategies to teach reading to English language learners. *Middle School Journal*. Retrieved from http://www.amle.org/BrowsebyTopic/DiversityandSocialEquity/ DivDet/ TabId/185/ArtMID/791/ArticleID/283/Reading-English-Language-Learners.aspx

Boyle, A., Taylor, J., Hurlburt, S., & Soga, K. (2010). *Title III accountability: Behind the numbers ESEA evaluation brief: The English language acquisition, language enhancement, and academic achievement act* (pp. 1-26, Issue brief No. ED-04-CO- 0025/0017). Washington, D.C.: U.S. Department of Education. Retrieved from http://www2.ed.gov/rschstat/eval/title-iii/behind-numbers.pdf

Bradley, K. (2009, December 23). *Quasiexperimental research*. Retrieved from http://www.education.com/reference/article/quasiexperimental-research/

Calderón, M. (2007). *Teaching reading to English language learners, grades 6-12: A framework for improving achievement in the content areas*. Thousand Oaks, CA: Corwin Press.

Campaign for High School Equity. (2013). *Maintaining a focus on subgroups in an era of Elementary and Secondary Education Act waivers* (pp. 1-48, Publication). Retrieved from http://lulac.org/assets/pdfs/WaiversReport_R8.pdf

Chall, J. S. (1967). *Learning to read: The great debate; an inquiry into the science, art,*

and ideology of old and new methods of teaching children to read, 1910-1965. New York, NY: McGraw-Hill.

Chambers, B., Slavin, R., Madden, N., Abrami, P., Logan, M., & Gifford, R. (2011). Small-group, computer-assisted tutoring to improve reading outcomes for struggling first and second graders. *The Elementary School Journal, 111*(4), 625-640. doi: 10.1086/659035

Cheung, A. C. (2012). Effective reading programs for Spanish-dominant English language learners (ELLs) in the elementary grades: A synthesis of research. *Review of Educational Research, 82*(4), 351-395. Retrieved from http://www.jstor.org/stable/10.2307/41812112?ref=searchgateway:f0905f9588b73ee8aac9af02ba466e69

Cheung, A. C., & Slavin, R. E. (2005). Effective reading programs for English language learners and other language-minority students. *Bilingual Research Journal, 29*(2), 241-267. doi: 10.1080/15235882.2005.10162835

Cheung, C. K., & Slavin, R. E. (2013). Effects of educational technology applications on reading outcomes for struggling readers: A best-evidence synthesis. *Reading Research Quarterly, 48*(3), 277-299. doi: 10.1002/rrq.50

Cipriani-Sklar, R. (2006). Generating enriched literacy experiences for older English language learners. *Reaching Reluctant Readers*, *1*, 14-15. Retrieved from http://www.randomhouse.com/highschool/RHI_magazine/pdf/RHI06.pdf

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. New York, NY: Routledge.

Coleman, R., & Goldenberg, C. (2012). The Common Core challenge for ELLs.

Principal Leadership, 12, 46-51.

Collier, V. P., & Thomas, W. P. (2004). The astounding effectiveness of dual language education for all. *National Association for Bilingual Education Journal for Research and Practice, 2*(1), 1-20. Retrieved from http://njrp.tamu.edu/2004/PDFs/Collier.pdf

Common Core State Standards. (n.d.). Application of Common Core State Standards for English language learners. Retrieved from http://www.corestandards.org/assets/application-for-english-learners.pdf

Cook, G. (2009). WIDA focus on growth. Retrieved from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CCsQFjAC&url=http%3A%2F%2Fwww.colquitt.k12.ga.us%2FPortals%2FColquitt%2FDistrict%2Fdocs%2FESOL_ACCESS_Scores_Interpretation%255B1%255D.ppt&ei=OUs7VO_5DJKcyASnuoGwDg&usg=AFQjCNFwwKJ0Ifdt2r947Hjc9aIKoyMupg&sig2=7kGfOSnoDizZKNicuDbLng

Cook, G., Linquanti, R., Chinen, M., & Jung, H. (2012). *National evaluation of Title III implementation supplemental report— exploring approaches to setting English language proficiency performance criteria and monitoring English learner progress* (pp. 1-134) (United States, Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, Washington, DC). Retrieved from https://www2.ed.gov/rschstat/eval/title-iii/implementation-supplemental- report.pdf.

Costenino de Cohen, C., Deterding, N., & Chu Clewell, B. (2005). *Who's left behind? immigrant children in high and low LEP schools*. Retrieved

from http://www.urban.org/UploadedPDF/411231_whos_left_behind.pdf

Crandall, J., Jaramillo, A., Olsen, L., & Krefft Peyton, J. (2002). *Using cognitive strategies to develop English language and literacy* (United States, Department of Education, Educational Research and Improvement). ERIC Clearinghouse on Languages and Linguistics. Retrieved from http://www.ericdigests.org/2003-3/using.htm

Crouch, R., & Zakariya, S. B. (2012, May). The United States of education: The changing demographics of the United States and their schools. Retrieved from http://www.centerforpubliceducation.org/You-May-Also-Be-Interested-In-landing-page-level/Organizing-a-School-YMABI/The-United-States-of-education-The-changing-demographics-of-the-United-States-and-their-schools.html

Cummins, J. (1979). *Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters*. Toronto: Ontario Institute for Studies in Education.

Daggett, W. R., & Hasselbring, T. S. (2007). *What we know about adolescent reading* [Scholarly project]. In *Maine Department of Education*. Retrieved http://www.maine.gov/education/diploma/adolescentreading.pdf

Davies, A. Z. (2007). Characteristics of adolescent Sierra Leonean refugees in public schools in New York City. *Education and Urban Society, 40*(3), 361-376. doi: 10.1177/0013124507304453

De Winter, J. (2013). Using the student's t-test with extremely small sample sizes. *Practical Assessment, Research & Evaluation, 18*(10), 1-12. Retrieved from

http://pareonline.net/getvn.asp?v=18&n=10.

Dobbs Santos, S. (2012). *RtI intervention focus: Sight word recognition*. McDonough, GA: Dr. Sherri Dobbs Santos.

Dove, M., & Honigsfeld, A. (2010). ESL coteaching and collaboration: Opportunities to develop teacher leadership and enhance student learning. *TESOL, 1*(1), 3-22. Retrieved from http://www.crosscultured.com/documents/ELL%20ESL%20Website/eslcoteacher.pdf

Echevarria, J., Vogt, M., & Short, D. (2012). *Making content comprehensible for English learners: The SIOP model*. Boston, MA: Pearson.

The Economic and Social Research Institute. (2012). *Minority population growth— the new boom an analysis of America's changing demographics* [Brochure]. Author. Retrieved from http://www.esri.com/library/brochures/pdfs/minority-population-growth.pdf

English-Language Learners. (2011). *Education Week*. Retrieved from http://www.edweek.org/ew/issues/english-language-learners/

Flores, S. M., Batalova, J., & Fix, M. (2012). *The educational trajectories of English language learners in Texas* (pp. 1-30, Publication). Washington, DC: Migration Policy Institute.

Fortuny, K., & Chaudry, A. (2011). *Children of immigrants growing national and state diversity* (pp. 1-10, Issue brief No. 5). Washington, DC: Urban Institute. Retrieved from http://www.urban.org/UploadedPDF/412433-children-of-immigrants-brief5-nat-state-diversity.pdf

Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). *Practical*

guidelines for the education of English language learners: Practical guidelines for the education of English language learners. Houston, TX: Center on Instruction. Retrieved from http://www.centeroninstruction.org/files/ELL1-Interventions.pdf

Fratt, L. (2007, June). Teacher education programs address a growing number of non-English speaking students. *District Administration*. Retrieved from http:// www.districtadministration.com/article/professional-development- new-century

Gándara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). *Listening to teachers of English language learners* [Scholarly project]. In *The Center for the Future of Teaching and Learning*. Retrieved from http://www.cftl.org/documents/2005/ listeningforweb.pdf

Gass, S. M. (1997). *Input, interaction, and the second language learner*. Mahwah, NJ: Lawrence Erlbaum Associates.

Gibbons, P. (2009). *English learners, academic literacy, and thinking: Learning in the challenge zone*. Portsmouth, NH: Heinemann.

Gil, L., & Bardack, S. (2010, May 31). *Common assumptions vs. the evidence: English language learners in the United States a reference guide* [Scholarly project]. In *American Institutes for Research*. Retrieved from http://www.air.org/sites/ default/files/downloads/report/ELL_Assumptions_and_Evidence_0.pdf

Goldenberg, C., & Coleman, R. (2010). *Promoting academic achievement among English learners: A guide to the research*. Thousand Oaks, CA: Corwin.

Gottlieb, M. (2012). *Common language assessment for English learners*. Bloomington, IN: Solution Tree Press.

Grantmakers for Education. (2010). *Investing in our next generation: A funder's guide to addressing the educational opportunities and challenges facing English language learners* (Issue brief). Retrieved from http://carnegie.org/fileadmin/Media/Publications/GFE_Investing_in_Our_Next_Generation.pdf

Great Schools. (2014). *Definitions*. Retrieved from http://www.greatschools.org/definitions/or/nclb.html

Hansen-Thomas, H. (2008). Kappa Delta Pi. *Kappa Delta Pi Record,* (Summer), 165-169. Retrieved from http://ritell.org/Resources/Documents/General%20Education%20Resources/Sheltered_Instruction_for_Mainstream%5B1%5D.pdf

Helman, L. (2012). *Literacy instruction in multi-lingual classrooms engaging English language learners in elementary school*. New York, NY: Teachers College Press.

Herrera, S. G., Holmes, M., & Kavimandan, S. (2011). *Crossing the vocabulary bridge: Differentiated strategies for diverse secondary classrooms*. New York, NY: Teachers College Press.

High, J., & Kagan, S. (1993). *Second language learning through cooperative learning*. San Juan Capistrano, CA: Kagan Cooperative Learning.

Hispanic population growth in Missouri. (n.d.). Retrieved from http://www.missourieconomy.org/indicators/population/hispanic/hispanic_en.stm

Ivey, G., & Fisher, D. (2006). *Creating literacy-rich schools for adolescents*. Alexandria, VA: Association for Supervision and Curriculum Development.

Jameson, J. H. (1998). *Enriching content classes for secondary ESOL students*. Washington, DC: Center for Applied Linguistics.

Jensen, E. (2009). *Teaching with poverty in mind: What being poor does to kids' brains*

and what schools can do about it. Alexandria, VA: ASCD.

Johnson, K. (2006). *Demographic trends in rural and small town America* [Scholarly project]. In *Carsey Institute University of New Hampshire*. Retrieved from http://www.carseyinstitute.unh.edu/publications/Report_Demographics.pdf

Kim, J. S. (2008). Research and the reading wars. *The Phi Delta Kappan, 89*(5), 372-375. Retrieved from http://www.jstor.org/stable/10.2307/20442503?ref=searchgateway:a35b92534aa441d0d1c2bd97ce99b29d

Kim, J. S., Capotosto, L., Hardy, A., & Fitzgerald, R. (2011). Can a mixed-method literacy intervention improve the reading achievement of low-performing elementary school students in an after-school program? Results from a randomized controlled trial of READ 180 enterprise. *Educational Evaluation and Policy Analysis, 33*(2), 183-201. Retrieved from http://www.jstor.org/stable/10.2307/41238546?ref=searchgateway:daa545bcd47242f8a41421caa502502f

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. New York, NY: Pergamon.

Krimmel, E. (2012, June 18). Using theme-based projects to motivate reluctant ESL high school students. Retrieved from http://www.readinghorizons.com/blog/post/2012/06/18/Theme-based-Projects-to-Motivate-ESL-High-School-Students.aspx

Lang, L., Torgesen, J., Vogel, W., Chanter, C., Lefsky, E., & Petscher, Y. (2009). Exploring the relative effectiveness of reading interventions for high school students. Journal of Research on Educational Effectiveness, 2(2), 149–175.

Lau et al. v. Nichols et al., 414. U.S. 563 (January 21, 1974).

Lazos Vargas, S. R. (2002). Missouri, the war on terrorism, and immigrants: Legal

challenges post 9/11. *Missouri Law Review, 67*(4), 775-830.

Lesaux, N. K. (2012). Reading and reading instruction for children from low-income and non-English-speaking households. *The Future of Children, 22*(2), 73-88. doi: 10.1353/foc.2012.0010

Literacy Information and Communication System. (n.d.). Assessment strategies and reading profiles: Print skills (Alphabetics). Retrieved from http://lincs.ed.gov/readingprofiles/MC_Word_Recognition.htm

MacDonald, H. (2012, Winter). California's demographic revolution. *City Journal*. Retrieved from http://www.city-journal.org/ 2012/22_1_california-demographics.html

Maxwell, L. A. (2012, May 11). Study: Most ELLs are in districts that fall short of federal goals. *Education Week*. Retrieved from http://blogs.edweek.org/ edweek/learning-thelanguage/2012/05/_need_headline_for_title_iii_r.html

Maxwell, L. A. (2013a, October 28). ESL and classroom teachers team up to teach Common Core. *Education Week*, *33*(10), 9-12. Retrieved from http://www.edweek.org/ew/articles/2013/10/30/10cc-eslteachers.h33.html

McKenzie, B. (2012, March 27). Why mastering English is a must — but not always so easy. *The Dallas Morning News*. Retrieved from http://educationfrontblog.dallasnews.com/ 2012/03/why-mastering-english-is-a-mus.html/?nclick_check=1

Melekoglu, M. A. (2011). Impact of motivation to read on reading gains for struggling readers with and without learning disabilities. *Learning Disability Quarterly, 34*(4), 248-261. doi: 10.1177/0731948711421761

MetriTech, Inc. - President's Message. (n.d.). Retrieved https://www.metritech.com/about_president.aspx

Migration Policy Institute (2011). Missouri social and demographic characteristics. Retrieved http://www.migrationinformation.org/DataHub/charts/10.2010.shtml

Missouri 2010-2011 four-year high school graduation rate. (2012, November 26). Retrieved from http://eddataexpress.ed.gov/state-report.cfm?state=MO&submit.x=21&submit.y=11&submit=View

Missouri 2010 Census data confirms sustained growth of Hispanic population 79.2 percent growth 2000-2010. (2011, March 1). *Cambio Center*. Retrieved from http://www.cambio.missouri.edu/ News/20110301_Census2010Note.pdf

Missouri Department of Elementary and Secondary Education. (2011, January 13). ACCESS for ELLs assessment/W-APT news and updates. Retrieved from http://dese.mo.gov/divimprove/assess/ell.html

Missouri Department of Elementary and Secondary Education, Migrant and English Language Learner. (2012). *Title III – No Child Left Behind Act of 2001 English language learning*. Jefferson City, MO. Retrieved from http://dese.mo.gov/qs/me/documents/qs-ell-Guide-for-Dist-Rev-01-14.pdf

Missouri Department of Elementary and Secondary Education. (2013a). Quick Facts. Retrieved from http://mcds.dese.mo.gov/quickfacts/SitePages/DistrictInfo.aspx

Missouri Department of Elementary and Secondary Education. (2013b, February 12). State Board of Education. Retrieved http://www.dese.mo.gov/overview.html

Missouri Department of Elementary and Secondary Education. (2013c, December).

Understanding Title III Annual Measurable Achievement Objectives (AMAOs) 2013-2014. Retrieved from http://dese.mo.gov/qs/me/documents/qs-amao-Understanding-Title-III-AMAO-13-14.pdf

Missouri Department of Elementary and Secondary Education. (2014, January). *Developing an English Language Learning Program*. Retrieved from http://dese.mo.gov/qs/me/documents/qs-ell-developing-ell-program-01-2014.pdf

Missouri minority population grows at faster pace. (n.d.). *News-Leader*. Retrieved from http://www.newsleader.com/article/20110224/NEWS11/110224015/ Missouri-minority-population-grows-faster-pace

Moustafa, M., & Maldonado-Colon, E. (1999). Whole-to-parts phonics instruction: Building on what children know to help them know more. *The Reading Teacher, 52*(5), 448-458. Retrieved from http://www.jstor.org/stable/ 10.2307/20202102?ref=searchgateway:b0eb8673ea2a8bdde8c36659f977488e

National Board for Professional Teaching Standards. (2010). *English as a new language standards*. (2nd ed.). Retrieved from http://www.nbpts.org/sites/default/ files/ documents/certificates/nbpts-certificate-emc-enl-standards.pdf

National Education Association. (2008). *English language learners face unique challenges* (pp. 1-4, Issue brief). Washington, DC. Retrieved from http://www.weac.org/Libraries/PDF/ELL.sflb.ashx

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (United States, Department of Health and Human Services, National Institute of Health). Washington, DC. Retrieved from

http://www.nichd.nih.gov/publications/pubs/nrp/pages/smallbook.aspx

Northwest Regional Educational Laboratory. (2005). Thematic instruction. Retrieved from http://www.netc.org/focus/strategies/them.php

Padrón, Y. N., Waxman, H. C., & Riviera, H. H. (2002). *Educating Hispanic students: Obstacles and avenues to improved academic achievement* (Rep. No. R306A60001-96). Santa Cruz, CA: E Center for Research on Education, Diversity & Excellence.

Papalewis, R. (2004, March). Struggling middle school readers: Successful, accelerating intervention. Retrieved from http://www.freepatentsonline.com/article/Reading-Improvement/117035258.html

Pennington, M. (2011, January 28). Different strategies for teaching sight words to beginning readers - reading horizons. Retrieved from http://www.readinghorizons.com/blog/post/2011/01/28/Different-Strategies-for-Teaching-Sight-Words-to-Beginning-Readers.aspx

Peregoy, S. F., & Boyle, O. (2001). *Reading, writing & learning in ESL: A resource book for K-12 teachers*. New York, NY: Longman.

Poston, B. (2009). An exercise in personal exploration: Maslow's Hierarchy of Needs. *Association of Surgical Technologists,* 347-353. Retrieved from http://www.ast.org/ publications/Journal%20Archive/2009/8_August_2009/ CE.pdf

Pottinger, J. S. (1970). *DHEW memo regarding language minority children* (United States, Department of Health, Education and Welfare). Washington, DC.

Public Education Network, & National Coalition for Parent Involvement in Education.

(n.d.). *NCLB Action Briefs Standards and Assessments* (Issue brief). Retrieved from http://www.ncpie.org/nclbaction/standards_assessment.html

Ramsey, A., & O'Day, J. (2010). *Title III policy: State of the states ESEA evaluation brief: The English language acquisition, language enhancement, and academic achievement act* (United States, Department of Education). Washington, D.C. Retrieved from https://www2.ed.gov/rschstat/eval/title-iii/state-of-states.pdf

Rasmussen, M. B. (2010, Summer). Issues in the assessment of English language learners. *Accelerate*, *10*, 2-5.

Reeves, J. R. (2006). Secondary teacher attitudes toward including English-language learners in mainstream classrooms. *The Journal of Educational Research, 99*(3), 131-143. doi: 10.3200/JOER.99.3.131-143

Rennie, J. (1993, September). *ESL and Bilingual Program Models* (United States, Department of Education, Educational Research and Improvement). Retrieved from http://www.cal.org/resources/digest/rennie01.html

Robertson, K. (2008). No child left behind and the assessment of English language learners. Retrieved from http://www.colorincolorado.org/article/22763/

Robertson, K. (2009). Supporting ELLs in the mainstream classroom: Language tips. Retrieved from http://www.colorincolorado.org/article/33047/

Rodriguez, R. (2010, June 12). Bilingual education. Retrieved from http://www.tshaonline.org/handbook/online/articles/khb02

Romanova, N. (2009, Summer). Linguistic literacy and ELLs: A conceptual framework. *AccELLerate!*, *9*, 2-4.

Rubin, R., Abrego, M. H., & Sutterby, J. A. (2012). *Engaging the families of ELLs:*

Ideas, resources, and activities. Larchmont, NY: Eye on Education.

Rubinstein-Avila, E. (2003). Facing reality: English language learners in middle school classes. *English Education, 35*(2), 122-136.

Rumberger, R. W. (2006, October 1). *Tenth grade dropout rates by native language, race/ethnicity, and socioeconomic status* [Scholarly project]. In *University of California Linguistic Minority Research Institute*. Retrieved from http://eric.ed.gov/?id=ED533442

Salinger, T., Toplitz, M., Jones, W., Moorthy, S., & Rosenthal, E. (2010). *Implementation matters: Systems for success a descriptive study of READ 180, enterprise edition, In five urban middle schools* (pp. 1-50, Rep.). Washington, DC: American Institutes for Research. Retrieved from http://www.air.org/sites/default/files/downloads/report/READ_180_final_for_web_10-25-2010_v2_0.pdf

Schenck, A., Feighan, K., Coffey, D., & Rui, N. (2011). *Memphis Striving Readers Project evaluation report, year 4* (pp. 1-114) (United States, Department of Education, Striving Readers Program). Washington, DC: Research for Better Schools & RMC Research Corporation. Retrieved from https://www2.ed.gov/programs/strivingreaders/memphiseval32011.pdf.

Scholastic. (2010). *READ180: A decade of proven effectiveness* (pp. 1-12). New York, NY: Scholastic.

Scholastic. (2013a). *About READ 180 next generation*. Retrieved from http://read180.scholastic.com/reading-intervention-program/about

Scholastic. (2013b). *READ 180*. Retrieved from http://read180.scholastic.com/faqs

Scholastic. (2014). *Compendium of READ 180 research* (pp. 1-95, Rep. No. 632143). New York, NY: Scholastic. Retrieved March 21, 2014, from http://research.scholastic.com/sites/default/files/publications/R180_Compendium_2014.pdf

Schumann, J. H. (1986). Research on the acculturation model for second language acquisition. *Journal of Multilingual and Multicultural Development, 7*(5), 379-392. doi: 10.1080/01434632.1986.9994254

Scovel, T. (2001). *Learning new languages: A guide to second language acquisition*. Boston, MA: Heinle & Heinle.

Shawgo, K. (2005). *Report on research Read180* (pp. 1-2, Rep.). Evanston, IL: Minority Student Achievement Network.

SIOP - Learn about SIOP. (2014). Retrieved March 3, 2014, from http://www.cal.org/siop/about/

Slavin, R. E., Cheung, A. C., Groff, C., & Lake, C. (2008). Effective reading programs for middle and high schools: A best-evidence synthesis. *Reading Research Quarterly, 43*(3), 290-322. doi: 10.1598/RRQ.43.3.4

Slavin, R. E., Lake, C., Davis, S., & Madden, N. A. (2011). Effective programs for struggling readers: A best-evidence synthesis. *Educational Research Review, 6*, 1-26. doi: 10.1016/j.edurev.2010.07.002

Smith, S. J. (2010). Response to intervention and evidenced-based practices: where does technology fit? *Learning Disability Quarterly, 33*(4), 257-272. Retrieved from http://www.jstor.org/stable/10.2307/23053229?ref=search-gateway:6276a3bddeb9217db7669b493d0b103e

Smith, W. L. (1990). *Policy regarding the treatment of national origin minority students who are limited English proficient* (United States, Department of Education, Office of the Assistant Secretary For Civil Rights). Washington, DC. Retrieved from https://www2.ed.gov/about/offices/list/ocr/docs/lau1990_and_1985.html

Sprague, K., Zaller, C., Kite, A., & Hussar, K. (2011). *Springfield-Chicopee School Districts Striving Readers (SR) program year 4 report: Evaluation of implementation and impact* (pp. 1-130) (United States, Institute of Education Sciences, Elementary and Secondary Education). Providence, RI: The Educational Alliance at Brown University. Retrieved from http://www2.ed.gov/programs/strivingreaders/springfieldeval42011.pdf

Staehr Fenner, D. (2013a, June 13). Year-end review: A recap of our CCSS for ELLs posts (part 1) [Web blog post]. Retrieved from http://blog.colorincolorado.org/2013/06/13/year-end-review-a-recap-of-our-ccss-for-ells-posts/

Staehr Fenner, D. (2013b, June 18). Year-end review: A recap of our CCSS for ELLs posts (part 2) [Web log post]. Retrieved March 20, 2014, from http://blog.colorincolorado.org/2013/06/18/year-end-review-a-recap-of-our-ccss-for-ells-posts-part-2/

Tanenbaum, C., Boyle, A., Soga, K., Carlson Le Floch, K., Golden, L., Petroccia, M., O'Day, J. (2012). *National evaluation of Title III implementation— report on state and local implementation* (United States, Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service,). Washington, D.C. Retrieved from https://www2.ed.gov/rschstat/eval/title-iii/state-local-implementation-report.pdf

Tang, D. (2011a, February 26). Numbers tell story of demographic change. Retrieved from http://www.news-leader.com/article/20110227/NEWS01/ 102270363/ Numbers-tell-story-demographic-change

Tang, D. (2011b, February 28). St. Louis' population ebbs; Missouri diversity grows. *USA Today*. Retrieved from http://usatoday30.usatoday.com/news/nation/census/ 2011-02-24-missouri-census_N.htm

Teemant, A., & Reveles, C. (2012). Mainstream ESL instructional coaching: A repeated measures replication study. *INTESOL, 9*(1), 17-33. Retrieved from http://journals.iupui.edu/index.php/intesol/article/viewFile/15536/15585

TESOL pre-k–12 English language proficiency standards framework [Scholarly project]. (2006). In *Teachers of English to Speakers of Other Languages (TESOL)*. Retrieved from http://www.tesol.org/docs/books/ bk_prek-12elpstandards_framework_318.pdf?sfvrsn=2

The National Clearinghouse for English Language Acquisition. (2011). The growing numbers of English Learner students. Retrieved http://www.ncela.gwu.edu/files/ uploads/9/growingLEP_0809.pdf

Thompson, L. W. (2004). *Literacy development for English language learners: Classroom challenges in the NCLB age* (pp. 1-10). CTB/McGraw Hill. Retrieved from http://www.schrederplanetarium.com/uploaded/ Dept/is/general/Teacher_Section/English_Language_Learners.pdf

Turkan, S., Bicknell, J., & Croft, A. (2012). *Effective practices for developing literacy skills of English language learners in the English language arts classroom* (pp. 1-31, Rep. No. ETS RR–12-03). Princeton, NJ: Educational Testing Service.

Retrieved from http://www.ets.org/Media/Research/pdf/RR-12-03.pdf

United States Department of Education. (n.d.). *Supplement not supplant provision of Title III of the ESEA* (pp. 1-6). Washington, DC. Retrieved from http://www2.ed.gov/programs/sfgp/supplefinalattach2.pdf

United States Department of Education. (2005, March 16). *Developing ELL programs: Lau v. Nichols*. Retrieved from http://www2.ed.gov/about/offices/list/ocr/ell/lau.html

United States Department of Education. (2009). *Adolescent literacy READ 180* (pp. 1-31). Washington, DC: What Works Clearinghouse. Retrieved from http://ies.ed.gov/ncee/wwc/pdf/intervention_reports/wwc_read180_102009.pdf

United States Department of Education. (2011, April 21). *Translation and Interpretation for English Learners Requirements under Title VI of the Civil Rights Act of 1964 Related to National Origin Discrimination and Use of Funds under Title III, Part A and Title I, Part A of the ESEA*. Retrieved from https://www2.ed.gov/programs/titleiparta/titleititleiii421.pdf

United States Department of Education. (2013a, January). *English language learners*. Retrieved from http://nces.ed.gov/

United States Department of Education. (2013b, April 05). *Lead & manage my school standards and assessment group and accountability group*. Retrieved from https://www2.ed.gov/admins/lead/account/saa.html

United States Department of Education. (2014a, March 07). *Index page for the ESEA flexibility page*. Retrieved from http://www2.ed.gov/policy/elsec/guid/esea-flexibility/index.html

United States Department of Education. (2014b). *Teacher shortage areas nationwide listing 1990-1991 through 2014-2015* (pp. 1-163). Washington, DC. Retrieved from http://www2.ed.gov/about/offices/list/ope/pol/tsa.doc

Urquhart, V., & Frazee, D. (2012). Characteristics of literacy-rich content-area classrooms. *Reading Across the Content Areas, 8*(6), 48-51. Retrieved from http://www.ascd.org/ascd-express/vol8/806-urquhart.aspx

Van Roekel, D. (2011). *Professional development for general education teachers of English language learners* (Issue brief). Retrieved from National Education Association Quality School Programs and Resources Department website: http://www.nea.org/assets/docs/PB32_ELL11.pdf

Vásquez, A., Hansen, A. L., & Smith, P. C. (2013). *Teaching language arts to English language learners* (2nd ed.). New York, NY: Routledge.

Verdugo, R. (2006). *A report on the status of Hispanics in education: Overcoming a history of neglect*. Washington, D.C.: National Education Association.

Walker, S. E., Dollar, S., & Amonker, R. G. (2007). Population characteristics and health service use by Latino Immigrants to southwest Missouri. *Great Plains Research: A Journal of Natural and Social Sciences,* Paper 868, 87-100.

Watkins-Goffman, L. (2001). *Lives in two languages: An exploration of identity and culture*. Ann Arbor, MI: University of Michigan Press.

Weaver, C. (1998). *Reconsidering a balanced approach to reading*. Urbana, IL: National Council of Teachers of English.

Williams, L. (2012). *The 2012 readers' choice top 100 products*. Retrieved from http://www.districtadministration.com/article/2012-readers-choice-top-100-

products

World-Class Instructional Design and Assessment. (2012). *The English language learner CAN DO booklet*. Madison, WI: Board of Regents of the University of Wisconsin System.

World-Class Instructional Design and Assessment. (2013). *LADDER for language learners coach guide*. Madison, WI: Board of Regents of the University of Wisconsin System.

World-Class Instructional Design and Assessment. (2014a). ACCESS for ELLs, developed by Center for Applied Linguistics (CAL). Retrieved from http://www.wida.us/assessment/ACCESS/

World-Class Instructional Design and Assessment. (2014b). *ACCESS for ELLs interpretative guide for score reports*. Madison, WI: The Board of Regents of the University of Wisconsin System.

World-Class Instructional Design and Assessment. (2014c). WIDA. Retrieved from http://www.wida.us/

Zacarian, D. (2011). *Transforming schools for English learners: A comprehensive framework for school leaders*. Thousand Oaks, CA: Corwin.

Vita

Carissa is a teacher education instructor for Crowder College and Missouri Southern State University. Previously, Carissa served the Carthage R-9 School District as an English to Speakers of Other Languages (ESOL) coach and teacher. She also taught Spanish and adult literacy for the Carthage R-9 School District and McAuley Regional Catholic School. During her career, Carissa has developed programming and curriculum for the respective school districts.

Carissa earned her Master's in Teaching with an Emphasis in ESOL from Pittsburg State University in 2008. In 2000, she earned a Bachelor's of Science in Spanish Education with a minor in English. Her love of languages and cultures has drawn her to lead and assist in leading trips to countries such as Spain, Morocco, Mexico, Germany, and Argentina.

Being a second-language learner, Carissa has been interested in the process of language acquisition. She often wondered if the existing data were the best indicator of student performance. The topic for this study arose from a genuine curiosity of what constitutes a beneficial reading program for English Language Learners (ELLs). Carissa has had to make scheduling and programming decisions for many ELLs during her professional career.