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Influence of Two Instructional Models on Reading Achievement of ESL Middle School Students

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Walden University

College of Education

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Thomasine Hassell

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Walden University

2019

Abstract

Influence of Two Instructional Models on Reading Achievement of ESL Middle School Students

by

Thomasine Hassell

MA, University of Phoenix, 2007

BS, Western Kentucky University, 1992

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

March 2019

Abstract

English as second language (ESL) students are not meeting reading proficiency standards compared to their native English-speaking middle school peers. To address the low achievement scores among ESL students, the study site implemented an instructional hub in which trained ESL resource teachers used the sheltered instruction observation protocol (SIOP) model. The purpose of this quasi-experimental study was to examine the difference in reading achievement scores between ESL students who participated in the instructional hub and those who participated in traditional instruction. Krashen's second language acquisition theory and Terrell's natural approach theory provided the framework for the study. Archival data from a sample of 70 ESL students were used for data analysis. A paired-samples *t* test was used to determine whether the groups reading mean scores (SIOP and traditional) significantly differed from pretest to post test. The results showed that the SIOP group significantly improved or changed their reading scores from pre to post scores, while students who were in traditional group did not. Findings may be used by school district administrators to help teachers use the SIOP model to help ESL students meet reading proficiency standards and graduate from school.

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Dedication

This milestone is dedicated to a very special woman, a woman who was a teenager when she brought me in this world. My whole reason for wanting to be successful in life was to assure her I was a blessing and not a curse. As the oldest of my three siblings, I saw much more of her pain, struggles, and at times defeat. She has shown me how to persevere during difficult times and overcome doubt that sometimes overshadows success. I am so thankful that she drove my brothers and me to be our best, sheltered us from the evils of this world, and lived to see our greatest accomplishments. I owe it all to God and the woman I will always call "Mama."

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How do I say thanks for all the things God has done for me? Things so undeserved yet he gave to prove his love for me. To God be the glory. I am so thankful to my husband for his prayers, words of encouragement, and sacrifices to allow me to grow professionally. I want to thank my son for sacrificing his “Mom” time and understanding my need to finish this project. I have always stated to him that “quitters never win” and “winners never quit.” So, I had to show my son that his Mom is a winner, although I wanted to quit many times. He encouraged me by a single statement one day. He said “Mom, just keep swimming.” That one statement made me realize that quitting was not an option. I want to thank my committee chair, Dr. Mary Hallums. She has been so patient with me and at times has given me the push I needed to continue on this journey. Also, to my “ram in the bush,” Dr. Peter Kiriakidis, thank you for giving me the boost I needed to finish my project. I can’t forget my very close friends who have stayed in my corner throughout this process. The race is not given to the swift, nor to the strong, but to those who endure till the end. Thank you, God, for your word. I believe.

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Section 1: The Problem

One of the greatest challenges for secondary schools is a refugee student who enrolls in school as a teen with limited or no schooling, no basic English skills, and no speaking skills (Edwards & Van Waas, 2014). The 2013 National Center for Education reported there are limited to no formal and informal programs to address English as Second Language (ESL) students' speaking and literacy skills in U.S. secondary schools (Kim & Garcia, 2014). The State of North Carolina faces the same dilemmas for the ESL student population. According to the North Carolina Department of Public Instruction (NCDPI, 2016), only 32 of the 110 Local Education Agencies (LEA) provide dual language/immersion programs.

Following this same trend, a school district located in North Carolina currently has no formal or informal ESL programs in any of its 25 schools (District Homepage, 2016, para 14). Although district staff have discussed having individual plans for each student who enrolls in the school district, the staff has not outlined specifics on what the plans are to address the needs of ESL students.

Rodriguez (2013) explained that bilingual and regular education teachers need to research effective teaching practices for ESL students to help them become academically and linguistically successful in the classroom. Instructional resources, tools, and training are not being supplied to regular education teachers when ESL students are mainstreamed in the traditional classroom environment (Colombo, McMakin, Jacobs, & Shestok, 2013). Consequently, ESL students are not passing achievement tests because of the lack of relevant teacher resources to develop instructional strategies for educators (Song, 2016).

Additionally, students in high-poverty/minority schools have more contact with uncertified teachers than highly qualified teachers (Sutcher, Darling-Hammond, & Thomas, 2016).

The Local Problem

The local problem was most ESL students at Fields T. Middle School (pseudonym) were not passing the state reading test. More than 553 students at Fields T. Middle School took the reading test in the school year 2015-2016. Thirty-seven students (4.89%) were ESL students. ESL students are those identified as 1st, 2nd, and 3rd-year students learning English as a new language (NCDPI, 2016). When compared to their non-ESL peers, 57.8% of the non-ESL students scored at or above Level III out of IV, while only 9.1% of the ESL students scored at or above the same level creating a 46.3% achievement gap in reading (NCDPI, 2016).

Fields T. Middle School located in North Carolina has a 19.7% ESL student population consists of Burmese refugee students who enrolled with no formal education (District website, 2016). The school implemented an ESL instructional hub in 2011 that pulled first, second, and third-year students from their core classes for 2 hours of reading, language, and math instruction daily with ESL resource teachers. This hub was a state-supported public-school program for ESL students whose native language was not English (school district administrator, personal communication, June 23, 2014).

According to the North Carolina Accountability Services Division (2016), 2012 data indicated 20% of the Burmese students met proficiency standards while 89.1% of the

Burmese students made academic growth/progress from one year to the next. The ESL hub consisted of Burmese refugee students.

Despite experiencing proficiency and growth by the standards of the EOG test, the Cronos school district (pseudonym) discontinued implementation of the instructional hub in 2014. Students who had been served in the hub returned to their core classes full-time (math, science, English language arts, social studies) for traditional instruction by core teachers with limited resources, tools, and training to prepare ESL students for reading. As a result of the hub being dismantled, the ESL resource teachers were placed in multiple schools to provide consultative services to individual ESL students once a week (school administrator, personal communication, June 23, 2015).

Current North Carolina ESL instructional practice requires ESL students to meet reading objectives for state EOG exams in 3 years. Spoken and written mastery should be gained first for proficiency in reading (Hatami, 2015). Mainstream language arts teachers, as well as all other core subject teachers, grapple with how to assist ESL students with reading mastery when they have had little or no training in language education for ESL students (Miller, Windle, & Yazdanpanah, 2014). Middle school language arts teachers do not consider themselves reading teachers but rather facilitators of enhancing student learning by the time they enter middle school. Middle school teachers are delving into poetry, fiction, and complicated reading comprehension that evolves into writing (school administrator, personal communication, December 12, 2016).

The North Carolina Read to Achieve House Bill 950 (2012) is another layer that has made it difficult for third-grade ESL students to move to the next grade. The Read to Achieve section stated:

The program is designed to ensure that every student read at or above grade level by the end of third grade and continue to progress in reading proficiency so a student can read, comprehend, integrate, and apply complex texts needed for secondary education and career success. (p. 1)

This bill has become another hurdle that teachers must get over to teach ESL students to read. Guisbond, Neill, and Schaeffer (2012) indicated that ESL students are lagging behind their non-ESL peers on state performance-based achievement tests. Nichols (2016) explained that emphasis placed on high impact testing causes repeated failure on test exams, increased pressure, and diminished motivation for ESL students to stay in school.

The implementation of the NCLB law was intended to allow all students to have a quality education. Menken (2010) suggested that the quality of instruction for the ESL learner may be worse due to the NCLB law. The state also measures the percentage of growth an ESL student makes from year to year.

President Obama signed the Every Student Succeeds Act (ESSA) in December 2015. The ESSA was implemented to give individual states more autonomy in developing a specialized educational plan for students that overrides the NCLB law. The State of North Carolina will operate under the old accountability standards until the 2017-2018 school year (NCDPI, 2016). Teachers find it discouraging when the State of North

Carolina limits the ESL child to three years to become proficient on state-mandated exams (Public Schools of North Carolina, 2016). Students have less than three full school years to accomplish this task. If the ESL student enters school in May, the teacher has a little over two years to prepare an ESL student who has never been in the United States or has never had any previous English education to be proficient in a state reading and math exam. The state counts the child as being in school for one full year when the child has been in school for only a month. North Carolina's Title III (Section, 3102) requires schools to implement research-based best practices and programs.

Each school district has the autonomy to implement a plan of instructional strategies or programming for ESL students. Giving school districts autonomy for programming and strategies has enabled individual districts to design a plan to meet the needs of non-English speaking students. The targeted middle school, Fields T. Middle School, was chosen as the study site because it was the only school in the local area that assisted ESL students as if they were in a 3-year bilingual or full immersion program. The only difference between a bilingual or full immersion program and the instructional hub was that students were not being placed in the instructional hub for the entire day for 3 years. In addition, the students were exposed to the sheltered instruction observation protocol (SIOP) model on a daily basis by trained ESL resource teachers and core teachers, which gave ESL students more specialized instructional support. Because students were placed in the classroom full-time, the regular core teachers had to rely on a minimal amount of SIOP training to teach the ESL students. The purpose of this quantitative quasi-experimental study was to compare the influence of the instructional

hub and traditional direct instruction on reading academic achievement of ESL students as measured by the North Carolina EOG test in the local middle school.

Rationale

Evidence of the Problem at the Local Level

According to the information regarding the ESL population at Fields T. Middle School dating back to 2009, the middle school ESL population started with 11 students and currently has 70 students total. The North Carolina Department of Accountability disseminated 2012-2016 proficiency scores by subgroups. Table 1 presents the NCDPI proficiency reading results for ESL students as well as the student enrollment for the school year.

Table 1

NCDPI Proficiency Statistics

School year	Number of 6th-8th grade ESL students each year	Percent of 6th-8th grade ESL students proficient in reading	Number of 6th-8th grade Student enrolled in the school
2014-15	63	15%	623
2015-16	58	33%	553
2016-17	70	17%	620

Note. Data retrieved from the North Carolina Accountability report (2017).

Although most of the students no longer receive assistance from support programs, there is a need for continued programming to address the gap of students who are not meeting proficiency or growth. The school district mission statement is to provide high-quality, research-based, data-driven ESL services to meet the federal requirements of annual measurable achievement objectives. The district cut all the special programs in

2014 that assisted ESL students in achieving these performance goals (Crones District homepage, 2016).

The school district has more than 500 students who speak 32 different languages and are currently being served by regular core teachers who have no specialized ESL training and 10 ESL resource teachers (Director, personal communication December 5, 2016). The vision of the district is to develop, monitor, and continuously improve aligned ESL personnel and resource services for priority schools. At the state level, many teachers have enlisted support and ideas from each other on how best to help their ESL students.

One of the growing trends has been retaining low-performing students in the same grade level for another school year. ESL students fall into this category due to low proficiency scores. ESL resource teachers across the state are against retention of these students. Teachers are against retaining ESL students due to a lack of ESL English proficiency, teachers' limited knowledge of how to meet the needs of the students, teachers' attitudes toward the students, and students' potential of dropping out of high school (Andraed, Evans, & Hartshorne, 2015).

The North Carolina Read to Achieve House Bill 950, implemented in 2014, states that students who do not pass the reading EOG test will repeat the grade. As a result of this bill and research by Sparks (2015), students retained show academic problems that result in potential drop out of high school. The State of North Carolina has had an increase of ESL students in public education. The United States now recognizes the ESL population as the fastest growing in the nation. According to the most recent data

collected by the National Center for Educational Statistics (NCES) in 2014-2015, the percentage of ESL students in United States public schools rose from 9% to 10% from 2002-2003. The 1% increase accounts for 4.7 million students.

The NCES also displayed the National Assessment for Educational Progress (2015) reading scale scores by subgroups. The subgroups provide a comparison of reading achievement of ESL students and their non-ESL peers. The average reading achievement gap between 2009 and 2015 was 47% of 8th grade ESL students and non-ESL peers. The sizeable gap warrants the need for continued study of this growing issue.

Policymakers, superintendents, administrators, and teachers must seek data to address the need for educational change for the ESL population. The purpose of this quantitative, quasi-experimental study was to compare the influence of the instructional hub practices on middle school ESL students' academic achievement compared to the achievement of students who received traditional direct instruction delivered in core classes as measured by the EOG reading assessments. The independent variables, the instructional hub and traditional classroom treatment, were examined by measuring the academic growth (dependent variable) from one school year to the next.

Evidence of the Problem from Professional Literature

Dating to 1960, the federal government passed policies and funded states for ESL students. However, most states have had the liberty to implement programs based on their preference (Severns, 2012). Severns (2012) reported that a lawsuit in 1974 spawned The Equal Opportunity Act. This Act outlined the Title VII funds with more specifics and all states then had to provide some services to every ESL student. Once the No Child Left

Behind (NCLB) Act passed, it allowed states to create and provide their predetermined programming. The NCLB replaced Title VII with Title III, the English Language Acquisition Act, which now gives states flexibility to identify ESL students who are not proficient in English.

Due to the signed ESSA, every state has been given autonomy to design standards for curriculum instruction, accountability, and evaluation. The actual measure of learning has been debated in the past few years. The Northwest Evaluation Association (NWEA, 2014) suggested the Growth Index formula (GI) to calculate student growth throughout all subgroups and proficiency levels. The NWEA also argued that teachers can track the learning of each student by measuring growth opposed to proficiency.

California school leaders consider the GI a fair way of judging teachers' and leaders' effectiveness, adjusting instructional practices, and improving best practices for students [NWEA, 2014]. The Portland Public Schools chose to use their state funding to immerse some of their ESL students in 3-year full immersion schools. The school leaders used the limited data to identify students who required reading support, and a lottery system was created. Students were chosen from the lottery and monitored to see if their growth index would be higher than their peers who did not attend the immersion school.

The research in this local study was necessary for examining whether possible factors contributing to this problem included (a) regular education teachers' lack of training or education for the ESL students, (b) lack of language learning programs, and (c) measuring learning for the ESL students using growth or proficiency. Researchers found that the students in Portland Public Schools did remarkably well in the immersion

school using the growth component (Steele, Slater, Li, Zamarro, & Miller, 2017). The primary intent of the current study was to compare the influence of two learning environments: the instructional hub that delivers SIOP strategies with ESL resource teachers for 2 hours a day, and the traditional classroom that does not provide the SIOP strategies for ESL reading development.

Definitions of Terms

Core teacher: A teacher in the traditional classroom with all subgroups who teaches core subjects such as math, science, English language arts, and social studies (NCLB, 2009).

End of grade (EOG) tests: State assessments designed to test what students have been taught and learned from Grades 3 through 8 (NCDPI, 2015).

English as second language (ESL) students: Students who are in public schools but their primary language is not English. English is their second or more language they are trying to learn (Krashen, 1988).

Every Student Succeeds Act (ESSA): A law signed in 2016 that gives individual states authority to use indicators beyond performance to assess school performance (Mathis & Trujillo, 2016).

Growth Index (GI): A formula used to calculate student growth throughout all subgroups and any proficiency levels (Wiseman & Thomas, 2011).

No Child Left Behind Act (NCLB): A law signed in 2002 designed to help all students meet high academic standards by requiring that states create annual assessments

that measure what children know and can do in reading and math in Grades 3 through 8 (United States Department of Education, 2010).

North Carolina Department of Public Instruction (NCDPI): The institution that implements the State's public-school laws and State Board of Education's policies governing kindergarten through 12th grade public education (NCDPI, 2015).

Proficiency: A score that all students in each subgroup must meet to pass with proficiency (NCDPI, 2015).

Resource teacher: A teacher in a specialized area with one type of subgroup who reinforces instruction already delivered by a regular education teacher. A resource teacher also provides advisory assistance to regular education teachers (NCLB, 2009).

Sheltered instruction observation protocol (SIOP): An approach to teaching that helps to prepare English language learners to be college and career ready but benefits all students (Honingsfeld & Dove 2014).

Significance of the Study

The purpose of this quantitative quasi-experimental study was to compare the influence of the instructional hub and traditional direct instruction on reading academic achievement of ESL students as measured by the North Carolina EOG test in the local middle school. Comparing the two instructional environments for growth on the EOG reading achievement test for ESL students was significant for this local setting. The study was designed to provide insight into which instructional environment would increase ESL students' reading skills. Teachers and administrators who implement best practices for ESL students who are not meeting the North Carolina proficiency standards need

evidence-based best practices to support the 70 ESL students currently in the traditional classroom. The results of this study may help administrators and teachers defend the need for one or all of the following: (a) funding, (b) SIOP training for all teachers, and (c) resuming the ESL instructional hub.

School administrators have an equity challenge when trying to provide the appropriate learning environment for language learners (Elfers & Stritikus, 2014). This study may help the local educational community better serve students who have not had the same opportunity or amount of time to learn to read or understand the English language. The study may assist other school districts in exploring options beyond the regular classroom setting for ESL students. Findings may help teachers and administrators determine whether having an instructional hub would better serve this subgroup in developing reading skills. The study may also assist teachers in determining whether to use best instructional practices such as SIOP methods for reading. Finally, the study may provide the local education agencies with research-based evidence to determine whether partial or full immersion programs are useful for ESL students across the state and country.

Research Question and Hypotheses

The purpose of this quantitative quasi-experimental study was to compare the influence of the instructional hub and traditional direct instruction on reading academic achievement of ESL students as measured by the North Carolina EOG test in the local middle school. The instructional hub maintains ESL resource teachers for 2 hours a day who support ESL students' reading development before the students are mainstreamed

back to the traditional classroom. The traditional classroom teacher did not use the same reading support strategies. ESL students eligible for Title III services in sixth, seventh, and eighth grade were the study's population.

The North Carolina EOG test was used for the pre- and posttest to determine which instructional model (independent variable) had the greater influence as measured by the student growth (dependent variable) on the EOG reading test for ESL students. Despite the increasing number of ESL students entering the local setting and not meeting North Carolina proficiency standards, the local education agency dismantled the ESL instructional hub and students were placed back in the traditional environment. The study was designed to compare the influence of instructional practice in the instructional hub (independent variable) and the traditional environment (independent variable) on reading achievement (dependent variable). The follow research question (RQ) and hypotheses guided the study:

RQ: What differences exist, if any, between the reading growth of ESL students who received SIOP instruction within an instructional hub and ESL students who were in the traditional classroom environment as measured by the pre- and posttest reading scores of the North Carolina reading End of Grade test?

H₀: There is no significant difference between the reading growth of ESL students who received SIOP instruction within an instructional hub and reading growth of ESL students within a traditional environment as measured by the pre- and posttest reading scores of the North Carolina Reading End of Grade test.

H_a: There is a significant difference between the reading growth of ESL students who received SIOP instruction within an instructional hub and reading growth of ESL students within a traditional environment as measured by the pre- and posttest reading scores of the North Carolina Reading End of Grade test.

Review of the Literature

A review of the literature provided the foundation for comparing the influence of an instructional hub and traditional classroom practices on reading achievement among ESL students. I examined relevant literature to understand the impact each instructional setting may have on reading achievement among ESL students in the local environment. Peer-reviewed articles, scholarly journals, and books from the Walden University library were the primary sources for the review. The following academic databases and search engines were used: ERIC, Google Scholar, Open Library, Education Research Complete, SAGE Publications, ProQuest Central. The following terms were used for literature searches: *ESL reading proficiency, Sheltered Instructional Observational Protocol, Growth Index, No Child Left Behind Law, Immersion programs, Bilingual programs, English as Second Language, teacher best practices for ESL students, ESL resource teachers, collaboration and planning, measuring ESL academic achievement, and measuring ESL academic proficiency and growth in reading.*

The literature review consists of five sections: a theoretical framework for second language acquisition, a historical background of the Elementary and Secondary Act of 1965 (ESEA) that evolved into the NCLB Act and the ESSA, current ELL North

Carolina programs, the SIOP model for teaching ESL students, and the use of proficiency versus the growth index for ESL state accountability measures.

Theoretical Framework

The current study focused on comparing the influence of the instructional hub and the traditional classroom on ESL students' reading skills at Fields Middle School. The theoretical framework of Krashen's (1988) second language acquisition theory and Terrell's (1977) natural approach to language acquisition guided this study. Both frameworks support educational environments for teaching ESL students and provide an understanding of how a second language is acquired and achieved. Krashen stated that acquisition of the language results from natural communication. Individuals do not require repetitive, grammatical drills, rules, and practice to acquire another language.

Krashen's (1988) theory consists of five main hypotheses: acquisition learning, natural order, monitor, input, and affective filter; however, the emphasis is placed on the acquisition-learning hypothesis. Formal instruction follows the acquisition of natural communication. Furthermore, Krashen argued that when students read more, they encounter words more often that help them to gradually acquire the meaning and language.

Some critics oppose Krashen's theory by claiming the model does not explain the variations and functions. Acquisition and learning should not be split into two disciplines but used simultaneously (Zafar, 2010). Lui (2015) claimed that many researchers, theorists, linguists, and psychologists have criticized Krashen's model. Most researchers claimed his five hypotheses were vague, ill-defined, lacking empirical content, and

unmotivated constructs (Lui, 2015). Terrell (1977) noted that acquired language is a conscious and unconscious process. He supported Krashen's theory by making the argument that a second language is naturally acquired by informal means and progresses into formal means of learning the language. According to Krashen and Terrell, ESL learners have a long process of becoming proficient in English, but they all go through a natural progression if not rushed or forced to learn quickly.

Krashen's Five Hypotheses

Acquisition-learning hypothesis. Acquisition and learning have two independent systems of second language performance. Krashen (1981) theorized that students will develop an acquired second language subconsciously when they have immersed themselves in an environment in which the second language dominates. The second portion of the hypothesis is the independent system consists of a student actively and consciously learning the grammatical rules of a second language.

Natural order. Students acquire (not learn) proper grammatical structures in the correct order as they age. Krashen (1981) argued that the natural order is predictable with age and, depending on which language the child is learning, some of the grammatical structures are acquired very early or sometimes later in age. Krashen noted some differences and similarities depending upon the learner's environment, background, age, and frequency of exposure to the language.

Monitor hypothesis. This has a unique relationship with the acquisition-learning hypothesis because it is used to monitor the conscious learning of a student. Moreen and Soneni (2015) stated that oral language is the fundamental form of language for children.

Students are biologically enabled to learn by the structures in their brain. Three conditions must to be met in Krashen's monitor hypothesis: (a) students have to have time to use the grammatical rules in regular conversation, (b) students must focus on form and the correctness when writing, and (c) students must know the grammatical rules to pass a test (Krashen, 1988).

Input hypothesis. Speech will directly emerge on its own with no direct instruction. If the input is understood and the students are in a grammatically challenging environment, deliberate grammatical programming is unnecessary. Students are challenged by being thrust in the acquisition of learning the language beyond their current level of understanding (Krashen, 1988).

Affective filter hypothesis. This hypothesis addresses the anxiety, motivation, and self-confidence of students' second language acquisition. Krashen (1988) claimed that affective variables such as motivation, self-confidence, and anxiety play a significant role in second language acquisition. If students are highly motivated, have a good self-image, and have low anxiety, they tend to be more successful in acquiring the second language. However, Krashen's critics stated that he never specified how the affective filter works and what filters must exist for ESL students to be successful (Berlin & Hammarstrom, 2016).

Terrell's Natural Approach

Terrell augmented Krashen's theoretical hypothesis of language acquisition in the theory of the natural approach to bilingual education. Terrell (1977) viewed communication competences progressing through (a) aural comprehension, (b) early

speech production, and (c) speech activities. Depending on the learner's language background, the communication competency goals may be met at varying stages. Language learners may progress slowly or at a faster rate depending on age, native language, and affective issues.

Terrell (1977) had two basic principles of the natural approach. The first is speech is not taught but acquired through comprehensible input in a low anxiety environment. The second principle is speech is acquired naturally in stages with an unconscious development of language. There were three important conditions for acquisition to be met:

1. The acquirer must receive comprehensible input. The acquirer must hear or read the language.
2. The sentence structures must contain a message that can be communicated.
3. The acquirer must be in an environment that is stress free where there is a feeling of security for acquisition to take place.

Terrell's (1977) approach involves the students speaking in their native tongue to provide input for acquisition. Students are allowed to use either the language being taught or their first language. The teacher does not correct any of the audible errors but may give written grammar exercises that are corrected. Terrell emphasized that students are able to use the language to solve problems, talk about ideas, and perform tasks so they learn and acquire the language.

Terrell's production stages. Terrell's (1977) principles of the natural approach refer to the production of speech as a response to teaching and listening. The production

of speech has to happen in phases for the acquirers to begin comprehending the new language.

Pre-production stage. A child gives non-verbal answers to questions. This period can last as long as needed until the natural acquisition process develops to the next stage. Teachers use several classroom techniques to aid in nonverbal responses such as movement, visual, or both. Movement techniques include the following:

- sitting, standing, and turning;
- body parts such as touching the shoulder, nose, eyes, and ears; and
- classroom activities such as touching or pointing to the wall, floor, desk, or window.

Visual aids for the preproduction learner can include pictures and real objects the teacher uses to point to and describe the content of the picture or object. This technique can be as simple or imaginative as the teacher wants. Terrell (1977) emphasized that the preproduction stage should not be rushed or forced before the acquisition process has had a chance to begin developing. The preproduction stage could include a period of 1 to 6 months of English exposure before the learner begins to learn the language.

Early production. The second stage involves the early production of one-word and two-word responses coupled with the preproduction stage of nonverbal responses. During this stage, students struggle with the language. They make errors during this stage but are corrected based on content rather than structure. Also, during this stage, once children recognize about 500 to 1000 words, production activities are included in questions that provide the answer in choice form. The instructor selects a sentence with a

single missing word and students fill in the blank. After the students master this activity, they progress to filling in two blank words. The activities can be the same, but students have to fill in two blanks with a verbal response. The students begin to work in small cooperative groups and pairs to practice speaking. Once the students have developed a strong foundation with vocabulary and syntax in English, they rapidly progress. At this stage, students have had anywhere from 3 to 12 months of English exposure (Terrell, 1977).

Speech emergence. ESL students transition to the speech emergence stage after 3 years of English language exposure. During this stage, students begin to use phrases and sentences and reading proficiency increases. Typically at this stage, the ESL student vocabulary has increased to nearly 7,000 words. Students begin to answer *how* and *why* questions, and teachers start to develop a variety of teaching strategies such as cooperative learning, comparing/contrasting, describing, poetry, songs, and problem solving. These strategies must be strategically implemented and supported for student success. If the teacher feels the student is regressing, then it is imperative to employ the same strategies used from the beginning to develop the student's English proficiency (Terrell, 1977).

Intermediate fluency. Students begin to understand and use English for academic purposes. Students transition into this stage occurs (Terrell, 1977) after having been exposed to English for 3 or 4 years. The students have mastered 12,000 vocabulary words that are used to engage in complex speaking, reading, and writing activities. Students can process the English language well enough to do research, analyze literature,

write essays, and read complex passages with understanding. However, ESL students continue to need the support to perform the same activities as other students because English is not their native language (Terrell, 1977).

ESL students pose a challenge because of the federal mandates placed on schools to improve students' performance with limited funding and inadequate training for teachers (Sampson & Collins, 2012). Although the ESL population is rising rapidly, mainstream teacher training is falling behind (Rodriguez, 2013). SIOP provides an instructional framework to assist teachers with best teaching strategies. Krashen and Terrell's (1995) natural approach has been the foundation for the development of the SIOP instructional framework. Through use of the natural approach methods such as the comprehensive input, hands-on activities, and scaffolding, SIOP has become one of the most effective instructional frameworks for ESL students.

Historical Background of the ESEA and NCLB Act

The Elementary and Secondary Education Act (ESEA) was enacted in 1965 by a majority of Democrats in the House and Senate when Lyndon B. Johnson assumed the Presidency after John F. Kennedy was assassinated (Gamson, McDermott, & Reed, 2015). President Johnson signed the ESEA into law believing educational quality would be provided to all students (Bishop & Jackson, 2015).

Fast-forwarding 16 years to 1981, President Ronald Reagan felt the need to examine American schools. The President tasked his Secretary of Education, Terrence Bell, to appoint a National Commission on Excellence in Education with developing a report on the state of American schools. Through the commission's examination, a report

was issued entitled, *A Nation at Risk*. This report brought a laser focus to education and it caused some states to push for educational reform. North Carolina was one out of four states that led the Nation in raising state educational teaching standards. Ironically, this report gave the nation the boost it needed to tackle the need for educational change.

By 2001, Presidents George Bush and Bill Clinton moved and re-authorized the ESEA with the No Child Left Behind (NCLB) Act of 2001. The NCLB Act became a federal accountability system with a focus around testing all third through eighth grade students in the areas of math and reading, providing highly qualified teachers in every classroom, and assuring adequate yearly progress is made in multiple areas. One of the major components of the NCLB Act sanctioned states that did not meet the needs of the ESL students. States could lose up to ten percent of their federal funding if they did not implement programs; meet the testing requirements for accountability, and specific strategies in place to teach ESL students.

The NCLB Act was up for reauthorization in 2007 and by 2012 many states were in dismay about the expectations of 100 % of all students meeting proficiency (Tooley, 2015). Hence, this moved Secretary of Education, Arne Duncan, to grant many states waivers due to the unachievable and lofty expectations of the NCLB Act and replacing this with a rigorous teacher evaluation measure, college and career ready standards, and school rating accountability system.

By 2015, the federal government agreed to give states more control of their educational system and cut back on their role in the educational decisions within each state, which moved President Barack Obama to sign Every Student Succeeds Act

(ESSA). Rothman (2016) described the ESSA that will go into effect in the 2017-2018 school year as giving individual states authority to use different indicators to assess school performance.

The ESSA bill gave each state the educational responsibility of 1) articulation, vision, priorities, and goals; 2) support academic improvement through implementing standards and assessments; 3) designing and implementing accountability systems; 4) administering, implementing and overseeing state and federal funding and programs; and 5) developing two-way communications with stakeholders and the public (Chenoweth, 2016). The Act also allowed local communities to have a clearer picture of how well their schools were performing by letting the state determine how to display each school's academic performance (Rothman, 2016). Studies must include either a theoretical foundation or a conceptual framework section; studies may include both or just one.

Consequences of the NCLB and ESSA

The NCLB Act was intended to increase proficiency in reading and math for third through eighth grade students, raise state accountability, and increase the graduation rate. However, by 2010, Swanson (2010) reported that the NCLB Act had begun unintentionally having a negative effect on the core elements that it sought to increase. Although the act was intended to increase proficiency, the research on when and how ESL students acquire language was overlooked. Hence, it takes three to seven years for ESL students to acquire a new language (Yee, 2015).

Yee (2015) explained that most professionals found it inappropriate to test newcomers. The number of linguistically limited proficient English-speaking students

was increasing in the states where the NCLB Act was modeled after such as North Carolina. For example, North Carolina experienced a 250% increase in their LEP population, which presented big problems for the state because the state had never served this population to this great degree in the past (Tooley, 2015).

Ironically, Ujifusa (2012) reported that states such as Connecticut, Delaware, Louisiana, Maryland, New York, North Carolina, Ohio, and Rhode Island were now the recipients of the NCLB waiver from the U.S. Department of Education Race to the Top grants that give the states flexibility under the NCLB law to implement new standards for testing students and evaluating teachers. In contrast, North Carolina kept most of the original NCLB initiatives but escalated the consequences for schools that repeatedly failed the participation rate for student testing. With the newly signed ESSA bill, North Carolina is currently drafting the North Carolina Consolidated Plan (NCDPI, 2016) with all stakeholders. The plan has multiple “holds” in the testing and accountability section, which give no direction on how students will be tested next year (NCDPI, 2016).

From state to state, there is much discussion about the achievement gap, but little attention is given to the inequities of educational resources (Darling-Hammond & Snyder, 2015). There is a great deal of variation between states when funding their high poverty districts. The highest poverty districts receive 15 percent less per student than other districts (Ushomirsky & Williams, 2015).

Educational funding has been cut since 2011 because state legislatures believe too much money has been invested with no marked positive results. Though state legislatures have cut educational funding, there has been a significant positive effect of ESL student

performance (Barker, 2014). The ESSA set clear expectations for states to assess students but no direction on assessments construction or how funding will be distributed. With no clear guide for distribution of funds, the likelihood for an “equity gap” to exist or become wider is plausible. Resources for ESL student learning can move from little to no resources depending upon state priorities (Dearing, Walsh, Sibley, & St. John, 2016).

ELL Programs in the North Carolina Region

According to the North Carolina Department of Public Instruction (2016), as of July 2016, public, private, and charter schools must adopt the policy GCS-S-K-000 that establishes guidelines for Limited English Proficient programs. The policy outlines standards that give schools specific directives to adopt a program(s), which give ESL students a reasonable opportunity to progress (NCDPI, 2016).

Hence, four developmental dual language/immersion programs exist in North Carolina, which include: Two-Way program, Developmental Bilingual program, Full Immersion program, and the Partial Immersion program. Dual language programs are being viewed as more successful in recent years than transitional or bilingual programs (Hatheway, Shea, & Winslow, 2015).

Thomas and Collier (2002) studied dual language programs and found that ESL students instructed in well implemented dual language programs had more academic success in English than their native English-speaking peers (Estrada, Gomez, & Escalante-Ruiz, 2009). High quality education in the first language deepens the conceptual level of knowledge in both languages (Martinez, Slate, & Martinez-Garcia, 2014).

In the two-way program, native and non-native English speaking students learn another language and establish skills in both languages. This is established at a very young age to produce bilingual or biliterate students by the end of elementary school (Maxwell, 2013). The developmental bilingual program is designed to help non-English speaking students learn English content and academic skills in their heritage language.

The full immersion program serves primarily native English-speaking students where the target language is used exclusively to teach a subject. Wagner (2015) stated that it is not uncommon for classrooms to have both non-speaking and speaking English student in the same classroom (p. 40). English language arts class would be a primary example of every student learning the subject in English.

Finally, the partial immersion program is designed to serve English-speaking students where content is delivered in the target language and English. For example, a Spanish, French, or Latin class may be the target language being delivered. North Carolina outlines in the Instructional Support Tools for Achieving New Standards that dual language/immersion, and K-12 trained licensed teachers are responsible for teaching language while teaching their content area.

North Carolina endorses the proven Sheltered Instructional Observational Protocol (SIOP) model to assist districts, schools, and teachers with closing the achievement gap and giving various teaching methods and best research strategies that benefit both the ESL and non-ESL students (NCDPI, 2016). Although there are multiple ESL instructional variations for effectively instructing ESL students, the Institute of Education Sciences identified intensified vocabulary activities, small group instruction,

structured writing practice, and integrated English instruction in all subject areas as best practice in all classrooms (Sparks, 2016).

Sheltered Instructional Observational Protocol Model (SIOP)

Educators, administrators, and policymakers question, which program model, is more effective for ESL students (Vance, 2017). The Sheltered Instructional Observational Protocol (SIOP) model offers a solution to one aspect of school reform needed for ESL learner's acquisition of English and reading achievement. Thomas and Collier (2002) discovered that one or two-way immersion programs were more successful in helping ESL students reach their academic reading goals. By having all teachers trained to teach ESL students, administrators supporting the initiative, parental support and an intentional focus on academic and linguistic development, ESL students were more successful in this setting than any other program.

The Sheltered Instructional Observational Protocol (SIOP) model offers a solution to one aspect of school reform needed for ESL learners' acquisition of English and reading achievement. Echevarria, Vogt, and Short, the creators of the SIOP model, found this model gave the most effective sheltered instructional teaching needs for substantial academic growth of ESL learners.

This model is a lesson planning and delivery system and a protocol instrument used to observe, rate, and provide feedback on lessons (Echevarria & Vogt, 2015). Studies have shown SIOP strategies have given teachers a way to provide rigorous content instruction for both English learners and other students (Echevarria & Vogt 2015). The SIOP model incorporates and promotes the comprehensive input, affective

filter, and monitor model (Alicea, 2013). Krashen (2014) concluded that SIOP supports how language and literacy are developed and acquired. Students in sheltered environments learn a great amount of subject matter and in some cases just as much as native speaking students.

Inceli (2015) posited that teachers found the SIOP model creates elements and strategies ideal for learning. However, Crawford and Reyes (2015) argued that the SIOP model is prescriptive rather than inquiry based. They also felt the methodology was a watered-down version of Krashen's notion of sheltering, and the research was flawed and deficit-based. The SIOP model is composed of 30 features grouped into eight components: Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice/Application, Lesson Delivery, and Review/Assessment (Echevarria & Vogt, 2015).

Lesson preparation. SIOP component number one requires lesson planning that pulls in as many materials as needed to make learning comprehensible. The lessons must be built to enable students to make connections with their prior knowledge and experiences and new concepts being taught. Lessons should include content and language objectives. SIOP instruction is a rigorous and challenging model that supports teachers with designing, creating, and implementing challenging and comprehensible lessons for ESL students. Teachers should use supplementary materials such as graphic organizers, charts, pictures, poems, music, multimedia, manipulatives, and illustrations to delivery their lessons. The content objective is “what” the student will learn during the lesson. The

language objective describes “how” the student will learn the content of the lesson (Echevarria & Vogt, 2015).

Building background. The second component is directly related to the students’ cultural, academic, or personal experiences. The teacher should establish links to the students past learning and new concepts. Key vocabulary should be stressed during this period. Vocabulary should be used with supplementary items such as graphic organizers, word walls, games, and music. Teachers should use simple and concrete terms, so students can grasp and understand the vocabulary (Echevarria & Vogt, 2015).

Comprehensible input. SIOP component number three requires teachers to use a variety of techniques to make concepts clear to students. Teachers must use concepts such as body language, speaking slowly, repeating words frequently, using pictures to describe their speech, and adjust speech when needed according to the students’ language proficiency level. Teacher lesson plans should include (a) appropriate speech and avoid jargon and idiomatic expressions; (b) an explanation of the academic task that is expected in sequential order; (c) scaffolding; (d) questioning; (e) interaction; (f) wait time to formulate answers; (g) clarifying key vocabulary in first language; (h) application of content and language knowledge; and (i) integration of language skills into other content areas, and 10) review of key vocabulary (Echevarria & Vogt, 2015).

Strategies. Component four enhances comprehension for learning and retaining information. Mental, meta-cognitive, cognitive, and social/affective strategies are learning strategies that should be incorporated in teachers’ lesson plans by the consistent use of scaffolding. Some of the common strategies: (a) think aloud, (b) prompting, (c)

previewing, (d) elaboration, (e) prediction, (f) summarizing, and (g) questioning that promotes higher order thinking skills (Echevarria & Vogt, 2015).

Interaction. ESL students need to have the opportunity to have meaningful opportunities to speak English across content areas. Teachers need to set up sheltered ways that allow students to do more meaningful speaking than listening to the teacher talk. Through meaningful speaking students can practice making themselves understood by clarifying ideas, asking and answering questions, and negotiating. Researchers felt as if ESL students can be creative and also build their understanding if they can comprehend the material (Peterson-Dryden, 2015). Teachers can use strategies to promote interaction such as cooperative groupings, wait time or think time, or opportunities for clarity by the student (Echevarria & Vogt, 2015).

Practice and application. SIOP component six is essential for the students and the teachers. This component allows for daily practice and application of what the students have learned while giving the teacher the opportunity to formatively assess the students' learning. Students are reading, writing, listening, and speaking while receiving the necessary practice and time needed to acquire the English. Lin, Pandian, and Paramaswari (2016) stated that reading is the only way students become good readers, develop a good writing style, an adequate vocabulary, advanced grammar, and the only way we become good spellers. Hands-on materials, puppets, white boards, experiments, and manipulatives are used to practice and apply what they are learning (Echevarria & Vogt, 2015).

Lesson delivery. The seventh component ensures the instruction clearly supports the objectives. On occasion, lessons can be filled with activities but no substance. Students can miss the understanding of the goals or objectives. ESL students should analyze language using higher order thinking skills to debate and discuss meaning of the translated language (Echevarria & Vogt, 2015). Therefore, teachers can use a formative assessment tools such as the “stand up-sit down” tool which gives the students the opportunity to answer true/false questions, turning statements into who, what, when, where or why questions, or orally explaining their responses to questions and how they got specific answers.

Review/assessment. The eighth and final component of the SIOP model is ongoing throughout the entire process. This component simply reminds teachers that review, and assessment should be planned before, during, and after the lesson. Also, the component stresses the use of a variety of assessment tools along with positive verbal comments that assist students with self-monitoring and adjusting their own learning. Lastly, providing the students with regular feedback on their progress will give the students the acquisition they need to grow academically (Echevarria & Vogt, 2015). Krashen and Terrell’s’ comprehensible input-based methods resulted in better test of communication and formal test (Inceli, 2015).

Testing and Accountability

The ESL population is the fastest growing subgroup in the schools today (Taherbhai, Seo, & O’Malley, 2014). However, the topic of how to accurately assess ESL students continues to be a topic for many states. Some of the main issues in how to assess

the students do not come from just the language barrier but from the many dimensions of an ESL student (Lakin & Young, 2013). For example, growing up in a gang violent, poverty, and war-stricken country make the academic and social challenges enormous for U.S. school districts when these students arrive (Zimmerman-Orozco, 2015).

Middle school students have more hurdles to overcome because of possible interruptions in formal education, no prior content knowledge, and basically no understanding of how U.S. schools work. Language barriers, stereotypes, privacy concerns, and cultural misunderstanding usually go undetected by teachers and staff which have a significant impact on how ESL students' performance in class and on standardized tests (Peterson-Dryden, 2015).

Furthermore, current state policies focus on standardized testing as the sole measure of high performing students. Hence, Wells, Fox, & Cordova-Cobo (2016) argued that current testing policies are detrimental to good teaching practice. It was found that ESL students consistently underperformed on reading assessments that measured vocabulary and comprehension when compared with their peers (2016).

Having mentioned these factors, Lakin and Young (2013) stated that because of the growing ESL population and the historically large achievement gap it is imperative to look at the growth models for this population in holding schools accountable and closing the achievement gap. The growth formula can be used to track individual, classroom, or school-wide year-to-year growth within each proficiency level (Wiseman & Thomas, 2011); however, most states mandate that ESL students take the blanket EOG test that is given to every student and test the basic skills for all students.

The reauthorization of the NCLB has caused a major shift in thinking about how ELL students should be testing. So, some states are experimenting with different types of assessment tools that work for this population (Mitchell, 2015). The ESSA signed bill made experimenting with different types of assessments feasible. McGuinn (2016) stated that experimenting with students and state testing would cause an increase in pressure and diminish the motivation of ESL students who will repeatedly fail the exam and eventually drop out of school due to all the testing experimentation.

Implications

A project deliverable was a program policy position paper, curriculum plan or evaluation report. Results from North Carolina End of Grade reading data for ESL students in the instructional hub and ESL students in the traditional classroom where teachers in one setting used the SIOP model may clarify ways to effectively increase reading achievement for ESL students. Anticipated outcomes of the project may yield higher or lower growth of ESL students' reading achievement.

I analyzed student growth in the instructional hub where teachers used the SIOP model and traditional classroom teachers did not use the SIOP model to compare relationships between the two instructional models. The findings identified if ESL students demonstrated higher growth, lower growth, or no change when participating in either (instructional hub or traditional classroom) setting. Therefore, the research and the results from this study can be used to guide policy recommendations for specific types of instructional practices, strategies and environments for ESL students to improve reading achievement in middle school education.

Summary

The educational community has been very concerned for the ESL population due to the highly problematic No Child Left Behind Act (Columbo, McMakin, Jacobs, & Shestok, 2013). Although, many states have received waivers that relieve some of the pressure of testing, North Carolina continues to use the NCLB accountability system. With the ESL population being one of the fastest growing subgroups in the U.S. educators has to find research-based strategies that had a positive impact on ESL student reading achievement.

The literature revealed teachers must have a specific methodology for students to acquire reading skills. Although many researchers such as Krashen and Terrell offer effective teaching strategies, the SIOP model brings a framework for how to teach the strategies, organize the techniques, and facilitate the students learning.

Section 2: The Methodology

The purpose of this quantitative, quasi-experimental study was to compare the influence of the instructional hub and traditional direct instruction on reading academic achievement of ESL students as measured by the North Carolina EOG test in the local middle school. The research question and hypotheses for this study were the following:

RQ: What is the difference in the reading achievement scores on the North Carolina reading End of Grade test between ESL students who received SIOP instruction within an instructional hub and ESL students who were in the traditional classroom environment as measured by the pre- and posttest reading scores of the North Carolina reading End of Grade test?

H₀: There is no significant difference between the reading achievement of ESL students who received SIOP instruction with the instructional hub and reading achievement of ESL students in the traditional environment as measured by the pre- and posttest reading scores of the North Carolina Reading End of Grade test.

H_a: There is a significant difference between the reading achievement of ESL students who received SIOP instruction with the instructional hub and reading achievement of ESL students in the traditional environment as measured by the pre- and posttest reading scores of the North Carolina Reading End of Grade test.

This section provides an explanation of the research methodology used to conduct this study, including descriptions of the research design and approach, setting and sample size, instrumentation and material, data collection and analysis procedures, assumptions, limitations, scope, delimitations, and protection of participants' rights.

Research Design and Approach

A quantitative, quasi-experimental design was used to compare the influence of the instructional hub and traditional direct instruction on reading academic achievement of ESL students as measured by the North Carolina EOG test in the local middle school. The quasi-experimental study included 5 years of NCEOG archival reading data. This design was suitable given the nonrandom selection of ESL students.

The quasi-experimental design requires fewer participants (Cramer & Howitt, 2014). In the current study, the quasi-experimental design allowed for preexisting actions, real-life school settings, and an evaluative examination of two different instructional approaches. Educators use this design instead of experimental designs due to artificial groups that would disrupt the natural school setting (Creswell, 2017). An ex post facto approach was taken because the participants were from nonrandom groups based on their past experiences, which could not be manipulated.

The experimental design was not appropriate for this study. Unlike correlation research, this study focused on comparing nonrandom groups and the influence of instructional practices from two classroom environments (independent variables) on reading achievement (dependent variable). This pre- and posttest design was used to compare ESL student reading achievement in the following years: 2013-2014, 2014-2015/treated, 2015-2016/control, and 2016-17/control.

I used a quasi-experimental design because a pure experimental design was not suitable for the study. The quasi-experimental design was used to compare a group of ESL students who received SIOP instructional reading strategies and two groups of

regular English language arts classes that were currently in place for ESL students. All the information on the groups came from archival data. ESL reading growth achievement for the treated group (Group A) was compared to the control groups (Group B) that did not receive the SIOP instructional practices in the traditional environment. The archival data were listed by random student number identification so each student's identity would be protected. The ESL students' reading EOG test from the year prior served as the pretest while the ESL students' end of year reading EOG was used as the posttest to determine whether the experimental group and control groups showed differences in reading growth. Creswell (2017) noted that true experiments have randomly selected participants who are randomly assigned to either receive the treatment or act as the control group.

Setting and Sample

The local project study site was a school in rural North Carolina that served a population of 623 students in the 2014-2015 school year. An instructional hub where teachers taught SIOP instructional practices was provided to all identified ESL students. Out of the 623 students, 70 were identified ESL students (10%). In 2015-2016, the local school board stopped funding the instructional hub, and all ESL students were placed in the traditional classroom setting. The 2015-2016-school enrollment moved to 553 students with 70 identified ESL students. The student enrollment increased in the 2016-2017 school year to 620 students with 70 of the students being ESL. The sample population comprised refugee Burmese students with no prior English educational background.

I used Fields T. Middle School as the unit of analysis, with nonrandom samples from the ESL students who took both the EOG pretest and posttest assessments. The ESL target population was a nonequivalent intact sampling of students. Having a nonequivalent group allowed me to address the problem of assignment bias that existed with this group (see Abbuhl, Gass, & Mackey, 2013). Students in the study were refugee students with no formal English educational background before entering the United States.

The ESL population was part of this nonprobability sampling method because the vast majority of ESL students were housed in one middle school in rural North Carolina. The treatment group for this study included ESL students instructed in the instructional hub (Group A). ESL students who were in the instructional hub in the 2013-2014 and 2014-2015 school years met the criteria for the study (experimental group). The control group for this study included ESL students instructed in the traditional classroom in 2015-2016 and the 2016-2017 school year (Group B). All students who identified as ESL in 2014-2015, 2015-2016, and 2016-2017 took a pre- and posttest, which was the North Carolina EOG reading exam that generated the archival data, as shown in Table 2.

Table 2

Non-Experimental Pre/Post Test Design

Pre-Test (experimental) 2013-2014 Instructional Hub (SIOP intervention)	Post-Test (experimental) 2014-2015 Instructional Hub (SIOP intervention)
Pre-Test (control) 2014-2015 Traditional Classroom (No intervention)	Post-Test (control) 2015-2016 Traditional Classroom (No intervention)
Pre-Test (control) 2015-2016 Traditional Classroom (No intervention)	Post-Test (control) 2016-2017 Traditional Classroom (No intervention)

Only ESL students identified as consultative were excluded from the study. The consultative ESL students took an entrance exam and scored above average in reading and math. The consultative ESL students required no specialized instructional services such as the instructional hub. The research data were archival. The local middle school, Fields T. Middle School, had five classroom teachers and one ESL resource teacher trained in the SIOP model.

ESL students who were no longer in the instructional hub and taught by the support teachers had taken the EOG pretest and posttest. Teachers in the instructional hub (Group A) setting used the SIOP model to deliver reading instruction while teachers in the traditional classroom (Group B) did not. The instructional hub (Group A) was the 2013-2014 and 2014-2015 treatment group of ESL students, and the 2015-2016 and 2016-2017 traditional classroom (Group B) of ESL students were the control group.

Instrumentation and Materials

I used the North Carolina reading assessments to measure the reading growth of students in control and experimental groups. All public schools in North Carolina are required to administer the reading EOG assessment to Grade 3-8 students. The 2013-2014, 2014-2015, 2015-2016, and 2016-2017 reading EOG scores were the pretest. The archived pretest served as a baseline for the students' current academic achievement level. The concepts measured on the reading test were the same for Grades 6-8. A variety of literary and informational text was tested to reflect each teaching standard for each particular grade level (NCDPI, 2015).

Knowledge assessment involved students reading selections and answering questions related to the reading passage. The assessment was used to measure knowledge of vocabulary by indirect application of understanding within the context of selections and questioning. All of the questions were multiple choice (NCDPI, 2016).

The NCDPI Division of Accountability homepage included the reading EOG's process for reliability and validity. The Reliability Report (2014) claimed that using: (a) alternate form, (b) test-retest, and (c) internal consistency coefficient would establish reliability. The report stated that the internal consistency confirmed the reliability of the EOG test given in the state of North Carolina. The fact that the test had been administered annually since 2012-2013 also validated the reliability of the reading test. The raw data were also available on the NCDPI (2016) website and archived at Fields T. Middle School. The North Carolina End of Grade reading test was the tool used to measure academic growth. Each student report had several scores that included (a)

percentile score, (b) scale score, (c) performance level score, (d) proficiency score, and (e) reading score.

Data Collection and Analysis

The study participants experienced two types of treatments. The Group A ESL study participants participated in the instructional hub with SIOP instruction. The Group B ESL study participants took part in the traditional classroom practice. Archival data released from the state of North Carolina's Department of Public Instruction were used to complete this study. I gained permission from the school's principal, superintendent, and Walden's institutional review board (IRB) to collect and analyze archived data from the ESL subgroup and nonidentified ESL students (IRB approval number 03-12-18-0377652). Archival data were used, and students' personal information was concealed. A number system was used to protect students' identity.

The North Carolina EOG interval scale was used to determine the distance between the pretest and posttest. There were two ESL resource teachers who used the SIOP model to drive reading instruction, and there were five traditional classroom teachers who did not use the SIOP model. The ESL resource teachers (experimental group) had 2 hours of instruction time 5 days a week. The traditional classroom (control group) teacher instructed the ESL students 55 minutes a day 5 days a week.

The Statistical Package for the Social Science (SPSS) analysis was carried out to examine the difference between the pretest and posttest scores of ESL students who received instruction within the instructional hub and ESL students in the traditional instructional environment. An analysis of variance (ANOVA) inferential test was used to

compare the mean results of the EOG pretest and posttest scores in both instructional settings and answer questions about the sample population (see Gravetter & Wallnau, 2017). The two-way ANOVA was used to compare the mean difference in the pretest (covariant) and posttest scores in reading (dependent variable) of ESL students. The Shapiro-Wilk test was used to test the null hypothesis for normal distribution. By measuring the effect size, I compared the strength of the relationship between the instructional hub, traditional classroom, and the academic reading achievement of ESL students. The control groups and the experimental groups were not equal because the ability levels varied from student to student. The groups were controlled by using the pretest scores as the covariant.

Assumptions, Limitations, Scope, and Delimitations

Due to the quantitative nature of this ex post facto, quasi experimental study, the study could not disrupt the daily classroom setting. Before using ANOVA, it had to be determined assumptions of linearity, homogeneity, outliers, the normality of ANOVA were met. Assumptions included that teachers who were trained in the use of SIOP: (a) integrated SIOP into their daily instruction, (b) used all components of SIOP, and (c) SIOP strategies improved EOG reading scores. Also, assumptions were based upon all ESL students in the treated and control group sharing the same demographics; as well as, the students being grouped by the same ability level.

The limitations were variables such as the students past educational experience or intelligence quotient (IQ) that may have influenced test scores for the students in a negative or positive manner. Also, limitations of the study were the small sample size

ESL students in the 2013-14, 2014-15, 2015-16 and 2016-17 school years. The sample size was determined by the number of ESL students in the school and since there were no more identified ESL students enrolled at Fields T. Middle School, the data analysis may not have yielded significant statistical differences.

Both Balkin and Kleist (2016) claimed that statistical tests are easily influenced by the sample size (p. 100). The sample can also limit the research to differences or effects between the design and measure because a larger sample of ESL students could increase the significant difference between the groups. Also, the smaller sample size could warrant further investigation due to limited statistical differences (Haegele & Hodge, 2015).

The scope of this research was the analysis of EOG reading test scores before and after the implementation of SIOP. The focus was on one middle school within the research district that implemented the SIOP, which bound this study. The study was also delimited by the experiences of the resource teachers who implemented the SIOP model. Because of the quantitative nature of the study, the study did not examine the effect the instructional hub or traditional classroom had on the ESL's motivation to acquire the English language, the sense of belonging and well-being in the school environment, and how they adjusted their own learning.

Protection of Participants' Rights

Gathering archival data required no contact for the selected sample. The identity of the participants and the school were kept anonymous and to ensure anonymity there were no mention of names. Permission was not required from the subjects in the study.

However, the principal of Fields T. Middle School, the superintendent of the district and Walden University granted permission to conduct the study. I compared published data to determine the influence the instructional hub and the traditional classroom had on reading growth. The superintendent of accountability and technology signed a data usage agreement for the study and gave originally released data, which remained confidential throughout the data collection process. Also, the superintendent of the school district completed a letter of cooperation.

Data Analysis Results

After gathering the data from the district superintendent of accountability and technology, data were entered into an Excel spreadsheet and then uploaded to SPSS 25. Each archived EOG reading score was given a unique number in order to replace the state ID to ensure the identities of the students were protected. There were five repeated measures in this study for the testing years of 2013, 2014, 2015, 2016, and 2017.

Descriptive Statistics

The sample was $n = 70$ students. The overall mean scores and general descriptive statistics are shown in Table 3.

Table 3

5 Year Descriptive Statistics for EOG Reading Scores

Year	Minimum	Maximum	<i>M</i>	<i>SD</i>
2013	351	453	435	18.1
2014	349	463	439	19.7
2015	429	479	442	10.8
2016	429	469	443	8.53
2017	432	456	443	7.17

The data were averaged between the testing years of 2013-2014 and after the testing years of 2016-2017 (Table 4).

Table 4

Mean EOG Reading Scores of Matched Students for the Testing Years of 2013-2017

	<i>N</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>
2013-2014	70	351.00	463.00	439.89	19.79
2014-2015	70	341.00	479.00	442.21	10.85
2015-2016	70	427.00	469.00	433.76	8.53
2016-2017	70	426.00	456.00	443.11	7.17

The mean of the SIOP model implementation EOG scores for the testing years of 2013-2014 was $M = 439.89$. The mean of traditional classroom EOG reading scores for the testing years of 2014-2015 was $M = 442.21$. The mean of the traditional classroom EOG reading scores for 2015-16 was $M = 433.76$. The mean of the traditional classroom EOG reading scores for 2016-2017 was $M = 443.11$. Therefore, EOG reading state scores increased after the implementation of the SIOP model by 4.22 points.

To further show there was a significant difference in EOG reading scores, a paired-samples t test with statistics, repeated measures ANOVA, multivariate tests, within-subjects contrasts, and pairwise comparisons were conducted. A paired-samples t test was conducted to evaluate whether the means of EOG scores before the SIOP implementation differed significantly or not from the means of EOG after the SIOP implementation.

Research Question and Hypotheses

What differences exist, if any, between the reading growth of ESL students who received SIOP instruction within an instructional hub and ESL students who were in the

traditional classroom environment as measured by the pre-and post-reading test scores of the North Carolina reading End of Grade test?

Null

There is no significant difference between the reading growth scores of ESL students who received SIOP instruction with the instructional hub and reading achievement of ESL students in the traditional environment as measured by the pre-and post-test of the North Carolina Reading End of Grade test.

Alternate

There is a significant difference between the reading growth scores of ESL students who received SIOP instruction with the instructional hub and reading achievement of ESL students in the traditional environment as measured by the pre-and post-reading test scores of the North Carolina Reading End of Grade test.

In this study, the reading EOG test scores were used as the dependent variable. The independent variables were the two groups: 2014-15 instructional hub with ESL resource teachers using SIOP instructional practices and 2015-16 and 2016-17 traditional classroom with regular education teachers using no SIOP instructional practices.

Research Question Findings

The results (Table 5) include the mean EOG reading scores for 2 years of SIOP implementation ($M = 439.89$, $SD = 19.79$) in the instructional hub. After the SIOP implementation, 2014-2015, EOG reading scores showed a positive affect ($M = 442.21$, $SD = 10.85$). In 2015-2016 the EOG reading scores differed slightly after the SIOP

implementation ($M = 443.76$, $SD = 8.54$). Finally, the EOG reading scores showed a small decline ($M = 443.10$, $SD = 7.17$).

Table 5

Paired Samples Statistics

Pair 1	SIOP (2013)	435.95	70	18.20	2.68
	SIOP (2014)	439.89	70	19.79	2.92
Pair 2	Trad. (2014)	428.10	70	33.24	5.39
	Trad. (2015)	442.21	70	10.85	1.76
Pair 3	Trad. (2015)	442.51	70	10.09	1.75
	Trad. (2016)	443.75	70	8.53	1.48
Pair 4	Trad. (2016)	437.89	70	5.98	1.37
	Trad. (2017)	443.10	70	7.17	1.64

Using the effect size index, where the standardized effect size index was $d = 2.44$.

With a 95% confidence interval, the mean differences in the 2013-2014 ratings were between -5.52 and -2.34. The mean differences in the 2014-2015 ratings were between -23.93 and -4.27. The mean differences in the 2015-2016 ratings were between -4.13 and 1.64. The mean differences in the 2016-2017 ratings were between -8.54 and -1.87 (Table 6).

Table 6

Paired t Test Distribution of EOG reading Scores of Matched Students Paired

		<i>M</i>	<i>SD</i>	<i>SEM</i>	Lower	Upper	<i>t</i>	<i>df</i>	<i>p</i>
Pair 1	SIOP (2013-2014)	-3.93	5.35	.789	-5.52	-2.34	-4.98	45	.000
Pair 2	Trad. (2014-2015)	-14.10	29.91	4.85	-23.93	-4.27	-2.90	37	.006
Pair 3	Trad. (2015-2016)	-1.24	8.15	1.41	-4.13	1.64	-876	32	.388
Pair 4	Trad. (2016-2017)	-5.21	6.91	1.58	-8.54	-1.87	-3.28	18	.004

The correlation coefficient was also computed among the mean EOG reading scores before and after the years of SIOP implementation. Using the Bonferroni approach to control for Type I error in the correlation, a p value of less than .05 was required for significance (Table 7). The result of the analysis showed a significant change in the mean EOG reading scores of ESLs when measured before and after the implementation of the SIOP model.

Table 7

Paired Samples Correlations

	<i>N</i>	Correlation	<i>p</i>
Pair 1 SIOP (2013-2014)	70	.964	.000
Pair 2 Trad (2014-2015)	70	.455	.004
Pair 3 Trad (2015-2016)	70	.629	.000
Pair 4 Trad (2016-2017)	70	.459	.028

Repeated measures ANOVA was used to determine if there were significant differences in EOG reading scores before and after the SIOP implementation across the years. Repeated measures ANOVA is a statistical method that allows a single group to be used as both the control and experimental group by applying different experimental treatments and making comparison (Creswell, 2012) since the matched students of this study have had similar reading ability, ANOVA was appropriate to compare EOG reading averages.

Repeated measures ANOVA test with a 95% confidence level and a significance level ($\alpha = .05$) was used to determine if there was a significant difference in EOG reading scores of ESL students across the years of pre and post SIOP implementation. The scores were archived EOG reading scores before SIOP instruction and after the SIOP

implementation were calculated and compared in relation to the research question. The comparison of the means yielded a p value to test the null hypothesis. There were statistically significant differences in the EOG reading scores of ESL students across the years of pre- and post-SIOP implementation (Table 8).

Table 8

ANOVA Descriptive Statistics

	<i>M</i>	<i>SD</i>	<i>N</i>
Instructional Hub (2014)	437.15	29.73	70
Traditional (2015)	445.05	12.48	70
Traditional (2016)	443.68	9.96	70
Traditional (2017)	443.10	7.17	70

For a one-way within-subjects ANOVA, the multivariate tests (Table 9) indicated a positive effect intercept, Wilk's $\Lambda = .55$, $F(4, .133) = 2.21$, $p < .02$. The Shapiro Wilk's test was used to test the null hypothesis (Table 8).

Table 9

Multivariate Test

	Effect	Value	<i>F</i>	<i>df</i>	Error	<i>df</i>
Time	Pillai's Trace	.447	2.22	4.00	11.00	.133
	Wilk's Lambda	.553	2.22	4.00	11.00	.133
	Hotelling's Trace	.808	2.21	4.00	11.00	.133
	Roy's Largest Root	.808	2.21	4.00	11.00	.133

Note. Design: Intercept Within Subjects Design.

The results of the pairwise comparisons are shown in Table 10. Five pairwise comparisons were conducted among means for instructional hub (2014), traditional (2015), traditional (2016), and traditional (2017). All five comparisons were positive,

across the five tests, at the .05 level, using Holm's sequential Bonferroni procedure. For all comparisons, the p value was less than .05.

Table 10

Pairwise Comparisons

	Mean Differences	SE	Sig. ^b	95% Confidence Interval for Difference b	
				Lower Bound	Upper Bound
Hub (2014)	439.89	19.79	2.19	434.013	445.769
Trad (2015)	442.21	10.85	1.76	438.643	465.697
Trad (2016)	443.75	8.53	1.48	440.730	446.784
Trad (2017)	443.10	7.17	1.64	439.64	446.561

Thus, a paired-samples t test was conducted to evaluate whether the means of EOG scores before the SIOP implementation differed significantly or not from the means of EOG scores after the SIOP implementation. The results showed a significant change in the mean of EOG scores when measured before and then after the implementation of SIOP.

Summary

The study used a quantitative ex post facto design to determine the influence of the instructional hub and traditional direct instruction on reading academic achievement of ESL students as measured by the North Carolina EOG test in the local middle school. The results of this study indicated there was significant difference in the instructional hub and traditional environments in reading pretest and posttest scores.

All ESL student achievement scores were de-identified archival data. SPSS analytical software was used to analyze the collected data. Repeated measures ANOVA were computed with a 95% confidence interval. The findings revealed a significant change in scores after the implementation of the SIOP model for instruction.

The null hypothesis was rejected. There were statistically significant differences in the EOG reading score of ESL students across the years of the pre- and post SIOP implementation. Thus, prompting the need for district wide awareness of effective ESL teacher training, teaching strategies and improved instructional environments for ESL students to acquire language acquisition. In Section 3, a detailed discussion of recommendations and implications for positive social change, reflections, and the conclusion of this study are presented.

Section 3: The Project

The project for this study was an evaluation report based on comparison of archival standardized reading test scores of ESL students in an instructional hub and ESL students in a traditional classroom. The problem was ESL students were not passing the EOG state reading test. Data analysis revealed a significant difference in reading pre- and posttest scores between students in the instructional hub and traditional classroom environment. The findings led me to develop an evaluation report because the district no longer had money to finance the ESL program (instructional hub). The evaluation report was designed to promote discussions on the importance of ESL teacher training, teaching strategies, and instructional environments that support ESL students.

Description of the Goals

The goal of the project was to address low reading achievement among ELS students. Budget cuts forced the local and district administrators to end the instructional hub in the 2014-2015 school year where ESL resource teachers were trained SIOP instructors. All ESL students were placed back in the traditional classroom where SIOP instruction was not implemented.

The study included a quantitative ex post facto design to compare pre- and posttest scores of two ESL control groups and two ESL treatment groups from the 2013-2014, 2014-15, 2015-16, and 2016-17 school years. Because the alternate hypothesis was rejected, an outcome-based program evaluation white paper was chosen for the project. In Section 3, I discuss the history of the white paper, successful research-based implementation of ESL teacher training including SIOP practices, ESL teaching

strategies, and ESL instructional environments for learning. The goal of this outcome-based project was to present principals, district directors, and administrators with research-based practices that

- provide an account of the data analysis,
- present options for effective ESL teacher training,
- provide research-based ESL teaching strategies, and
- present information to improve the instructional environment for ESL students.

Rationale

The project for this study was an outcome-based evaluation white paper intended for school-based and district administrators to gain information on the appropriate training for teachers, instructional strategies, and learning environments for ESL students to meet state reading proficiency standards. The project addressed the problem at the study site through comparison of published data to determine the influence the instructional hub and the traditional classroom had on reading growth of middle school ESL students. I did not choose a formative evaluation because this type of evaluation focuses on variables such as the number of service hours in a program or why a program changed over time. Also, this type of evaluation addresses how program outcomes and inputs were achieved. I chose an outcome evaluation as opposed to a process evaluation because I examined the influence of different programs on the participants.

The collection and analysis of the data in Section 2 led me to construct a white paper as the final project for this study. I collected the students' standardized NCEOG

reading test data to analyze the outcome achievement data for the one treatment ESL group that received SIOP instruction through the instructional hub and the two control ESL groups who were in the traditional classroom with no SIOP instruction. Using the inferential statistical analysis, I compared the mean differences between the one treatment group and the two control groups.

The students' reading EOG test results from the prior school year (pretest) and end of school year (posttest) served as the dependent variables. An ANOVA was used to determine whether there was a statistically significant difference in the reading achievement of ESL students who received SIOP instruction in the instructional hub compared to ESL students in the traditional classroom with no SIOP instruction. The results of the quantitative ex post facto data analysis indicated that ESL students in the instructional hub showed a significant difference in reading achievement compared to the ESL students in the traditional classroom.

Review of the Literature

I conducted a brief literature review on white papers. The review of literature included an investigation of white papers, how they were developed, and the theory and research behind a white paper. The search term *white paper* in a Sage journal search through the Walden library produced 91,263 results. A Google Scholar search of *white papers in education*, *white papers as a genre*, and *white paper history* produced 4,020,00 results. Key terms used to address the white paper recommendations were *ESL training*, *ESL instructional environments*, *SIOP teaching strategies*, and *ESL reading achievement*.

White Paper

In the early 1900s, British political communication came in a blue book. The term white paper developed because the communication from Winston Churchill was on white paper (James, 2017). The original white paper definition is an official government report. In 1922, the first white paper was written by Prime Minister Winston Churchill in response to conflicts in Palestine (Origin of the White Paper, n.n.). Churchill's document outlined a problem and solutions regarding the dispute with the Palestinian government. However, the first known educational white paper did not appear until 1943 (McCulloch, 2013). This particular white paper was written to oppose standardized testing of children but then moved toward assessing and classifying children by their aptitudes (McInerney, 2018). The white paper of 1988 outlined and explained the significant changes in higher education (Williams, 1988).

The term white paper is now a genre, and members of organizations write white papers as a tool to argue or advocate for their position (Malone & Wright, 2018). Typically, officials argue for a specific position or problem that is rooted in governmental policy (Stelzner, 2007). For white papers to have substance, Stelzner (2007) stated they must (a) be persuasive and informative, (b) provide the history of the problem, (c) have a thorough explanation of the new product, and (d) break the content down into small chunks.

In the current study, the white paper project provided detailed information on reading achievement among ESL middle school students and outlined the use of SIOP instruction through a daily, 2-hour, instructional hub to increase reading achievement.

The findings regarding the appropriate learning environment for ESL students to meet state reading proficiency standards are outlined in detail. Chambers and Hausman (2014) contended that there are multiple variables that result in high or low reading achievement. Some of these variables include supportive leadership, professional development, teacher morale, and the type of instructional strategies. A well-written white paper has more potential for people to read and respond to what one is trying to sell (Boys, 2014). The white paper in the current study contended that research-based instructional strategies should be used to close the ESL reading achievement gap.

Theory and Research

A white paper must get readers' attention by quickly describing the problem and presenting solutions (Stelzner, 2007). The project in the current study addressed low reading achievement among ESL middle school students and the use of ESL instructional practices as a solution to increase ESL reading achievement. The results of this study were outlined and intended for principals and district administrators. This white paper presented the local problem, research question, data collection and analysis procedures, and results from the study. The white paper also provided principals and district administrators with instructional practices/training options for ESL student achievement, and recommendations for closing the achievement gap between ESL students and their non-ESL peers in the area of reading. The results of this project revealed that instruction in the instructional hub had a more significant influence on reading achievement for ESL students than instruction in the traditional classroom. A review of literature revealed

successful research-based instructional approaches for training teachers and supporting ESL student reading achievement.

Outcome-Based Teacher Training

The thought process of sending teachers to one-day training, conferences, or workshops is widely accepted as a tool to equip teachers with restructuring and changing school cultures (Lieberman, 2018). However, teachers need to engage in research-based concepts relating teacher actions to ESL student achievement (Good & Lavigne, 2018). Mainstream teachers are beginning to learn they are responsible for the language development of their students (Verplaetse & Migliacci, 2017). Therefore, teachers need models for developing lesson plans that integrate all subject matters (Calderon & Slakk, 2018). A deeper understanding of evidence-based instructional priorities such as professional development is also needed (Rossiter, Abbott, & Kushnir, 2016).

Simon, Esper, Porter, and Cutts (2013) offered explanations for preparing teachers on how to instruct ESL students. Simon et al. proposed primary and secondary teachers be trained to teach their students using student-centered strategies. One of the challenges teachers face is the timetable for learning and implementing new strategies while still having to teach (Ulla, 2017). Although teachers suggest they have limited time to train and deploy strategies, Johnson and Wells (2017) suggested effective teacher training may help address the challenges of implementing state standards for ESL students. Szpara (2017) stated that research supports quality professional development for teachers, dedicated planning time, and focused instruction in content and academic

English language as the leading indicators for academic achievement among the ESL population.

Through the implementation of a specific ESL instructional training for teachers, Hoover, Sarris, and Hill (2015) found a group of teachers in a remote rural county increasing the use of research-based ESL strategies. Hoover et al. argued that limited resources, training, and supports to assist teachers would threaten implementation of ESL instruction. Therefore, Hoover et al. included four workshop sessions including training, classroom observations, coaching, and interview sessions. Hoover et al. found the project to be effective in increasing rural educators' knowledge and application of ESL best practices.

Professional development should be systematic for teachers to compensate for theory practices that were not provided during a teacher's educational program of study (Song, 2016). Instructional strategies for ESL students are often overlooked when teachers are doing their undergraduate and graduate work. Song conducted a study to examine secondary teachers' report on instructional strategies for ESL students and role changes after they had SIOP training and coaching sessions. Most secondary teachers exposed to the SIOP training and coaching sessions reported their interaction and coping strategies were much improved. Teachers also reported that ESL students were advanced and intermediate learners instead of low-level learners after implementation of the SIOP model (Song, 2016).

Outcome-Based Instructional Strategies

The goal of SIOP instruction was for all content teachers to develop ESL students' academic skills while using techniques to engage and teach them in a comprehensible manner (Echevarria et al., 2017). Short (2016) argued that there was a limited number of oral and reading techniques that could be used to plan lessons in all subject areas. Short contended that the SIOP model could apply to all content areas for ESL students in response to the growing educational challenges. However, educators' decisions need to reflect bilingualism, biliteracy, and cross-cultural competence instead of high scores on a single standardized test (Palmer, Henderson, Wall, Zuniga, & Berthelsen, 2016).

Khonbi and Sadeghi (2017) conducted a one-way analysis of variance on the use of four idiom-teaching modes (short movie clips, sentence use, definition, and role play) to measure the effect each mode would have on 47 ESL students' understanding of the English language. Idioms were defined as a phrase or sentence whose meaning is not clear from the meaning of the individual words. Khonbi and Sadeghi found a significant effect on developing ESL learners' idiomatic competence through the four teaching modes. Khonbi and Sadeghi contended that teachers and learners must rely on regular courses for acquiring the language.

Gibson (2016) carried out an empirical study which identified effective language teaching-learning practices for ESL students. The research question Gibson posed was "what best educational strategies are used to develop English language acquisition among English language learners struggling to develop and retain English language

proficiency?” His research found that cognitive strategies, metacognitive strategies, vocabulary building, use of cognates, and computer-based instruction as beneficial to closing the ESL achievement gap. Krulatz (2014) noted that SIOP component four, “strategies,” is the central component of effective SIOP instruction because it includes metacognitive, cognitive, social, and affective strategies for second language acquisition.

Azkarai and Agirre (2016) researched the benefits of task-based interactional strategies that lead to second language learning. The study focused on ESL learners’ oral interaction while playing a guessing game and a picture placement task in both a mainstream classroom and sheltered classroom setting. The researchers analyzed 27 ESL students between the ages of 9 to 12 years old in both environments. Azkarai and Agirre examined the conversational strategies employed by the students to complete the two tasks. Findings proved mainstream learners had more difficulty carrying out the task than in the sheltered environment. The students applied more clarifying strategies in the sheltered environment which assist them in completing the interactive task successfully.

Outcome-Based: Instructional Environments

Maxwell (2015) contended all ESL students in two-way dual language instructional environments in North Carolina districts were scoring significantly higher in reading than their non-dual language peers. According to Sanchez, Garcia, and Solorza (2018), dual language classes had two meanings. One meaning, the instruction is given to both English speaking students that are developing another language or non-English speaking students developing English speaking skills. The second meaning, the instruction is given to one language minority group.

A strong emphasis on policy support for bilingual education could provide a bridge to closing the gap that exists between ESL and their non-ESL peers. Ozfidan (2017) stated bilingual education help build strong relationships and academic achievement. McEneaney, Lopez, & Nieswandt (2014) posited that there were two instructional models for English language acquisition. The first model, which is most prevalent in schools is English-only instruction. The second being, a bilingual education where ESL students are taught in both their native language and English. McEneaney et al. evaluated the effect of the two types of instructional environments and their impact on reading achievement. The research appeared to support the bilingual program as having a more significant impact on reading achievement. In a large California school district, Umansky, Valentino, & Reardon (2016) examined the district's four different instructional environments for their diverse ESL population.

English immersion. Students are in general education classes with native speaking English students in an all English setting. Teachers are trained and use an immersion model called Specially Designed Academic Instruction in English (SDAIE) to instruct both groups of students.

Transitional bilingual immersion. This is an ESL classroom environment where teachers instruct in the students' home language as a bridge to English acquisition and a way to make the content more accessible to the students. Students stay in this environment for a year.

Maintenance bilingual immersion. This is an ESL classroom environment that is similar to the transitional bilingual classroom, but students stay in this environment for a more extended period of time.

Dual immersion. This is a classroom comprised of a 2:1 ratio of ESL and non-ESL students with the goal being native English speakers becoming bilingual and bi-literate in both languages.

Umansky et al. (2016) analyzed data on eight cohorts of ESL students who were assigned to one of the four instructional environments. Ten years of data were collected for each cohort to track their academic performance and growth in math and reading. Their findings concluded, ESL students immersed in the two-way language classroom environment made a 0.3 standard deviation larger- from 2nd to 7th grade- than their ESL peers in the English immersion classrooms (2016).

Wright (2016) suggested no program, expensive software, or interventions will make ESL students English proficient in one or two years. Rapid English proficiency will not magically appear by merely throwing the students into a mainstream classroom with no support. Wright stated, although schools should provide bilingual instructional support for ESL students, they also must have ESL instruction and sheltered content area instruction. By implementing these supports, the long-term effect will be a higher percentage of English proficient students.

Project Description

Resources and Potential Barriers

The resources needed for this project are limited. Because I am disseminating the white paper electronically to principals, directors, and the superintendent, no funds were required to produce a copy for each stakeholder. My superintendent has reviewed my proposal and is very interested in the results of my study. The superintendent approved the research and presented a letter of recommendation for the data collection process to the board members. Because the superintendent is vested in improving instruction for all students, the findings from my study may be considered for future continuous improvement practices.

On the other hand, school administrators may have some reluctance to adopting another model for instruction when the district is currently implementing a “learning-focused model” for teaching and learning. Although this is a potential barrier, I plan to present the SIOP model as a complementary tool to the learning-focused model. By emphasizing the training and teaching strategies of the SIOP model as an option to assist ESL students with reading comprehension, administrators will see the methods as an enhancement for teaching and learning.

Implementation Timetable

In the Fall of 2019, an electronic copy of my study will be distributed to the superintendent and cabinet members in the local school district. I will discuss the finding of my study in a weekly district cabinet meeting. The study will present data and

research-based strategies to close the reading achievement gap between ESL students and their non-ESL peers.

Secondly, after the superintendent and cabinet have reviewed and studied the findings, I intend to share the findings with principals during a scheduled monthly principals' meeting. Directors (from every department), curriculum coaches, assistant superintendents, board members, and the superintendent will be in attendance. After the meeting, principals will have an opportunity to express their willingness to consider the possible implementation of recommendations for the 2019-2020 school year through a short google survey. My role as the researcher will be to facilitate the conversation and questions for implementation of ESL instructional teaching practices, ESL teacher training, and an ESL instructional environment. I will be the sole key player in presenting the project.

Policy Recommendation Plan

Based upon the results from this study, I chose an outcome-based white paper which will be disseminated to elementary, middle, and high school principals as well as district administrators after the study is approved and the degree is earned. In the white paper, I discuss the data analysis for the problem, provide an account of the data analysis, present options for effective ESL teacher training, provide research-based ESL teaching strategies, and present information to principals and district administrators to improve the instructional environment for ESL students.

The outcome-based evaluation was chosen for this study because principals and district administration should assess the past and current programs for ESL reading

achievement. Also, consideration should be given on how to better serve this subgroup in acquiring reading skills. The study will provide the LEA with research-based evidence to determine whether partial or full immersion programs such as the instructional hub are useful for ESL students across the school district, state, and country.

Project Implications

The white paper study recommends ESL training for teachers, research-based teaching instructional strategies, and an instructional setting to improve reading achievement among ESL students. Due to budget constraints, the school district discontinued implementation of the instructional hub in 2014. Students who had been served in the hub returned to their core classes full time (math, science, English Language Arts, social studies) for traditional instruction by core teachers with limited resources, tools, and training to prepare ESL students for reading.

If the school district decides to adopt, either one or all considerations, - ESL teacher training, a model for instruction, or an ESL instructional environment, they may see an upward trend to ESL reading academic achievement. Because the SIOP model is a planning and delivery framework for teachers in all content areas, the district would provide effective instructional support in the tested subjects of reading, math, and science over the course of the ESL students' academic career.

Furthermore, equipping teachers with best practices for planning and lesson delivery to ESL students will cause all students to benefit from excellent teaching practices. ESL students will become confident in their language skills, be able to assist their ESL peers with gaining reading skills and start to look at furthering their education

beyond high school. The graduation rate for ESL students will increase which will cause an effective change in the school district and the community. As the school district begins to see an effective academic difference, other school districts can start to benchmark with the district in assisting their growing ESL population. In turn, the academic achievement will rise beyond one district, becoming a model and change agent for many school districts in the state and beyond.

Section 4: Reflections and Conclusions

Section 4 includes my reflection and conclusions of the project study that addressed the impact of an ESL instructional hub compared to traditional instruction. The project strengths and limitations are covered in this section. Also, an analysis of my learning and growth as a scholar, practitioner, and developer of this outcome-based white paper project is included.

Project Strengths and Limitations

One strength of this project was the research-based recommendations to assist ESL students and teachers. Also, using state standardized reading test scores provided robust data to compare the two instructional environments. The project was a direct examination of the growing achievement gap between ESL students and their non-ESL peers. The format of the white paper was structured so the intended audience could understand the current problem, research question, data collection, analysis process, and the research-based outcomes for ESL student reading achievement.

Limitations of the project included possible lack of buy-in from administrators, lack of dedicated time to the project, and lack of discretionary funding for the project. Administrators must see a need for ESL support and teacher training. If the district and local administrators do not actively support the project, the considerations will be rejected.

Recommendations for Alternative Approaches

The results of this study indicated a significant difference in reading pre- and posttest scores between ESL students in the instructional hub and traditional

environments. The local education agency opted to mainstream ESL students to the traditional classroom due to budgetary restraints. I recommend providing planning time for ESL resource teachers and content area teachers to collaborate and develop differentiated instruction for ESL students to gain reading comprehensive skills. Also, I recommend placing ESL students with a specific team of teachers using the SIOP model for learning. Additionally, I recommend pulling ESL resource teachers into the classroom and team teaching with the regular education teachers.

Scholarship, Project Development, and Leadership and Change

Scholarship

My appreciation for scholarship has deepened over the course of my educational career. Looking back at my undergraduate and graduate work, I have grown as an educator. As an undergraduate and graduate, the knowledge I gained was how to become an educator and administrator. In postsecondary school, I had to approach knowledge from a global perspective. I had to study and think about the entire educational process and the impact my thinking would have on children, teachers, administrators, and district leaders. For me, the meaning of scholarship has evolved from financial support to research knowledge support.

Project Development

Having to learn how to research a problem and describe the purpose of the research in a specific format was challenging. I had to change my written and verbal expression to fit into APA format. I learned that research was more than a Google search. Research included the integration of researchers' ideas, critical reading, and thinking.

Having to work with a committee to express the meaning of my study was very different because each committee member had different evaluations and revisions. I had to show my work in a way that would be acceptable to everyone.

Leadership and Change

I have found in my 24 years of educational practice that change is difficult for educators. Because leaders are groomed to think and practice as their district leaders, being a change agent requires decisive, courageous, and competent leadership. The way children learn and acquire information is changing on a daily basis. It is important to have leaders who are not afraid to change for their students and with the changing student population. Leadership starts in the classroom. As a scholar and practitioner, I must be willing to learn and grow from other leaders, students, and colleagues.

I learned that educational research is an essential step in making educational changes. Leaders who do not educate themselves on specific problems become leaders of chance instead of change. They learn to take a chance and hope for change. This type of leadership causes students to lose faith in their learning as well as the educational system.

The strengths of being a leader include the willingness to be led, preparation to lead others into leadership roles and responsibilities, and readiness to inspire students to become confident change agents for the future. As the project developer, I learned through my research that there are other proven theories and recommendations for ESL students to acquire reading skills. More than anything, my research has deepened my passion for all students to receive a quality education.

Reflection on Importance of the Work

Walden's classroom homepage portal states "A Higher Degree, A Higher Purpose." Seeking an doctorate in education has moved me toward "A Higher Degree." Having the opportunity to research a subject and group of students who need more scholarly attention has moved me to "A Higher Purpose."

This project study addressed low reading proficiency among middle school ESL students. ESL students are expected to grasp English and every subject within 3 years. It is important to train teachers, equip ESL students with second language acquisition, and provide a nurturing instructional environment. This project study may lead to social change by assisting school districts with ways to support ESL students with reading comprehension. Instructional models and strategies such as SIOP may be ways to improve reading achievement among ESL students.

Implications, Applications, and Directions for Future Research

The study's impact on positive social change adds to the body of research geared toward how to best support ESL students. Empirical options for enhancement of current practices, teacher training, lesson planning, implementation of research-based practices, and placement of ESL students are set out in the project's white paper. The options have the potential to initiate dialogue with decision-makers, improve teaching, improve learning, and improve reading achievement for middle school ESL students. Providing a framework for improved practices may assist ESL students with academic and language acquisition.

Most ESL students help one another in school. ESL students who are equipped with the proper reading and language skills help students who turn around and assist another group of ESL students. The limitations of the study were the small sample size of each of the groups. Many of the identified ESL students were no longer classified as ESL in the school database because the students were beyond the 3-year identification process.

Recommendations for future research include investigating how colleges or universities are preparing student teachers to teach ESL language acquisition. College institutions should integrate ESL instruction and training into the elementary, middle, and high school curriculum. Teachers are no longer allowed to concentrate on teaching one subject. Reading, writing, cooperative learning, and technology are now the responsibility of all subject area teachers. Therefore, teacher training, instructional models for teaching ESL students, and instructional environments can be used to guide school districts in improving their planning.

Additional research could also include taking the sample and tracking the ESL students' reading achievement from middle school through high school. The research could encompass not only quantitative data but qualitative data as well. Surveying the students and teachers in a mixed-methods study could result in more solutions to the ongoing reading gap that continues to widen between ESL students and their non-ESL peers.

Conclusion

The project focused on SIOP instruction in an instructional hub in comparison to the instruction in a traditional classroom environment for reading achievement for ESL

students. This study was developed to address the reading achievement gap between ESL students and their non-ESL peers. Although the study population was underrepresented, the results of the study indicated a significant difference in reading scores of ESL students in the instructional hub compared to those in the traditional classroom. The current financial situation of the school district led me to examine research-based strategies for improving ESL student reading support within the traditional classroom environment. The project may provide principals, superintendents, and district leaders with a better understanding of how to support teachers and ESL students.

The doctoral process caused me to reflect and determine why I wanted to continue in the field of education. My passion for teaching was strong when I graduated from high school. Being a poor African American, I wanted to provide an education to underprivileged children such as myself. I realized I had to learn as much as possible to become equipped to teach any child in my undergraduate work. However, I quickly realized that college did not adequately train me to teach a changing population of students who were coming to American schools.

ESL children have a thirst for knowledge and a drive to live the American Dream. I too had that thirst. However, as a teacher, I was ill-equipped to give ESL students a quality education. I eventually became a principal, and 20% of the students were non-English speaking. I was determined to make a difference for this population because I had done so poorly years before. I began to seek training and understanding of how best to support teachers and ESL students. The project study led me down many paths.

However, this study also revived my passion for people, my hope for equality, and my joy in educating.

References

- Abbuhl, R., Gass, S., & Mackey, A. (2013). Experimental research design. In J.S. Podesava et al. (Eds.), *Research methods in linguistics*. New York, NY: Cambridge University Press.
- Alicea, R. (2013). Influence of SIOP cognitive coaching workshops on teaching practices of ESL teachers and ESL paraprofessionals. Wayne State University Dissertation, 2014. Retrieved from https://digitalcommons.wayne.edu/oa_dissertations/1039
- Andraed, M. S., Evans, N. W., & Hartshorn, K. J. (2015). Perceptions and realities of ESL students in higher education: An overview of instructional practices. In N.W. Evans et al. (Eds.), *ESL readers and writers in higher education: Understanding challenges, providing support*. New York, NY: Rutledge.
- Azkarai, A., & Agirre, A. I. (2016). Negotiation of meaning strategies in child EFL mainstream and CLIL settings. *TESOL Quarterly*, 50(4), 844-870.
<https://doi.org/10.1002/tesq.249>
- Balkin, R. S., & Kleist, D. M. (2016). *Counseling research: A practitioner-scholar approach*. Alexandria, VA: American Counseling Association.
- Barker, B. (2014). Evaluating the recession's impact on state school finance systems. *Education Policy Analysis Archives*, 22(91), 1-33.
<http://dx.doi.org/10.14507/epaa.v22n91.2014>
- Berlin, A., & Hammarstrom, K. (2016, Feb). First language use in second and foreign language teaching. *Linköping University*. Retrieved from <http://urn.kb.se/resolve?urn=urn:nbh:se:liu:diva-125620>

- Bishop, J. P., & Jackson, J. H. (2015). Fifty years later: A chance to get ESEA back on track. *Educational Policy Analysis Archive*, 23(24), 620-624.
<http://dx.doi.org/10.14507/epaa.v23.2025>
- Boys, B. (2014). *How to write a white paper in one day: Everything you need to know to create your own powerful marketing tool*. Retrieved from
<https://www.amazon.com/How-Write-White-Paper-One-ebook/dp/B00MTY2LPM>
- Calderon, M. E., & Slakk, S. (2018) *Teaching reading to English Learners 6-12: A framework for improving achievement in the content areas* (2nd ed). Thousand Oaks, CA: Corwin Press.
- Chambers, J., & Hausman, C. (2014). A comparative case study of factors distinguishing between high and low-performance on reading achievement in elementary rural appalachian schools. NCPEA Education Leadership Review of Doctoral Research. 1(1), 220-236. Retrieved from
<https://files.eric.ed.gov/fulltext/EJ1105738.pdf>
- Chenoweth, K. (2016). ESSA offers changes that can continue learning gains. *Phi Delta Kappan*, 97(8), 38-42. <https://doi.org/10.1177/0031721716647017>
- Colombo, M., McMakin, D., Jacobs, C., & Shestok, C. (2013). Hopefulness for teachers of ELLS in the era of NCLB. *Multicultural Perspectives*, 15(2), 81-87.
<http://dx.doi.org/10.1080/15210960.2013.781358>
- Cramer, D., & Howitt, D. (2014). *Introduction to research methods on psychology* (4th

- ed.). Essex, England: Pearson Education Limited.
- Crawford, J., & Reyes, S. (2015). The trouble with SIOP: How a behaviorist framework, flawed research, and clever marketing have come to define and diminish-sheltered instruction for English language learners. *Institute for Language and Education Policy*. Portland, OR. Retrieved from www.journal.nystesol.org
- Creswell, J. W. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Darling-Hammond, L., & Snyder, J. (2015). Professional capacity and accountability: An introduction. *Education Policy Analysis Archives*, 23(14).
<http://dx.doi.org/10.14507/epaa.v23.2005>
- Dearing, E., Walsh, M. E., Sibley, E., & St. John, T. L. (2016). Can community and school-based supports improve the achievement of first generation immigrant children attending high poverty schools? *Child Development*, 87(3), 883-897.
<http://dx.doi.org/10.14507/epaa.v23.2005>
- Echevarria, J., & Vogt, M. (2015). Reaching English learners: Aligning the ELA/ELD framework with SIOP. *California Reader*, 49(1), 23-33. Retrieved from https://www.researchgate.net/profile/Jana_Echevarria/publication/283420759_THE_CALIFORNIA_READER/links/5637941f08ae1740c93b1be8/THE_CALIFORNIA-READER.pdf
- Echevarria, J., Vogt, M., & Short, D. (2017) *Making content comprehensible for English language learners: The SIOP model*. Boston, MA: Allyn & Bacon.
- Edwards, A., & Van Waas, L. (2014). *Nationality and statelessness under international*

law. Chicago, IL: Cambridge University Press.

- Elfers, A. M., & Stritikus, T. (2014). How school and district leaders support classroom teachers' work with English language learners. *Educational Administration Quarterly*, *50*(2), 305-344. <http://dx.doi.org/10.1177/0013161X13472797>
- Estrada, V. L., Gomez, L., & Escalante-Ruiz, J. (2009). Let's make dual language the norm. *Educational Leadership*, *66*(7), 54-58. Retrieved from www.diti.us/doc/DL_THE_NORM_2009
- Every Student Succeeds Act of 2015, *Pub. L. No. 114-95 § 114 Stat.* 1171 (2015-2016)
- Gamson, D. A., McDermott, K. A., & Reed, D. S. (2015). The elementary and secondary education act at fifty: Aspirations, effects and limitations. *The Russell Sage Foundation Journal of the Social Sciences*. *1*(3), 1-29. Retrieved from <https://muse.jhu.edu/article/605398>
- Gibson, C. (2016). Bridging English language learner achievement gaps through effective vocabulary development strategies. *English Language Teaching*, *9*(9), 134-138. doi:10.5539/elt.v9n9p134
- Good, T. L., & Lavigne, A. L. (2018) *Looking in Classrooms*. New York, NY: Taylor & Francis.
- Gravetter, F. J., & Wallnau, L. B. (2017) *Statistics for the behavioral sciences* (10th ed.). Wadsworth: Cengage Learning.
- Guisbond, L., Neill, M., & Schaeffer, B. (2012). *NCLB's lost decade for educational progress: What can we learn from this policy failure?* The National Center for Fair and Open Testing. Retrieved from <https://www.jstor.org/stable/42982079>

- Haegele, J. A., & Hodge, S. A. (2015). Quantitative methodology: A guide for emerging physical education and adaptive physical education researchers. *The Physical Educator*, 72(5), 59-75. <https://dx.doi.org/10.18666/TPE-2015-V72-15-6133>
- Hatami, S. (2015, March). Teaching formulaic sequences in the ESL classroom. *TESOL*, 6(1), 112-129. <https://doi.org/10.1002/tesj.143>
- Hatheway, B., Shea, D., & Winslow, M. (2015). Dual language program meets integrated collaborative teaching. *Journal of Multilingual Educational Research*. 6(8), 137-151. Retrieved from <https://fordham.bepress.com/jmer/vol6/iss1/8>
- Head, M. L., Holman, L., Lanfear, R., Kahn, A. T., & Jennions, M. D. (2015). The extent and consequences of p-hacking in science. *PLOS Biology*, 13(3). <https://doi.org/10.1371/journal.pbio.1002106>
- Honingsfeld, A., & Dove, M. G. (2014). *Collaboration and co-teaching for English learners: A leader's guide*. Thousand Oaks, CA: Sage Publications.
- Hoover, J. J., Sarris, J. S., & Hill, R. (2015). Increasing usage of ESL instructional practices in a rural county elementary school. *Journal of the National Rural Education Association*, 36(3). Retrieved from <http://epubs.library.msstate.edu/index.php.ruraleducator/article/view/300>
- Inceli, O. (2015). Perceptions of English teachers to the SIOP model and it's impact on English limited proficiency. *Journal of Ethnic and Cultural Studies*, 2(1), 15-28. Retrieved from www.ejecs.org/index.php/JECS/article/view/13/pdf_3
- International Literacy Association. (2016). *Framework for literacy education reform*. Retrieved from <https://www.literacyworldwide.org>.

- James, A. (2017). Origin of white Papers. Retrieved from www.klarita.com/white-papers/origin-of-white-papers.
- Johnson, T., & Wells, L. (2017, March). English language learner teacher effectiveness and the common core. *Education Policy Analysis Archives*, 25(23), 2-21.
<http://dx.doi.org/10.14507/epaa.25.2395>
- Khonbi, Z. A., & Sadeghi, K. (2017, Oct). Improving English language learners idiomatic competence: Does mode of teaching play a role? *Iranian Journal of Language Teaching Research*, 5(3), 61-79. Retrieved from
<https://files.eric.ed.gov/fulltext/EJ1156202.pdf>
- Kim, W. G., & Garcia, S. B. (2014). Long-term English language learners' perception of their language and academic learning experience. *Remedial and Special Education*, 35(5), 300-312. <https://doi.org/10.1177/0741932514525047>
- Krashen, S. (1988). Second language acquisition and second language learning. In *second language acquisition and second language learning*. London: Prentice-Hall International.
- Krashen, S. D. (1981). Bilingual education and second language acquisition theory. In *schooling and language minority students: A Theoretical Framework*, Sacramento, California: Evaluation, Dissemination and Assessment Center.
- Krashen, S. D. (2014, Jan/Feb). The common core: A disaster for libraries, a disaster for language arts, a disaster for American education. *Knowledge Quest*, 42(3), 36-45. Retrieved from www.schoolmatter.info/2014/01/the-common-core-disaster-for-libraries.html

- Krashen, S. D., & Terrell, T. D. (1995) *The natural approach: Language acquisition in the classroom*. Hempstead, Hertfordshire: Prentice Hall Europe.
- Krulatz, A. (2014). Training teachers in the sheltered instruction observation protocol (SIOP) model, the siop way. *The Teacher Trainer Journal*, 28(1), 8-10. Retrieved from connection.ebscohost.com/c/articles/97272927/training-teachers-sheltered-instruction-observation-protocol-siop-model-siop-way
- Lakin, J. M., & Young, J. W. (2013, Fall). Evaluating growth for ELL students: Implications for accountability policies. *Educational Measurement: Issues and Practice*, 32(3), 11-26. <https://doi.org/10.1111/emip.12012>
- Lieberman, A. (1995, April). Practices that support teacher development. *Phi Delta Kappan*, (76)8, 591-96. Retrieved from <https://eric.ed.gov/?id=EJ501258>
- Lin, D., Pandian, A., & Paramaswari, J. (2016, September). Encouraging ESL/EFL reading among lower proficiency students at the tertiary level: The use of graded readers. *The Reading Matrix: An International Online Journal*, 16(2), 20-36. Retrieved from www.readingmatrix.com/files/15-543s6940.pdf
- Lui, D. (2015). A critical review of Krashen's input hypothesis: Three major arguments. *Journal of Education and Human Development*, 4(4), 39-146. doi:10.15640/jehd.v44a16
- Malone, E. A., & Wright, D. (2018). "To promote that demand:" Toward a history of the marketing white paper as a genre. *Journal of Business and Technical Communication*, 32(1), 113-147. <https://doi.org/10.1177/1050651917729861>
- Martinez, R. M., Slate, J. R., & Martinez-Garcia, C. (2014). English language learner

boys and girls reading and math achievement as a function of early-exit and late-exit bilingual programs: A multi-year, statewide analysis. *Education Research International*, 1-10. <http://dx.doi.org/10.1155/2014/508459>

Mathis, W., & Trujillo, T. (Eds.) (2016). *Learning from the federal market-based reforms: Lessons for the every student succeeds act (ESSA)*. Charlotte, NC: Information Age Publishing.

Maxwell, L. A. (2013, August 5). *ELL advocates call for Parcc tests in Spanish* [Blog post]. Retrieved from blogs.edweek.org.

Maxwell, L. A. (2015, August). *ELL advocates call for Parcc tests in Spanish* [Blog post]. Retrieved from http://blogs.edweek.org/edweek/learning-the-language/2013/08/ell_advocates_call_for_parcc_t.html

McEneaney, E. H., Lopez, F., & Nieswandt, M. (2014, Oct). Instructional models for the acquisition of English as bridges into school science: Effects on the science achievement of U.S. Hispanic English language learners. *Learning environments Research*, 17(3), 305-318. doi:10.1002/tea.21310

McGuinn, P. (2016, June 5). From No Child Left Behind to Every Student Success Act: Federalism and the education legacy of the Obama Administration. *The Journal of Federalism*, 43(3), 392-415. <https://doi.org/10.1093/publius/pjw014>

McInerney, L. (2018, March). The history of education white papers. *Schools Week*. Retrieved from <https://schoolsweek.co.uk/the-history-of-education-white-papers/>

Menken, K. (2010). NCLB and English language learners: Challenges and consequences. *Theory into Practice*, 49(2), 121-128.

<https://doi.org/10.1080/00405841003626619>

Miller, J., Windle, J. A., & Yazdanpanah, L. K. (2014). Planning lessons for refugee-background student's challenges and strategies. *International Journal of Pedagogies and Learning, 9*(1), 38-48.

<https://doi.org/10.1080/18334105.2014.1108>

Mitchell, C. (2015, Nov). The educational experiences of refugee children in countries of first asylum. *Education Week, 35*(12), 5. Retrieved from www.edweek.org/go/alerts

Moreen, M., & Soneni, M. (2015). The acquisition-learning distinction: A critique of Krashen's monitor model. *Journal of Emerging Trends in Educational Research and Policy Studies, 6*(2), 198-200. Retrieved from jeteraps.scholarlinkresearch.com

National Assessment for Educational Progress (2015). *Digest for educational statistics*. Retrieved from www.nces.ed.gov

National Center for Education Statistics (2015). *Fast Facts*. Retrieved from www.nces.ed.gov

Nichols, S. L. (2016). High-Stakes testing and student's developing motivation "The role of context, class, and race." *Handbook of social influences in school contexts: Social-Emotional, motivational and cognitive outcomes*. Chicago, IL.

North Carolina Department of Public Instruction (2015). *Accountability Service Division*. Retrieved from www.ncpublicschools.org/accountability

North Carolina Department of Public Instruction (2014). *Reliability of North Carolina*

- End of Grade and End of Course Assessments*. Retrieved from www.ncpublicschools.org
- NorthWest Evaluation Association. (2014). *The case for growth: Why measure student learning?* Retrieved from <https://www.nwea.org/content/uploads/2014/07/MAP-Catalyst-Series-Measuring-Growth-E-Book-Jan14.pdf>.
- Office of Refugee Resettlement (2018). Retrieved from www.acf.hhs.gov
- Ozfidan, B., & Burlbaw, L. M. (2017). A framework for understanding of bilingual education in Turkey: A mixed method approach. *Journal of Education and Training Studies*, 5(10), 188-196. doi: <https://doi.org/10.11114/jets.v5i10.2533>
- Palmer, D., Henderson, K., Wall, D., Zuniga, C. E., & Berthelsen, S. (2016). *Team teaching among mixed messages: Implementing two-way dual language bilingual education at third grade in Texas*. Language Policy, Springer.
- Peterson-Dryden, S. (2015, Oct). The educational experiences of refugee children in countries of first asylum. *Education Week*, 14(2), 131-148. <https://doi.org/10.1177/1477878515622703>
- Rodriguez, A. (2013). Instruction for ELL's through meaningful collaboration. *Gist Education and Research Journal*, 7, 12-34. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1062607.pdf>
- Rothman, R. (2016). Accountability for what matters. *State Education Standard*, 16(1), 10-13. Retrieved from www.Nasbe.org/wp-content/uploads/NASBE-Standard-Jan16_FINAL.pdf
- Rossiter, M. J., Abbott, M. L., & Kushnir, A. (2016, May). L2 vocabulary research and

- instructional practices: Where are the gaps? *TESL-EJ*, 20(1). Retrieved from <https://eric.ed.gov/?id=EJ1103317>
- Sanchez, M. T., Garcia, O., & Solarza, C. (2017, Dec.) Reframing language allocation policy in dual language bilingual education. *The Journal of the National Association for Bilingual Education*. 41(1), 37-51.
doi.org/10.1080/15235882.2017.1405098
- Sampson, J. F., & Collins, B. A. (2012). Preparing all teachers to meet the needs of English language learners: Applying policy to research and practice for teacher effectiveness, *Center for American Progress*. Retrieved from <https://files.eric.ed.gov/fulltext/ED535608.pdf>
- Severns, M. (2012). Starting early with English language learners: First lessons from Illinois. *New American Foundation*, 24. Retrieved from <https://files.eric.ed.gov/fulltext/ED540309.pdf>
- Short, D. (2016). How to integrate content and language learning effectively for English language learners. *Journal of Mathematics Science & Technology Education*, p. 4237-4260. <https://doi.org/10.12973/eurasia.2017.00806a>
- Simon, B., Esper, S., Porter, L., & Cutts, Q. (2013). *Student experience in a student centered peer instruction classroom*. San Diego, California: ICER'13. doi: 10.1145.2493394.2493407
- Song, K. (2016 a). Applying a SIOP based instructional framework for professional development in Korea. *Teaching English as a Second or Foreign Language*, 20(1), 1-26. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1103323.pdf>

- Song, K. H. (2016 b). Systematic professional development training and its impact on teachers' attitudes toward ELLS: SIOP and guided coaching. *TESOL Journal*, 7(4), 767-769. <https://doi.org/10.1002/tesj.240>
- Sparks, S. D. (2015). Should 3rd grade be the pivot point for early reading? Research questions the wisdom of returning students who struggle to read. *Education Week*, 34(30), 17-19. Retrieved from <https://www.edweek.org/ew/articles/2015/05/13/should-3rd-be-the-pivot-point.html>
- Sparks, S. D. (2016). Teaching English-learners: What does the research tell us? Questions around what works best are far from settled. *Education Week*. 35(30), 3-6. Retrieved from <https://www.edweek.org/ew/articles/2016/05/11/teaching-english-language-learners-what-does-the-research.html>
- Steele, J. L., Slater, R., Li, J., Zamarro, G., & Miller, T. (2017). Cost and effects of dual-language immersion in programs on student achievement. *Society for Research on Educational Effectiveness*. 54(1). Retrieved from <https://files.eric.ed.gov/fulltext/ED562111.pdf>
- Stelzner, M. (2007). *Writing white papers: How to capture readers and keep them engaged*. Poway, CA: WhitePaperSouce Publishing. Retrieved from homepages.abdn.ac.uk/n.beacham/pages/teaching/.../HowtoWriteAWhitePaper.
- Sutcher, L., Darling-Hammond, L., & Thomas, D. C. (2016, September). A coming crisis in teacher? Teacher supply, demand, and shortages in the U.S. *Learning Policy Institute*. Retrieved from <https://learningpolicyinstitute.org/product/coming-crisis->

teaching

Swanson, P. B. (2010). The shortage of America's foreign language teachers: A review of the literature. *Journal of Teacher Recruitment and Retention, 1*(1), 1-17.

Retrieved from

https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1013&context=mcl_facpub&sei-redir=1&referer=https%253A%252F%252Fscholar.google.com%252Fscholar%253Fhl%253Den%2526as_sdt%253D0%25252C34%2526q%253DSwanson%252B210%252BNCLB%2526btnG%253D#search=%22Swanson%202010%20NCLB%22

Szpara, M. Y. (2017, Fall). Injustice for English language learners-Common core raises academic standards without increasing supports: A descriptive case study of a Philadelphia teacher cohort. *Literacy Practice & Research, 26*-33. Retrieved from <https://ar.masader.com/eds/detail?db=eue&an=126872582>

Taherbhai, H., Seo, D., & O'Malley, K. (2014). Formative information using student growth percentiles for the quantification of English language learners' progress in language acquisition. *Applied Measurement in Education, 27*, 196-213. <https://doi.org/10.1080/08957347.2014.905784>

Terrell, T. D. (1977, November). A natural approach to second language acquisition and learning. *Modern Language Journal, 61*, 325-337. <https://doi.org/10.1111/j.1540-4781.1977.tb05147>

Thomas, W. P., & Collier, V. P. (2002). *A national study of school effectiveness for*

- language minority students' long-term academic achievement*. Santa Clara, CA: Center for Research on Education, Diversity, and Excellence. Retrieved from <https://files.eric.ed.gov/fulltext/ED475048.pdf>
- Tooley, M. (2015). No Child left behind is gone but will it be back? The new law could mean it will still be business as usual. *The Atlantic*. Retrieved from <http://www.theatlantic.com/education/archive/2015/12/no-child-left-behind-is-gone-but-will-it-be-back/421329/>.
- Ujifusa, A. (2012). 8 states snag NCLB waivers in latest round. *Education Week*, 31(33), 21, 23. Retrieved from <https://www.edweek.org/ew/articles/2012/06/33waiver.h31.html>
- Ulla, M. (2017). Teacher training in Myanmar: Teachers' perceptions and implications. *International Journal of Instruction*, 10(2), 103-118. Retrieved from http://www.e-iji.net/dosyalar/iji_2017_2_7.pdf
- Umansky, I. M., Valentino, R. A., & Reardon, S. F. (2016). The promise of two-language education. *Educational Leadership*, 73(5), 10-17. Retrieved from www.ascd.org/publications/educational_leadership/feb16/vol73/num05/The_Promise_of_Two-Language_Education.aspx
- United States Department of Education (2018). *Laws and Guidance*. Retrieved from www2.ed.gov/policy/elsec02/index.html
- Ushomirsky, N., & Williams, D. (2015). Funding gaps 2015: Too many states still spend less on educating students who need the most. *Education Trust*, 1-9. Retrieved from <https://files.eric.ed.gov/fulltext/ED566665.pdf>

- Vance, N. (2017). Second language acquisition. *Research Starters: Education (Online Edition)*. Retrieved from <https://ezp.waldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ers&AN=89164436&site=eds-live&scope=site>
- Verplaetse, L. S., & Migliacci, N. (2017) *Making mainstream content comprehensible through sheltered instruction. Inclusive Pedogogy for English for English language learners: A handbook of research informed practices*. New York, NY: Taylor & Francis Group.
- Wagner, C. (2015, Fall/Winter). Connected conversations: How ela teachers and ell teachers support the needs of ell students? *Ohio Journal of English Language Arts, 55(2)*, 39-43. Retrieved from <https://ezp.waldenulibrary.org/login?url=https://search.ebscohost.com/login.aspx?direct=rue&db=eue&AN=112987559&site=ehost-live&scope=sit>
- Wells, S. A., Fox, L., & Cordova-Cobo, D. (2016) How racially diverse schools and classrooms can benefit all student. *Report K-12, 82(1)*, 17-24. Retrieved from <https://search.proquest.com/openview/fb50b0955e27bccd50ca20d87073704b/1?q-origsite=gscholar&cbl=25066>
- Williams, B. (1988). The 1988 white paper on higher education. *Journal of Tertiary Educational Administration, 10(2)*, 111-126.
<https://doi.org/10.1080/0157603880100202>
- Wiseman, P., & Thomas, K. (2011, January-February). Growth index: A powerful tool for school improvement. *Leadership, 40(3)*, 18-21. Retrieved from

<https://files.eric.ed.gov/fulltext/EJ965883.pdf>

Wright, W. E. (2016, Feb). Let them talk! *Educational Leadership*, 73(5), 24-29.

Retrieved from www.ascd.org/publications/educational-leadership/feb16/vol73/num05/Let-Them-Talk!.aspx

Yee, M. (2015). What English language learners have to say about NCLB testing.

National Society for the Study of Education, 114 (1), 19-38. Retrieved from <http://www.tcrecord.org/Content.aspContentId=18269>

Zafar, M. (2010). Monitoring the monitor: A critique of Krashen's five hypotheses. *The*

Dhaka University Journal of Linguistics, 2(4), 139-146.

doi:10.3329/dujl.v2i4.6903

Zimmerman-Orozco, S. (2015). Border kids in the home of the brave. *Educational*

Leadership, 72(6), 48-53. Retrieved from www.ascd.org/publications/educational-leadership/mar15/vol72/num06/Border-Kids-in-the-Home-of-the-Brave.aspx

Appendix: Evaluation Report

The Influence of Two Instructional Models on Reading Achievement of ESL Middle
School Students

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Executive Summary

At a rural middle school that serves the 19.7% ESL student population, when compared to their non-ESL peers, 57.8% of the non-ESL students scored at or above Level III out of IV, while only 9.1% of the ESL students scored at or above the same level creating a 46.3% achievement gap in reading (NCDPI, 2016).

The school (Fields T. Middle School) implemented an ESL instructional hub in 2011 that pulled 1st, 2nd, and 3rd-year ESL students from their core classes for two hours of reading, language, and math instruction daily with ESL resource teachers to improve reading academic achievement. This hub was a state-supported public-school program for ESL students whose mother tongue was not English. The school used the SIOP (Sheltered Instructional Operational Protocol) model for instruction. This instructional model is a lesson planning and delivery system and a protocol instrument used to observe, rate, and provide feedback on lessons (Echevarria & Vogt, 2015).

Implemented as a quantitative quasi-experimental design, this study compared the instructional hub (independent variable) and the traditional environment's (independent variable) instructional practice on reading achievement (dependent variable). The study found that ESL students who participated in the instructional hub with SIOP instruction achieved 9.5% greater than their peers from the traditional classroom.

Introduction

One of the greatest challenges for secondary schools is a refugee student who enrolls in school as a teen with limited or no schooling, no basic English skills, and no speaking skills (Edwards & Van Waas, 2014). The 2013 National Center for Education

reported there are limited to no formal and informal programs to address the English as Second Language (ESL) students' speaking and literacy skills in American secondary schools (Kim & Garcia, 2014).

The State of North Carolina faces the same dilemmas for the ESL student population. According to the North Carolina Department of Public Instruction (NCDPI) (2016), only 32 of the 110 Local Education Agencies (LEA) provide dual language and immersion programs. Meanwhile, teachers are no longer allowed to concentrate on teaching one subject. Reading, writing, cooperative learning and technology is now the responsibility of all subject area teachers. Thus, the training, instructional models for teaching ESL students, and instructional environment can be used to guide school districts' improvement planning. Given the current budgetary restraints of Fields T. Middle School, recommendations for research-based strategies for improving ESL student reading support within the traditional classroom environment were provided.

Project Study: Academic Achievement and ESL Instructional Environments

The goal of the project is to address low reading achievement among ELS students, an instructional hub, where ESL resource teachers delivered SIOP strategies were designed in the year 2012. However, budget cuts forced the local and district administrators to end the hub in the 2014-2015 school year where ESL resource teachers were trained SIOP instructors. All ESL students were placed back in the traditional classroom where SIOP instruction was not implemented.

This outcome-based evaluation was chosen to assist principals and district administration with the assessment of past and current programs for ESL reading

achievement. The evaluation also will provide the LEA with research-based evidence to determine whether partial or full immersion programs such as the instructional hub are useful for ESL students across the school district, state, and country. The outcome-based project presents principals, district directors, and administrators with research-based practices that:

- Provide an account of the data analysis.
- Present options for effective ESL teacher training.
- Provide research-based ESL teaching strategies.
- Present information to improve the instructional environment for ESL students.

Research Question and Data Analysis

The quasi-experimental design involved comparing unanalyzed scores of the 2013-14 and 2014-15 (experimental group) ESL group with scores of the 2015-16 and 2016-17 (control groups) ESL groups. Proposed questions are:

RQ1. What differences exist, if any, between the reading growth of ESL students who received SIOP instruction within an instructional hub and ESL students who were in the traditional classroom environment as measured by the pre-and post-reading test scores of the North Carolina reading End of Grade test? The results indicated there was significant difference between groups, therefore the null hypothesis was accepted.

H₀1: There is no significant difference between the reading growth of ESL students who received SIOP instruction within an instructional hub and reading growth of

ESL students within a traditional environment as measured by the pre-and post-reading test scores of the North Carolina Reading End of Grade test.

H_{A1}: There is a significant difference between the reading growth of ESL students who received SIOP instruction within an instructional hub and reading growth of ESL students within a traditional environment as measured by the pre-and post-reading test scores of the North Carolina Reading End of Grade test.

After gathering the data from the district superintendent of accountability and technology, data were entered into an Excel spreadsheet and then uploaded to SPSS 25. Each archived EOG reading score was given a unique number in order to replace the state ID to ensure the identities of the students were protected. There were five repeated measures in this study for the testing years of 2013, 2014, 2015, 2016, and 2017.

The sample was $n = 70$ students. The mean of the SIOP model implementation EOG scores for the testing years of 2013-2014 was $M = 439.89$. The mean of traditional classroom EOG reading scores for the testing years of 2014-2015 was $M = 442.21$. The mean of the traditional classroom EOG reading scores for 2015-16 was $M = 433.76$. The mean of the traditional classroom EOG reading scores for 2016-2017 was $M = 443.11$. Therefore, EOG reading state scores increased after the implementation of the SIOP model by 4.22 points.

To further show there was a significant difference in EOG reading scores, a paired-samples t test with statistics, repeated measures ANOVA, multivariate tests, within-subjects contrasts, and pairwise comparisons were conducted. A paired-samples t test was conducted to evaluate whether the means of EOG scores before the SIOP

implementation differed significantly or not from the means of EOG after the SIOP implementation.

The results the mean EOG reading scores for 2 years of SIOP implementation ($M = 439.89$, $SD = 19.79$) in the instructional hub. After the SIOP implementation, 2014-2015, EOG reading scores showed a positive affect ($M = 442.21$, $SD = 10.85$). In 2015-2016 the EOG reading scores differed slightly after the SIOP implementation ($M = 443.76$, $SD = 8.54$). Finally, the EOG reading scores showed a small decline ($M = 443.10$, $SD = 7.17$).

Using the effect size index, where the standardized effect size index was $d = 2.44$. With a 95% confidence interval, the mean differences in the 2013-2014 ratings were between -5.52 and -2.34. The mean differences in the 2014-2015 ratings were between -23.93 and -4.27. The mean differences in the 2015-2016 ratings were between -4.13 and 1.64. The mean differences in the 2016-2017 ratings were between -8.54 and -1.87.

The correlation coefficient was also computed among the mean EOG reading scores before and after the years of SIOP implementation. Using the Bonferroni approach to control for Type I error in the correlation, a p value of less than .05 was required for significance. The result of the analysis showed a significant change in the mean EOG reading scores of ESLs when measured before and after the implementation of the SIOP model.

Repeated measures ANOVA was used to determine if there were significant differences in EOG reading scores before and after the SIOP implementation across the years. Repeated measures ANOVA is a statistical method that allows a single group to be

used as both the control and experimental group by applying different experimental treatments and making comparison (Creswell, 2012) since the matched students of this study have had similar reading ability, ANOVA was appropriate to compare EOG reading averages.

Repeated measures ANOVA test with a 95% confidence level and a significance level ($\alpha = .05$) was used to determine if there was a significant difference in EOG reading scores of ESL students across the years of pre and post SIOP implementation. The scores were archived EOG reading scores before SIOP instruction and after the SIOP implementation were calculated and compared in relation to the research question. The comparison of the means yielded a p value to test the null hypothesis. There were statistically significant differences in the EOG reading scores of ESL students across the years of pre- and post-SIOP implementation. For a one-way within-subjects ANOVA, the multivariate tests (Table 9) indicated a positive effect intercept, Wilk's $\Lambda = .55$, $F(4, .133) = 2.21$, $p < .02$. The Shapiro Wilk's test was used to test the null hypothesis.

Thus, a paired-samples t test was conducted to evaluate whether the means of EOG scores before the SIOP implementation differed significantly or not from the means of EOG scores after the SIOP implementation. The results showed a significant change in the mean of EOG scores when measured before and then after the implementation of SIOP.

The findings revealed a significant change in scores after the implementation of the SIOP model for instruction. The null hypothesis was rejected. There were statistically significant differences in the EOG reading score of ESL students across the years of the pre- and post SIOP implementation.

Outcome-based Recommendations: Teacher Training

The thought process of sending teachers to one-day training, conferences, or workshops is widely accepted as a tool to equip teachers with restructuring and changing school cultures (Lieberman, 2018). However, teachers need to engage in research-based concepts relating teacher actions to ESL student achievement (Good & Lavigne, 2018). Mainstream teachers are beginning to learn they are responsible for the language development of their students (Verplatetse & Migliacci, 2017). Therefore, teachers need models for developing lesson plans that integrate all subject matters (Calderon & Slakk, 2018). A deeper understanding of evidence-based instructional priorities such as professional development is also a need (Rossiter, Abbott, & Kushnir, 2016).

In 2013, Simon offered explanations for preparing teachers on how to instruct ESL students. Simon (2013) proposed primary and secondary teachers be trained to teach their students using student-centered strategies. One of the challenges teachers face is the timetable for learning and implementing new strategies while still having to teach (Ulla, 2017). Although, teachers suggest they have limited time to train and deploy strategies, Johnson and Wells (2017) suggested effective teacher training may help address the challenges of implementing State Standards for ESL students. Szpara (2017) stated research supports quality professional development for teachers, dedicated planning time,

and focused instruction in content and academic English language as the leading indicators for academic achievement among the ESL population.

Through the implementation of a specific ESL instructional training for teachers, Hoover, Sarris, and Hill (2015), found a group of teachers in a remote rural county increasing the use of research-based ESL strategies. The authors argued limited resources, training, and supports to assist teachers would threaten implementation of ESL instruction. Therefore, the researchers included four workshop sessions to include training, classroom observations, coaching, and interview sessions. Hoover et al. (2015) found the project to be effective in increasing rural educator's knowledge and application of ESL best practices.

Professional development should be systematic for teachers to compensate for theory practices that were not provided during a teachers' educational program of study (Song, 2016, May). Instructional strategies for ESL students are most often overlooked when teachers are doing their undergraduate and graduate work. Song (2016, Dec) conducted a study to examine secondary teachers' report on instructional strategies for ESL students and role changes after they had SIOP training and coaching sessions. The majority of secondary teachers exposed to the SIOP training and coaching sessions report their interaction and coping strategies were much improved (Song, 2016, Dec). Teachers also felt ESL students were advanced and intermediate learners instead of low-level learners after implementing the SIOP model (Song, 2016, Dec).

Outcome-based Recommendations: Instructional Strategies

The goal of SIOP instruction was for all content teachers to develop ESL students' academic skills while using techniques to engage and teach them in a comprehensible manner (Echevarria, Vogt, & Short, 2017). Short (2016) argued there were a limited number of oral and reading techniques that could be used to plan lessons in all subject areas. Short (2016) contended the SIOP model can apply to all content areas for ESL students in response to the growing educational challenges. However, educator's decisions need to reflect bilingualism, biliteracy, and cross-cultural competence instead of high scores on a single standardized test (Palmer, Henderson, Wall, Zuniga, & Berthelsen, 2016).

Khonbi and Sadeghi (2017) conducted a one-way analysis of variance on the use of four idiom-teaching modes (short movie clips, sentence use, definition, and role play) and the effect each mode would have on 47 ESL students' understanding of the English language. Idioms are defined as a phrase or sentence whose meaning is not clear from the meaning of the individual words (dictionary). The research study found a significant effect on developing ESL learners' idiomatic competence through the four teaching modes. Khonbi and Sadeghi (2017) contended teachers and learners must rely on regular courses for acquiring the language.

Gibson (2016) carried out an empirical study which identified effective language teaching-learning practices for ESL students. The research question Gibson (2016) posed was "what best educational strategies are used to develop English language acquisition among English language learners struggling to develop and retain English language

proficiency?” His research found that cognitive strategies, metacognitive strategies, vocabulary building, use of cognates, and computer-based instruction as beneficial to closing the ESL achievement gap. Krulatz (2014) noted that SIOP component four, “strategies,” is the central component of effective SIOP instruction because it includes metacognitive, cognitive, social, and affective strategies for second language acquisition.

Azkarai and Agirre (2016) researched the benefits of task-based interactional strategies that lead to second language learning. The study focused on ESL learners’ oral interaction while playing a guessing game and a picture placement task in both a mainstream classroom and sheltered classroom setting. The researchers analyzed 27 ESL students between the ages of 9 to 12 years old in both environments. Azkarai and Agirre (2016) examined the conversational strategies employed by the students to complete the two tasks. Findings proved mainstream learners had more difficulty carrying out the task than in the sheltered environment. The students applied more clarifying strategies in the sheltered environment which assist them in completing the interactive task successfully.

Outcome-based Recommendations: Instructional Environments

Maxwell (2015) contended all ESL students in two-way dual language instructional environments in North Carolina districts were scoring significantly higher in reading than their non-dual language peers. According to Sanchez, Garcia & Solorza (2018), dual language classes had two meanings. One meaning, the instruction is given to both English speaking students that are developing another language or non-English speaking students developing English speaking skills. The second meaning, the instruction is given to one language minority group.

A strong emphasis on policy support for bilingual education could provide a bridge to closing the gap that exists between ESL and their non-ESL peers. Ozfidan (2017) stated bilingual education help build strong relationships and academic achievement. McEneaney, Lopez, & Nieswandt (2014) contended there were two instructional models for English language acquisition. The first model, which is most prevalent in schools is English-only instruction. The second being, a bilingual education where ESL students are taught in both their native language and English. McEneaney, Lopez, & Nieswandt (2014) evaluated the effect of the two types of instructional environments and their impact on reading achievement. The research appeared to support the bilingual program as having a more significant impact on reading achievement.

In a large California school district, Umansky, Valentino, & Reardon (2016) examined the district's four different instructional environments for their diverse ESL population.

English immersion- students are in general education classes with native speaking English students in an all English setting. Teachers are trained and use an immersion model called Specially Designed Academic Instruction in English (SDAIE) to instruct both groups of students.

Transitional bilingual immersion- ESL classroom environment where teachers instruct in the students' home language as a bridge to English acquisition and a way to make the content more accessible to the students. Students stay in this environment for a year.

Maintenance bilingual immersion- ESL classroom environment that is similar to the transitional bilingual classroom, but students stay in this environment for a more extended period of time.

Dual immersion- classroom comprised of a 2:1 ratio of ESL and non-ESL students with the goal being native English speakers becoming bilingual and bi-literate in both languages.

Umansky et al.(2016) analyzed data on eight cohorts of ESL students who were assigned to one of the four instructional environments. Ten years of data were collected for each cohort to track their academic performance and growth in math and reading (Umansky, et al., 2016). Their findings concluded, ESL students immersed in the two-way language classroom environment made a 0.3 standard deviation larger- from 2nd to 7th grade- than their ESL peers in the English immersion classrooms (Umansky et al., 2016).

Wright (2016) suggested no program, expensive software, or interventions will make ESL students English proficient in one or two years. Rapid English proficiency will not magically appear by merely throwing the students into a mainstream classroom with no support. Wright (2016) stated, although schools should provide bilingual instructional support for ESL students, they also must have ESL instruction and sheltered content area instruction. By implementing these supports, the long-term effect will be a higher percentage of English proficient students.

Conclusion

The study used a quantitative quasi-experimental design to determine the influence of the instructional hub and traditional direct instruction on reading academic achievement of ESL students as measured by the North Carolina EOG test in the local middle school. The results of this study indicated there was significant difference in the instructional hub and traditional environments in reading pre-and -post test scores. This project paper suggest effective approaches to ESL language acquisition.

The project paper recommends ESL training for teachers, research-based teaching instructional strategies, and an instructional setting to improve reading achievement among ESL students. If the school district decides to adopt, either one or all considerations, - ESL teacher training, a model for instruction, or an ESL instructional environment, they may see an upward trend to ESL reading academic achievement. Because the SIOP model is a planning and delivery framework for teachers in all content areas, the district could see the achievement gap closing in the tested subjects of reading, math, and science over the course of the ESL students' academic career.

Equipping teachers with best practices for planning and lesson delivery to ESL students will cause all students to benefit from good teaching practices. ESL students will become confident in their language skills, be able to assist their ESL peers with gaining reading skills and start to look at furthering their education beyond high school. The graduation rate for ESL students will increase which will cause an effective change in the school district and the community. As the school district begins to see effective academic change, other school districts can begin to benchmark with the district to assist their

growing ESL population. In turn, the academic achievement will flourish beyond one district, becoming a model and change agent for many school districts in the state and beyond.

References

- Azkarai, A., & Agirre, A. I. (2016) Negotiation of meaning strategies in child EFL mainstream and CLIL settings. TESOL Quarterly, 50(4), 844-870.
Retrieved from <https://doi.org/10.1002/tesq.249>
- Calderon, M. E., & Slakk, S. (2018) *Teaching reading to English Learners 6-12: A framework for improving achievement in the content areas*. Thousand Oaks, Californin: Corwin Press. Retrieved from <https://catalog.loc.gov/vweb/search..>
- Edwards, A., & Van Waas, L. (2014). *Nationality and statelessness under international law*. Chicago, Illinois: Cambridge University Press.
- Echevarria, J., & Vogt, M. (2015, Sept). Reaching English learners: Aligning the ELA/ELD framework with SIOP. *California Reader, 49(1)*, 23-33. Retrieved from https://www.researchgate.net/profile/Jana_Echevarria/publication/283420759_THE_CALIFORNIA_READER/links/5637941f08ae1740c93b1be8/THE_CALIFORNIA-READER.pdf
- Echevarria, J., Vogt, M., & Short, D. (2017) *Making content comprehensible for English language learners: The SIOP model*. Boston, MA: Allyn & Bacon.
- Gibson, C. (2016). Bridging English language learner achievement gaps through effective vocabulary development strategies. *English Language Teaching, 9(9)*, 134-138.
doi:10.5539/elt.v9n9p134

- Good, T. L., & Lavigne, A. L. (2018) *Looking in Classrooms*. New York, NY: Taylor & Francis.
- Hoover, J. J., Sarris, J. S., & Hill, R. (2015). Increasing usage of ESL instructional practices in a rural county elementary school. *Journal of the National Rural Education Association, 36(3)*. Retrieved from <http://epubs.library.msstate.edu/index.php.ruraleducator/article/view/300>
- Johnson, T., & Wells, L. (2017, March). English language learner teacher effectiveness and the common core. *Education Policy Analysis Archives, 25(23)*, 2-21. doi: <http://dx.doi.org/10.14507/epaa.25.2395>
- Khonbi, Z. A., & Sadeghi, K. (2017, Oct). Improving English language learners idiomatic competence: Does mode of teaching play a role? *Iranian Journal of Language Teaching Research, 5(3)*, 61-79. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1156202.pdf>
- Krulatz, A. (2014). Training teachers in the sheltered instruction observation protocol (SIOP) model, the siop way. *The Teacher Trainer Journal, 28(1)*, 8-10. Retrieved from connection.ebscohost.com/c/articles/97272927/training-teachers-sheltered-instruction-observation-protocol-siop-model-siop-way
- Lieberman, A. (1995, April). Practices that support teacher development. *Phi Delta Kappan, (76)8*, 591-96. Retrieved from <https://eric.ed.gov/?id=EJ501258>
- Maxwell, L. A.(2013, August 5). *ELL advocates call for Parcc tests in Spanish* [Blog post]. Retrieved from blogs.edweek.org.
- McEneaney, E. H., Lopez, F., & Nieswandt, M. (2014, Oct). Instructional models for the

acquisition of English as bridges into school science: Effects on the science achievement of U.S. Hispanic English language learners. *Learning environments Research, 17*(3), 305-318. doi:10.1002/tea.21310

Palmer, D., Henderson, K., Wall, D., Zuniga, C. E., & Berthelsen, S. (2016). *Team teaching among mixed messages: Implementing two-way dual language bilingual education at third grade in Texas*. Language Policy, Springer.

Rossiter, M. J., Abbott, M. L., & Kushnir, A. (2016, May). L2 vocabulary research and instructional practices: Where are the gaps? *TESL-EJ, 20*(1). Retrieved from <https://eric.ed.gov/?id=EJ1103317>

Sanchez, M. T., Garcia, O., & Solarza, C. (2017, Dec.) Reframing language allocation policy in dual language bilingual education. *The Journal of the National Association for Bilingual Education, 41*(1), 37-51.
doi.org/10.1080/15235882.2017.1405098

Simon, B., Esper, S., Porter, L., & Cutts, Q. (2013). *Student experience in a student centered peer instruction classroom*. San Diego, California: ICER'13. doi: 10.1145.2493394.2493407

Short, D. (2016). How to integrate content and language learning effectively for English language learners. *Journal of Mathematics Science & Technology Education*, p. 4237-4260. doi: <https://doi.org/10.12973/eurasia.2017.00806a>

Song, K. (2016a). Applying a SIOP based instructional framework for professional development in Korea. *Teaching English as a Second or Foreign Language, 20* (1), 1-26. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1103323.pdf>

- Song, K. H. (2016b). Systematic professional development training and its impact on teachers' attitudes toward ELLS: SIOP and guided coaching. *TESOL Journal*, 7(4), 767-769. doi: <https://doi.org/10.1002/tesj.240>
- Szpara, M. Y. (2017, Fall). Injustice for English language learners-Common core raises academic standards without increasing supports: A descriptive case study of a Philadelphia teacher cohort. *Literacy Practice & Research*, 26-33. Retrieved from <https://ar.masader.com/eds/detail?db=eue&an=126872582>
- Ulla, M. (2017). Teacher training in Myanmar: Teachers' perceptions and implications. *International Journal of Instruction*, 10(2), 103-118. Retrieved from http://www.e-iji.net/dosyalar/iji_2017_2_7.pdf
- Umansky, I. M., Valentino, R. A., & Reardon, S. F. (2016). The promise of two-language education. *Educational Leadership*, 73(5), 10-17. Retrieved from www.ascd.org/publications/educational_leadership/feb16/vol73/num05/The_Promise_of_Two-Language_Education.aspx
- Verplaetse, L. S., & Migliacci, N. (2017) *Making mainstream content comprehensible through sheltered instruction. Inclusive Pedogogy for English for English language learners: A handbook of research informed practices*. New York, NY: Taylor & Francis Group.
- Wright, W. E. (2016, Feb). Let them talk! *Educational Leadership*, 73(5), 24-29. Retrieved from www.ascd.org/publications/educational-leadership/feb16/vol73/num05/Let-Them-Talk!.aspx