AN INVESTIGATION OF THE EFFICACY OF A VOCABULARY INTERVENTION USING VOCABULARY ENHANCED SYSTEMATIC AND EXPLICIT TEACHING ROUTINES (VE SETR) ON FIRST GRADE SPANISH READERS' VOCABULARY DEVELOPMENT AND READING COMPREHENSION

by

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A DISSERTATION

Presented to the Department of Educational Leadership
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Education

June 2009

University of Oregon Graduate School

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Title:

"An Investigation of the Efficacy of a Vocabulary Intervention Using Vocabulary Enhanced Systematic and Explicit Teaching Routines (VE SETR) on First Grade Spanish Readers' Vocabulary Development and Reading Comprehension"

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In this dissertation study, the efficacy of Vocabulary Enhanced Systematic and Explicit Teaching Routines (VE SETR) as a vocabulary intervention was examined for first grade Spanish-speaking English Language Learners (ELLs). The quasi-experimental study included two groups of elementary students in two schools that had an "early exit" Spanish language arts programs, meaning students are instructed in their native languages for the purposes of early reading instruction for 2-3 years before they are transitioned to reading in English. The study examined the efficacy of a 15 minute daily vocabulary intervention using VE SETRs to enhance the vocabulary instruction in a first grade

Spanish reading program. The VE SETR treatment cohort of students received 75 minutes of core reading instruction using the Macmillan McGraw-Hill reading curriculum, *Tesoros,* in conjunction with systematic and explicit teaching routines (SETR) that addressed all areas of reading instruction (e.g., phonics, phonemic awareness, fluency, vocabulary and comprehension) plus 15 minutes of small group VE SETR instruction. The SETR comparison group received 90 minutes of the general core-reading curriculum using *Tesoros* and the SETRs only, without the 15 minutes of vocabulary enhanced instruction. The study examined whether the VE SETR intervention improved vocabulary development for students in the VE SETR treatment cohort. Assessment measures included the Bilingual Verbal Ability Test (BVAT), the Test de Vocabulario en Imagenes Peabody PVT-III (TVIP), Indicadores Dinámicos del Éxito en la Lectura (IDEL) oral reading fluency measure and the Depth of Knowledge (DOK) measure.

Research findings indicated a statistically significant difference in favor of VE SETR treatment on students' ability to define and use target vocabulary words as measured by the Depth of Knowledge assessment. However, the VE SETR treatment had no statistically significant effect on the treatment students' oral reading fluency and on their receptive vocabulary as measured by the TVIP, or their bilingual verbal ability as measured by the BVAT. Overall, the VE SETR treatment had a positive effect for the VE SETR treatment group on one of the four measures.

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ACKNOWLEDGEMENTS

I would like to thank Dr. Ed Kame'enui for his thoughtful guidance, intellectual integrity, support, and encouragement throughout my dissertation process. Additionally, I would like to thank the SETR team, especially Drs. Doris and Scott Baker, in providing me with both the inspiration and encouragement to complete this project. Special appreciation goes to the incredible instructional staff of the Tigard-Tualatin School District who work tirelessly to meet the needs of ELL students. I also thank the members of my committee for their valuable input. Finally, I want to thank my friends, family, and Steve for the love and encouragement that kept me going.

DEDICATION

To my parents for always reminding me that anything is possible
and to Claire and Paige for bringing so much joy to my life.

TABLE OF CONTENTS

Chapter Page

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

CHAPTER I

INTRODUCTION

The demographics of U.S. schools have changed dramatically over the last 20 years, as have the educational needs of an increasingly diverse student population. According to the U.S. Department of Education, National Center for Education Statistics (NCES), about five million English Language Learners (ELLs) were enrolled in public schools in the 2003-2004 school year, an increase of 65% from 1994-2004 (NCES, 2006). Importantly, over 80% are Spanish-speaking (Shin, Hyron, & Bruno, 2003). In Oregon alone, enrollment of ELL students has increased 133% from 1994-2002 (Kindler, 2002). In order to address the needs of culturally and linguistically diverse students, districts and schools are challenged to reevaluate their instructional practices and reading instruction for ELLs.

According to the 2007 National Assessment of Educational Progress (NAEP) report, 96% of eighth-grade ELLs are not achieving in literacy development, demonstrating that ELLs are not achieving proficiency at the same rate as their English-speaking peers. Vocabulary development, both Spanish and English, appears to be one of the primary areas in which ELLs struggle to develop literacy skills (Carlisle, Beeman, Davis & Spharim, 1999). ELL students are challenged to maintain literacy development commensurate with their non-ELL peers who typically have a higher level of vocabulary development, and thus, the discrepancy between the two groups increases over time (Baker, Simmons, & Kame'enui, 1997). Providing high quality vocabulary instruction for ELLs as a part of a comprehensive reading program in the early grades in English or

Spanish is critical for the academic success of English Language Learners (August & Shanahan, 2006). Unfortunately, the available evidence indicates there is little emphasis on the acquisition of vocabulary in school curricula in grades K-3 (Biemiller & Slonin, 2001).

Research also suggests that another factor contributing to the difference between students who are able to maintain appropriate literacy development and those who continue to struggle is the extensiveness of a child's vocabulary in his or her first language (Carlisle et al., 1999). ELL students instructed to read in their first language appear to do as well as, if not better than their peers instructed in English only. These students are able to transfer the literacy skills learned in their first language (L1) to their second language (L2) (August, 2003). This appears to lend support to Cummins' hypothesis (1979) of the dual language iceberg theory, which argues that first language skills can be transferred to a second language. Cummins (2005) suggests that it is critical to build a foundation of skills in a student's first language in order to transfer those skills to a second language.

In addition, research has shown that struggling ELL students have difficulty with reading programs that are not designed to employ explicit teaching strategies (Coyne, Kame'enui, & Carnine, 2006). Gersten, Baker, Shanahan, Linan-Thompson, Collins & Scarcella (2007) report that reading interventions that focus on explicit instruction in the area of vocabulary instruction, including the development of academic English, is an effective approach for English language learners.

Therefore, the purpose of the Vocabulary Enhanced Systematic and Explicit Teaching Routines (VE SETR) study was to examine the effectiveness of enhancing core vocabulary instruction in a student's first language and to determine the impact on vocabulary development and reading comprehension among first-grade Spanish-speaking ELLs. This study implemented the use of VE SETR to teach vocabulary during Spanish reading instruction for native Spanish speakers. Systematic and Explicit Teaching Routines (SETRs) are a set of instructional templates developed to address the fundamental components of literacy development in the core reading instruction. The SETRs provided teachers with a teaching protocol for effectively delivering explicit instruction systematically. SETR is based on research from schools that delivered effective literacy instruction in Spanish and English (Linan-Thompson et al., 2005; Vaughn, Cirino, et al., 2006; Vaughn, Mathes, et al., 2006). However, this particular study focused on using the VE SETRs to concentrate specifically on vocabulary development (Baker, Gersten, Haager, Dingle, & Goldenberg, 2006; Vaughn et al., 2006).

The objective of this study was to compare two groups of ELL students as they received Spanish vocabulary instruction in first grade. There were both treatment (VE SETR) and comparison (SETR) groups within the two participating schools. The treatment groups of students received 75 minutes of core-reading instruction using *Tesoros* (Duran et al., 2008) with the SETRs plus the VE SETRs intervention for 15 minutes daily. The comparison groups received core-reading instruction with SETRs only. The SETRs were not designed to alter the core reading curriculum or content. Instead, they were designed to enhance the teaching strategies used to deliver the content

already specified in the core-reading program. Pretest and posttest data were collected using the Bilingual Verbal Ability Test (BVAT), Test de Vocabulario en Imagenes Peabody PVT-III, oral reading fluency measure on the Indicadores Dinamicos del Exito en la Lectura (IDEL), and the Depth of Knowledge (DOK) assessment tool.

The study involved a pretest-posttest comparison group design implemented in two first-grade classrooms in two schools that were matched on demographic and instructional characteristics. This study was conducted in Tigard-Tualatin, a suburb in Oregon, and was part of a larger national long-term study that began in 2008 and is scheduled to conclude in 2012. Although research exists, such as the National Reading Panel support (NICHD, 2000) that stresses the importance of vocabulary development for reading comprehension and overall academic achievement, the number of studies on effective vocabulary interventions for ELLs is few. The National Literacy Panel on Minority Children and Youth (August & Shanahan, 2006) identified only 17 experimental studies on instructional approaches with ELLs, and only 3 devoted to vocabulary instruction. This VE SETR study is especially relevant and timely because there is limited research that examines the effectiveness of explicit vocabulary development in Spanish on reading comprehension involving Spanish-speaking ELLs.

The study examined the effectiveness of VE SETRs on vocabulary development and reading comprehension in first grade Spanish-speaking classrooms when compared with a traditional vocabulary instruction using the adopted core reading curriculum and the SETR only enhancement. The research hypothesis was that Spanish-speaking students who received the enhanced VE SETR instruction would have a higher level of

vocabulary development and reading comprehension when compared to a comparison group of students who received the SETR only instruction.

CHAPTER II

LITERATURE REVIEW

English Language Learners in the United States

The English Language Learner (ELL) population is growing significantly at the national, regional, and local levels. According to the U.S. Department of Education's, National Center for Education Statistics (NCES), English Language Learners (ELL) enrollment in public schools grew 65% from 1994-2004 (NCES, 2006). Moreover, 80% of the ELL population in the United States is Spanish-speaking (Shin et al., 2003). The Census Bureau projects continued growth of this Spanish-speaking demographic group that is likely to comprise approximately 40% of the school-age population by 2050 (US Census Bureau, 2008). In Oregon alone, enrollment of ELL students has increased 133% from 1994-2002 (Kindler, 2002). According to 2000 census data, 64% of the ELL students aged 5 to 18 were born in the United States, and these students are twice as likely to live in poverty as children who speak English only or who are proficient in English (Batalova, 2006).

Academic Achievement of ELL Students in U.S. Schools

In general, K-12 ELL students in the United States are not achieving at the same level in English reading as their native English-speaking peers. The National Assessment of Educational Progress (NAEP) 2005 report revealed a 35-point difference between English-only students and ELL fifth-grade students in reading. Importantly, only 4% of ELLs in eighth grade scored at the proficient level in reading. Not only are a mere 4% of eighth grade ELLs achieving in reading, but only 29% of eighth grade ELL students

scored at or above the proficient level for math, compared to 71% of their English-only eighth grade peers. In the 2007 NAEP report, there was very little improvement. The report reveals that only 7% of ELLs in 4th grade and 5% in 8th grade scored at the proficient level in reading as compared to their English-only peers who scored 35% in 4th grade and 33% in 8th grade. There was a 36-point difference between ELLs and their English-only peers, representing only a one-point increase when compared to 2005. This demonstrates that there has been no improvement for ELLs over the last two years. Furthermore, of the 50 states participating in the 2007 NAEP assessment, only 6 states scored below Oregon, meaning that the Oregon ELL achievement level is lower than the national average.

Academic success and English language proficiency play an important role in the overall success of ELL students. The National Center for Education Statistics (NCES, 2004) reported that over 31% of Latino ELLs drop out of high school. Moreover, Latino ELL students are more likely to drop out of high school than Latino students who are fluent in English (NCES, 2004). This suggests that limited English proficiency may be a key factor that keeps students from achieving academically. Although there has been progress in this area, there is still a void in the research on effective instructional practices designed to close the academic achievement gap between ELLs and English-only students.

Theoretical Framework and Instructional Models for ELLS

ELL Program Models

The Center for Research on Education, Diversity, and Excellence (CREDE, 2003) offers an outline of the various program models implemented and studied in U.S schools, which include: (a) Two-Way Bilingual Immersion programs that focus on K-12 and promote academic achievement, bilingualism, and biliteracy for ELLs and native English speakers; (b) One-Way Developmental Bilingual Education programs that are designed for language minority students from one language background (including ELLs), with goals that are the same as the Two-Way Bilingual Immersion program; (c) Transitional Bilingual Education programs or Early Exit models that teach English language development through academic content programs and native language instruction for at least 2 or 3 years, after which ELLs receive all-English instruction; and (d) English Language Development (ELD) or English as a second language (ESL) program models that focus only on teaching English explicitly to ELL students. A quick glance of these models suggests that that bilingual or native language instruction is incorporated in the majority of existing program models.

Cummins Iceberg Hypothesis

One of the cornerstones of bilingual education is the Cummins' hypothesis (1979) of the dual language iceberg theory. Cummins' theory of language interdependence proposed that there are common mental processes underlying both first-and second-language learning. This is referred to as the *iceberg model*. The iceberg analogy suggests that the first and second languages function in isolation. However, there appears to be a

foundation of underlying intellectual processes that overlap in both languages. In Cummins' hypothesis, the theory is that first language learning skills can be transferred to second language learning. Therefore, Cummins suggests that it is critical to build a foundation of skills in a students' first language in order to transfer those skills to a second language (Cummins, 2005).

The interdependence hypothesis attempts to explain the significant correlations between reading skills in a student's first and second language. These correlations exist both with languages that share the same writing systems and languages that do not, such as Kanji Japanese and English (Cummins et al., 1984). This suggests that the common underlying proficiency is both conceptual and linguistic. For example, in languages that share the same alphabetic system, such as Romance languages, both linguistic (e.g. phonemic awareness, sound letter correspondence, word reading, and root word transfer) and conceptual skills (e.g. word meaning, content specific concepts, academic processes, cognitive and metacognitive strategies) will arguably transfer from a child's first language to an additional language.

Yet with languages with different writing systems, transfer should primarily consist of cognitive and conceptual elements such as comprehension strategies, word meaning, and metacognitive skills, without the support of the linguistic transfer such as phonemic awareness or root word transfer. Cummins cites the example of the conceptual and cognitive transfer for the word, photosynthesis. In languages such as Spanish, French, and English, the term photosynthesis shares the same Greek root photo, meaning light. In Spanish the word is fotosintesis and French photosynthese. If a student can read the word photosynthesis in his or her first language and understand what it means, he or

she should be able to transfer both the linguistic skills and conceptual elements from their first language to their second language. Students who speak languages that do not share the same alphabetic writing system such as English and Japanese will most likely not be able to transfer the skills of phonics and sound letter correspondence from one language to another. For example, *photosynthesis* in English and the word *kougousei*, "光合性" in Japanese do not share the same alphabetic system or phonetic material to assist students in reading and understanding the word. However, if a student understands the meaning of "photosynthesis" in his or her first language he or she does not need to relearn the concept; he or she only needs to learn the linguistic aspects of how to read the word, pronounce it correctly and connect it to the conceptual understanding (Cummins, 2005).

As depicted in Figure 1, Cummins' common underlying proficiency model of bilingualism is represented in the form of two overlapping icebergs. The two icebergs represent the child's first and second language. Both languages appear separate above the surface, but beneath the surface, the two languages are not separate and theoretically operate through the same central processing system.

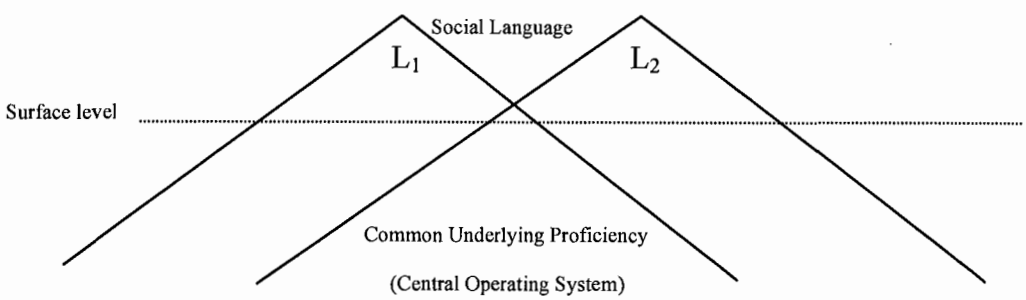


Figure 1: Cummins Iceberg Model

Bilingual Education

In the last decade, there has been a significant increase in research on program models for ELLs. Despite the perceived potential threat to bilingual education in our nation's public schools as more and more states (e.g. California, Arizona, Colorado, Oregon) attempt to pass English Only laws that limit bilingual education, one research question still persists today: "Does instructing a student in his or her native language increase the student's level of reading proficiency in English?" More specifically, does a student who learns to read in his or her first language (L1) improve in reading ability in a second language (L2)? Many studies report correlations between L1 development and L2 development, which suggests that literacy in a child's native language establishes a conceptual and skill base that transfers from native language reading to reading in a second language, especially in alphabetic writing systems (Cummins, 1989; Thomas & Collier, 2002). There is also evidence to support the assertion that students' reading proficiency in their first language is a strong predictor of their ultimate reading performance in English (Garcia, 2000; Reese, Garnier, Gallimore, & Goldenberg, 2000). For example, Ramirez, Pasta, Yuen, Billings, and Ramey (1991) conducted a study comparing native Spanish speaking students in English Only programs to two forms of bilingual program models: early exit (transition to English in grades 2-4) and late-exit (transition to English in grades 5-6). This 4-year longitudinal study included four schools; each had an English-only program and an early exit bilingual program. The students were matched based on pretests scores, socioeconomic status and other factors in kindergarten. On the English reading posttest, the early-exit children scored significantly better than the students in the English Only program by the end of first grade (Ramirez et al., 1991).

In a best-evidence synthesis conducted for the Institute of Education Sciences, U.S. Department of Education, on effective reading program models for ELLs, Slavin and Cheung (2003) examined studies on both native language and English only instruction. These authors concluded that there was a lack of research in the area of bilingual education, yet the existing studies supported the idea that first language reading instruction can be beneficial for the English reading of ELLs. The synthesis also noted that instructional practices were more predictive of academic success than the language of instruction (Slavin & Cheung, 2003).

Thomas and Collier (2002) also found that reading proficiency in a child's first language is a strong indicator of reading proficiency in their second language. Data for this study were collected from 1996-2001 in five school districts in Maine, Texas, and Oregon. The study focused on the academic outcomes of K-12 students in different ELL program models. Thomas and Collier (2002) found that students who participated in a 90-10 bilingual model, meaning that they received 90% of instruction in Spanish and 10% in English beginning in kindergarten, in which English instruction increased 10% each year until it reached 50% Spanish and 50% English in fifth grade, performed at or above grade level and at the 51st percentile on standardized reading tests in grades 1-5 in English. Students who were immersed in English Only instruction because their parents refused services, showed decreases in math and reading achievement to three-quarters of a standard deviation, when compared to ELL students receiving bilingual services. These students were also more likely to drop out of high school than students participating in a bilingual program.

Although the Thomas and Collier (2002) data suggest that ELL students perform better academically in bilingual programs when compared to ELLs receiving English only support, there are significant limitations to the overall design of the study. For example, Thomas and Collier used a simple descriptive cohort analysis; therefore, the same students were not studied over time, and there was no mention of whether pre-treatment differences were a factor in the study. Therefore, it is difficult to ascertain if students were achieving over time when compared with their peers, or if there were other prior factors that influenced student achievement.

Developing Literacy Skills in English Language Learners

A synthesis report from the National Literacy Panel on Language Minority Children and Youth (2006) on developing literacy in second-language, learners reveals important research on developing literacy, cross-linguistic relationships between first and second language literacy, and overall effective teaching strategies (August & Shanahan, 2006). According to the Panel's report, studies have reported that bilingual instruction is more effective than English-only instruction, because students are able to transfer the literacy skills from Spanish to English (August & Shanahan, 2006). Consequently, there are effective instructional reading strategies that are used to teach the transferability of metalinguistic, phonological awareness and comprehension skills from reading in Spanish to reading in English. In general, the research appears to support the importance of reading instruction in five core areas.

The "Big 5" Core Areas of Reading Instruction

Research indicates that the five core areas of reading instruction for English-speaking students--phonemic awareness, phonics, fluency, vocabulary, comprehension--

are the same for ELLs, whether they are instructed to read in Spanish or English (August & Shanahan, 2006). Shanahan and Beck (2006) indicated that the effective literacy components and instructional approaches for English only students are equally effective with ELLs. In the primary stages of reading instruction, phonemic awareness and phonics appear to be critical because these skills transfer from L1 to L2; however, fluency, vocabulary, and comprehension are imperative throughout the entire process of reading development (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). Unfortunately, many ELLs struggle in reading because of their lack of vocabulary skills, reading comprehension strategies, and fluency (August & Shanahan, 2006). Vocabulary knowledge is strongly related to text comprehension and appears to be a highly significant factor in second language readers' success (August & Shanahan, 2006).

In addition, ELLs enter classrooms with varying degrees of oral proficiency and literacy in their first-language. According to August and Shanahan (2006),

> They are not blank slates. There is clear evidence that tapping into first-language literacy can confer advantages to English language learners such as the ability to take advantage of higher order vocabulary skills in the first-language, such as the ability to provide formal definitions and interpret metaphors, when speaking a second language (p. 11).

Therefore, vocabulary instruction provided in a child's first language appears to offer an opportunity for students to strengthen both comprehension and fluency skills (August & Shanahan, 2006).

Vocabulary

It is estimated that by the time students graduate from high school they will need to know an estimated 75,000 words in English (Snow & Kim, 2007). This breaks down to a minimum of 10 words a day from the beginning of language development from approximately age two to the age of seventeen. This means that students who are starting a few years late, like ELL students, need to learn vocabulary at a quicker rate than their English speaking peers if they are going to catch up (Wagner, Muse, & Tannenbaum, 2007). Vocabulary is an important part of learning to read. As Stahl (2005) asserts "vocabulary knowledge is knowledge; the knowledge of a word not only implies a definition, but also implies how that word fits into the world" (p. 95). Vocabulary knowledge in kindergarten and first grade is also a significant predictor of reading comprehension in secondary grades (Cunningham & Stanovich, 1997). Research also supports the proposition that when a child has a restricted vocabulary development, it is very difficult to catch up to peers who have adequate vocabulary levels (Coyne, Simmons, & Kame'enui, 2004).

In a National Reading Panel Report, vocabulary knowledge is recognized as essential in the development of reading skills (NICHD, 2000). In basic terms, vocabulary "is the knowledge of meaning of words" (Kamil & Heibert, 2005). Words come in two forms: oral and print. Oral vocabulary refers to words that are spoken or read orally. Print vocabulary refers to words that a reader understands or knows when they are reading or writing (Beck, Mckeown, & Kucan, 2008). However, the understanding of words also comes in two forms: receptive and productive. Receptive vocabulary is a word or set of words that the can be given a meaning by the reader or listener. Receptive vocabulary is

usually more extensive than productive vocabulary and is very critical to establishing strong oral or receptive vocabulary skills for beginning readers. As a child begins to read, unless the word they are reading is in their receptive vocabulary, they will not comprehend the word, it simply is a set of sounds put together. Kamil and Hiebert (2005) suggest that "...vocabulary serves as the bridge between the word level processes of phonics and the cognitive processes of comprehension" (p.4). Productive vocabulary is the set of words that an individual uses words when writing or speaking to convey meaning (p.3).

The National Reading Panel Report (NICHD, 2000) also identified specific recommendations for providing effective vocabulary instruction. The report suggests that vocabulary can be developed in two ways, indirectly and directly. Indirect learning of vocabulary words occurs through students engaging daily in oral language, listening to adults reading to them, and read independently. Direct learning of vocabulary words refers to the explicit instruction of both individual words and word learning strategies. However, the National Reading Panel also states that vocabulary is taught and acquired in a variety of ways and there is no research-based method for teaching vocabulary that is considered to be the only way to teach vocabulary. Instead, the NRP recommends that teachers use a variety of direct and indirect methods of instruction. According to Beck et al. (2002), in order to deepen students' vocabulary, specific word instruction should be "robust", meaning that students should acquire deep understanding of a word, in different contexts, with different meanings.

The National Reading Panel (NICHD, 2000) report states that direct instruction of vocabulary helps students learn words "that are not part of their everyday experiences"

(p. 36). One principle of effective vocabulary instruction is to provide multiple exposures to a word and the word's meaning. According to Stahl (2005), students need to see a word multiple times before it is acquired as part of their long-term memory. Therefore, students should see, hear, and read the word in different contexts several times. Accordingly, it is important that vocabulary instruction provide students with opportunities to encounter words repeatedly and in more than one context (Stahl, 2005).

Furthermore, the National Reading Panel (NICHD, 2000) concluded that effective vocabulary instruction must use a variety of methods to help students acquire new words over time. These methods include: (a) providing students direct instruction on vocabulary required to learn a specific text; (b) providing multiple exposures to vocabulary words; (c) teaching students vocabulary that will likely appear in many contexts; (d) providing students vocabulary that is derived from content learning materials; (e) teaching vocabulary tasks that students fully understand and are within the context of their reading ability; (f) providing vocabulary learning that involves active engagement in learning tasks; (g) including repetition, richness of context, and motivation, which may also add to the efficacy of incidental learning of vocabulary; (h) utilizing computer technology to teach vocabulary; and (i) moving away from dependence on a single vocabulary instructional method toward a reliance on multiple strategies (NICHD, 2000, p. 4).

Vocabulary and Reading Comprehension

In the last two decades, several experimental studies have focused on vocabulary development for English-speaking students. Reading research clearly suggests that student vocabulary knowledge directly relates to reading comprehension and academic success (Baumann, Kame'enui, & Ash, 2003). There is also evidence to support a strong

correlation between vocabulary knowledge and reading comprehension, and that vocabulary is a strong predictor of future reading comprehension. For example, Ross, Speece, and Cooper (2002) found that kindergarten vocabulary knowledge could predict reading comprehension in second grade.

August and Hakuta (1997, p. 56) found that, "vocabulary is the primary determinant of reading comprehension," and Jimenez (1994, p. 103) identified vocabulary as the "single most encountered obstacle" for ELLs when they are learning to read text in school. . Consequently, it seems that emphasizing vocabulary instruction in the early years of school is critical, but it appears that teachers spend very little time on vocabulary instruction (Blachowicz, Fisher, Ogle & Watts-Taffe, 2006.) Vocabulary research has revealed important evidence about effective vocabulary instruction for helping students comprehend what they read (August, Carlo, Dressler, & Snow, 2005; Baumann et al., 2003; Nagy & Scott, 2000). However, there has been very limited research to better understand how native language vocabulary development increases reading comprehension with Spanish speaking ELLs. Vocabulary research for ELLs is limited, yet critical, because ELLs who experience slow vocabulary development are unable to comprehend text at the same level as their English only peers (August et al., 2005). Moreover, once students fall behind in vocabulary development, it is very difficult to close the achievement gap. This gap is evident in the NAEP reading achievement data in which ELLs struggle to achieve at the same level of vocabulary development as their English only peers, which is tied closely to reading comprehension (Baumann et al., 2003).

Research also suggests that the relationship between vocabulary and comprehension is the same in Spanish for Spanish-speaking ELLs (Proctor, Carlo, August, & Snow, 2005) as it is for English-speaking students in English. Vocabulary instruction is an essential component in the development of reading comprehension. Although vocabulary research with ELLs is limited, the existing research suggests that systematic and explicit vocabulary instruction is effective in helping ELLs learn the meanings of unfamiliar words (Carlo et al., 2004).

Vocabulary Development for ELLs

Vocabulary development is especially important for English-language learners (ELLs) and is considered one of the most critical tasks of ELLs (Folse, 2004). ELLs appear to be at a clear disadvantage in the area of vocabulary development when compared to their English-speaking peers. Most students reading in their first language have learned between 5,000-7,000 vocabulary words when they begin to read (Biemiller & Slonim, 2001). However, ELL students begin to read in English with a very limited lexicon of English words. Students who enter kindergarten with limited vocabulary knowledge appear to start behind their kindergarten peers and fall further behind over time (Biemiller, 2004; Carlo et al., 2004). As a result, many ELL students have difficulty comprehending what they read because of their lack of understanding of abstract English words or the academic vocabulary that they encounter (García, 1991; Verhoeven, 1990). Therefore, ELLs who have deficits in their vocabulary are less able to comprehend text at grade level than their English-only (EO) peers (August et al., 2005).

Research on Vocabulary Learning

Although there is extensive research on vocabulary development, in general, there has been very little research conducted on vocabulary development for ELLs. In a report published by the National Literacy Panel (August & Shanahan, 2006), only four studies were identified that focused on explicit vocabulary instruction involving ELLs (Shanahan & Beck, 2006). The following section outlines the details and limitations of the existing body of vocabulary research for ELLs.

Carlo et al., (2004) provided 254 fifth-grade students, 142 ELLs, and 112 English-only students with daily 30-45 minute vocabulary interventions for 15 weeks. The focus of the intervention was to build breadth and depth of word knowledge (August et al., 2005). Students from nine classrooms in California, Virginia, and Massachusetts participated in the study. In the treatment groups, students were taught 30-45 minutes per day, 4 days per week for 15 weeks. Classroom teachers used explicit instructional routines that taught 12 target words per week. Specifically, students first pre-read and reviewed the reading content that focused on the topic of immigration. The curriculum was developed from newspaper articles, diaries, fiction, and historical accounts. First, the students would read the text in Spanish and the teacher would provide activities to help students make semantic connections through activities to identify cognates, roots, affixes, and morphological relationships. Then students read the content in English with the established target vocabulary words. Students then used the words in context by completing cloze reading activities, and synonym and antonym practice activities. In contrast, the comparison group received vocabulary instruction that was part of the school curriculum.

Overall, Carlo et al., (2004) reported that explicit and systematic vocabulary instruction had a strong positive effect on word learning. Although there were no gains on the Peabody Picture Vocabulary Test (PPVT), the ELL students showed improvement on completing cloze passages, measures of word association, and morphological knowledge. Students in the treatment group did significantly better in generating sentences that conveyed a variety of meanings on measures of word association. It appears that treatment students also improved in the number of words they learned. However, it was not clear if the vocabulary intervention had an impact on reading comprehension for both groups. Although students improved in word learning and in providing different meanings of multi-meaning words, based on the design of the study, it was difficult to determine which instructional aspect had the most impact on student learning. Therefore, the researchers failed to isolate the specific instructional strategies that were most effective with ELLs for vocabulary development.

Umbel, Pearson, Fernandez, and Oller (1992) examined the receptive vocabulary in English and Spanish of 105 bilingual first graders. The non-experimental study included two groups, one bilingual, and the other Spanish-speaking only. Umbel et al., (1992) used the Peabody Picture Vocabulary Test (PPVT) (Dunn & Dunn, 1981) in English and the Test de Vocabulario en Imágenes Peabody (TVIP-H) in Spanish, to compare the receptive vocabularies of bilingual and monolingual Spanish speaking students. The objective was to determine to what extent bilingualism impacts receptive vocabulary in both English and Spanish.

Students were divided into two groups: students from families speaking only Spanish at home (OSH) and students from families speaking both English and Spanish at

home (ESH). Of the students from families who spoke English and Spanish at home, fifty-one percent had been exposed to both languages since birth and 86% of the parents had lived in the United States more than 12 years. Parents were given a questionnaire in both Spanish and English to be completed providing information on language(s) spoken at home and socio-economic status. Both OSH and ESH groups were tested using the PPVT and the TVIP-H. Both groups performed near the mean in Spanish receptive vocabulary (TVIP-H means 97 and 96.5). The ESH group children scored more than 1 SD higher in English than the OSH group (PPVT-R means 88.0 and 69.7). However, both groups scored significantly below the mean of the English-speaking sample. Therefore, learning two languages does not inhibit receptive language development in the first language, and appears to provide a foundation for stronger performance in English. Importantly, ELL students were still significantly behind in English vocabulary development when compared to their English-speaking peers.

There were significant limitations to the Umbel et al., study. First, all students participating in the study were from Miami where Spanish is the first language of almost half of the population. Therefore, the newspapers, television, and radio are all equally represented in Spanish and English. Moreover, in Miami, bilingualism is an additive phenomenon, meaning both languages are developed without interference. In other demographic areas, bilingualism can be subtractive, in which the learning a second language interferes with the learning of a first language and the second language replaces the first language.

Second, the researchers suggested that "the translation equivalent of vocabulary tested with the children proved to be words known in one language but not the other,

suggesting that the children were in command of more vocabulary concepts than either the PPVT-R or TVIP-H scores reflected" (Umbel et al., 1992, p.1019). Even children who were low in one of the languages knew some of the words in one language and not in the other. Overall, the researchers found that the vocabulary of Latino students in both English and Spanish vocabulary "contradicts the prevailing view of bilingualism as a risk factor in vocabulary development" (Umbel et al., 1992, p. 1018).

Vaughn, Linan-Thompson, Mathes, Cirino, Carlson, Pollard-Durodola, Cardenas-Hagan, & Francis (2006) conducted an experimental pretest-posttest design study of first-grade students with reading difficulties in Spanish. Sixty-four first-grade Spanish-speaking ELL students from 21 classrooms and seven schools participated in the study. Student participants were selected through a screening process for all first-grade students at the beginning of the school year. Three hundred sixty-one students were given the screening pretests. The Spanish screening consisted of two subtests: (a) the Letter–Word Identification (LWID) subtest from the *Woodcock Language Proficiency Battery* and (b) the first five words from an experimental word-reading list used to assess initial word reading ability. Students who scored below the 25th percentile for the first grade on the LWID subtest and demonstrated an inability to read more than one of the words from the word list, were selected to receive the treatment intervention.

Students were also given the following measures at the beginning and end of the study:

(1) *Letter naming and sound identification.* Children were asked to identify each of the 26 letters of the English alphabet and each of the 30 letters of the Spanish alphabet.

(2) *Comprehensive test of phonological processing (CTOPP).* The CTOPP (Wagner, Torgesen, & Rashotte, 1999) had nine subtests measuring phonological awareness (PA), rapid naming (RN), and phonological memory (PM).

(3) *Test of phonological processing Spanish (TOPP-S).* The TOPP-S aligns with the English language CTOPP.

(4) *Woodcock Language Proficiency Battery–Revised (WLPB-R).* The WLPB-R English Form measures language proficiency in English (Woodcock, 1991).

(5) *Dynamic Indicators of Basic Early Literacy Skills (DIBELS).* The DIBELS (Good & Kaminski, 2002), and the *Indicadores Dinamicos al Éxito en la Lectura* (IDEL; Good, Bank, & Watson, 2003), in Spanish were one-minute reading fluency measures.

The thirty-five students in the treatment group received a seven-month reading intervention for 50 minutes, 5 days a week in a small-group setting. The small-group intervention provided systematic and explicit instruction in oral language and reading in Spanish by bilingual reading intervention teachers. The intervention focused on the following six instructional practices: (a) explicit teaching, (b) promotion of English language learning, (c) phonemic awareness and decoding, (d) vocabulary development, (e) interactive teaching that maximized student engagement, and (f) instruction that produced opportunities for accurate responses with feedback for struggling learners (Vaughn, et al., 2006).

The instruction was delivered in a daily lesson plan that was fast paced in which the teacher explicitly modeled new content, and in which students were provided with guided practice and ultimately, independent practice. Students provided choral responses with

opportunities for individual responses. The teacher monitored responses and provided structured error correction opportunities for students. At the end of the seven-month intervention, intervention students significantly outperformed students in the comparison group on posttest measures of phonological awareness, word attack, word reading, and reading comprehension and language skills in Spanish. The treatment group also showed higher overall comprehension levels than the comparison group at the end of the intervention period. The comparison group received the school's standard intervention for struggling readers, such as guided reading, *Reading Recovery* (Clay, 1993), and tutoring.

The researchers concluded that ELLs who were struggling readers in Spanish increased their scores on reading measures when they received systematic and explicit instruction in a small group setting. Although the study did not focus exclusively on vocabulary development, 10 minutes of the 50-minute intervention focused on improving Spanish vocabulary and listening comprehension. Students advanced .8 of a standard deviation and were in the near-average level of performance on the Spanish Language Cluster, a test of receptive vocabulary (Vaughn et al., 2006).

Although it is evident that the Spanish reading intervention had a strong overall impact on first-grade students' Spanish reading achievement, there were limitations to this study. For example, it was not clear which component of the reading intervention contributed directly to student progress and which components did not. Furthermore, it is not evident how the comparisons students would have performed had they received the same amount of intervention time as the treatment students.

Another study was conducted on the vocabulary development of English Language and English only in kindergarten (Silverman, 2007). This study examined the effectiveness of a vocabulary intervention developed by the researcher through storybook read-alouds in 5 kindergarten classrooms. The intervention was implemented over 14 weeks, 3 days per week for 30-45 minutes each day. There were 3 mainstream classrooms with ELLs and English-Only (EO) students enrolled and instruction provided in English. There was one, two-way bilingual classroom in which both English-only (EO) and English Language Learners (ELLs) were enrolled and instruction was in both Spanish and English for equal amounts of time. There was one structured immersion classroom in which only ELLs enrolled but instruction provided in English. In total there were 72 students participating in the study, 44 EOs and 28 ELLs.

The researcher developed the intervention that included the following components: (a) introduction of words through rich context of authentic children's literature; (b) clear, child-friendly definitions and explanations of target words; (c) questions and prompts to help children think critically about the meaning of words (d) examples of how words are used in other contexts; (e) opportunities for children to act out the meaning of words when applicable; (f) visual aids illustrating the meaning of words; (g) encouragement for children to pronounce words; (h) guidance for children to notice the spelling of target words; (i) opportunities for children to compare and contrast words; and (j) repetition and reinforcement of target word. The curricula corresponded to 12 read aloud books used as part of the kindergarten curriculum. Teachers were asked to follow a scripted lesson plan during the intervention instruction. The purpose of the study

was to determine if ELLs learn words at similar rates as EOs and whether ELLs and EOs grow in overall vocabulary knowledge at similar rates.

The students were given a general vocabulary knowledge test three times during the intervention at pretest, posttest and half way through the intervention. Students were given the Test of Language Development P: 3 (TOLD) (Newcomer & Hammill, 1997) that examines children's picture, relational and oral vocabulary knowledge which is designed to assess general vocabulary knowledge over time. The students were also tested on their knowledge of words taught in the intervention. The researcher tested the students on the 50 target words form the intervention using an assessment that she developed called the Researcher Vocabulary Assessment (RVA). The test consisted of picture and oral vocabulary subtests that included the words taught in the intervention.

Initially EOs scored an average of 10 points higher than ELLs on the initial vocabulary measures. The difference on the TOLD was smaller with EOs scoring between 3-7 points higher than ELLs. The researcher found that both EOs and ELLs showed significant improvement in knowledge of target words from pretest to posttest. However, EOs learned an average of 14 target words, whereas ELLs learned an average of 20 words. The linear growth modeling analysis demonstrated that ELLs showed faster rates of growth that EOs on the TOLD. ELLs increased .17 points per week faster than EOs on vocabulary knowledge. The results suggest that ELLs, when taught explicitly with appropriate strategies, can learn vocabulary words as fast or faster than their EO peers.

The study was limited by the small sample size and small number of classrooms. The researcher also did not explore how school characteristics of classroom instruction

might have had an impact on vocabulary learning and growth. This study suggested that ELLs could benefit equally from a vocabulary intervention. The researcher stated, "although English vocabulary instruction was not supported with children's first-language knowledge in this study, how this approach might foster children's English vocabulary development is an important research topic" (Silverman, 2007 p.379).

In addition, Vaughn and Shavuo (1990) studied the procedures for presenting words to first-grade, Spanish-speaking students for 30 minutes a day for 3 weeks. Students were randomly assigned to two groups and each group was taught 31 words. One group was taught words presented in narratives, including the use of target words in sentences, and a review of illustrated picture cards and word meanings. The other group was taught using words presented out of context in individual sentences. The experimental group mastered 21 words and the control group mastered 9 words. The findings suggest that instruction requiring repetition, the use of words in a variety of formats, and the use of a variety of strategies to include words in context have a significant impact on vocabulary development for ELLs.

Vocabulary Word Selection

Word selection is a very critical component of vocabulary instruction (Beck & McKeown, & Kucan, 2004). Asking teachers to teach all vocabulary words in a language can be overwhelming, if not impossible. Therefore, selecting specific words that meet a particular set of criteria depending on the purpose for learning the selected words is critical. Many researchers have suggested several criteria for choosing vocabulary words to teach to ELL students (Beck, McKeown, & Kucan, 2002; Biemiller & Slonim, 2001).

These criteria focus on choosing words that are important to the understanding of a specific reading selection or concept, and words that students are generally likely to encounter in their general and content area reading.

Vocabulary words should be selected from the core-reading program and delivered with clear definitions in a language that students easily understand. Vocabulary instruction should be in both conversational and academic vocabulary (Biemiller & Slonim, 2001). Beck's (Beck et. al, 2002) tier selection criteria classify vocabulary words into three tiers. The first tier is general vocabulary words that are often learned through spoken language. Tier two vocabulary are words found in written text that can be found in multiple academic contexts. Tier three words are very specialized words specific to an academic discourse and are not found frequently in other content areas (Beck et al., 2002).

A research study by Blachowicz (2006) found that historically, commercial reading instruction programs had very little emphasis on vocabulary instruction. In contrast, in the 2008 publication of Macmillan-McGraw Hill's *Tesoros*, a Spanish literacy curriculum, there are explicit vocabulary teaching routines incorporated into each unit. For example, four to six words were selected for each session on word meaning or students' developmental differences in reading and word knowledge (Macmillan-McGraw Hill, 2008). The words were selected based on Avril Coxhead's (2000) list of High Incidence Academic Words and the Living Word Vocabulary list in English, in conjunction with the selection of words based on the following criteria:

1. Words within students' instructional ranges in terms of meaning and structure
2. Words with a high value in the content areas; (e.g. math, science, and social

studies)

3. Words that show students how to study

Although there is research to support the notion that native language instruction of the "Big 5" including vocabulary has a positive impact on reading progress, there are very few studies that examine the instructional variables that have a positive impact on student academic progress for ELLs (Francis et al., 2006). Currently, most of the research has been conducted on the effectiveness of teaching ELLs to read in their native language. August and Hakuta (1997) argue that the question should shift from which language to teach ELLs in, to which teaching strategies are most effective with ELLs.

Effective Instructional Strategies for Teaching Vocabulary To ELLs

Systematic and Explicit Instruction

Research has shown that struggling ELL students have difficulty with reading programs that are not designed to employ explicit teaching strategies (Coyne, Kame'enui, & Carnine, 2006). When the core content is not modified to address the needs of ELLs, students appear to disengage and withdraw from classroom instruction and participation. Gersten, Baker, Shanahan, Linan-Thompson, Collins & Scarcella (2007) report that reading interventions that focus on explicit instruction in the area of vocabulary instruction, including the development of academic English, is an effective approach for English language learners.

Explicit vocabulary instruction involves the modeling of vocabulary skills by the teacher, clear explanations and examples of the word being taught, a high level of teacher feedback and support, and multiple opportunities for students to practice and apply newly learned skills (National Center for Reading First Technical Assistance, 2005). Explicit

instruction is efficient and effective when the teacher can present the maximum number of skills in the minimum amount of time and students are successful (Carnine, Silbert, Kame'enui, & Tarver, 2004).

Existing research with English speaking students suggests that explicit and systematic reading interventions have a significant effect on student reading progress and therefore similar principles should apply to ELLs (Simmons, Kame'enui, Stoolmiller, Coyne & Harn, 2003; Torgesen et al., 1999). Although there is a strong research base on the effectiveness of systematic and explicit reading interventions, there is little evidence on effective vocabulary interventions for struggling ELLs. Much of the existing research on effective vocabulary instruction for native English speaking students can be applied to ELLs, yet there is much research that needs to be done that focuses on specific vocabulary interventions for ELLs.

Systematic and explicit instruction appears to increase student reading performance with ELLs (Gunn, Bigland, Smolkowski, & Ary, 2000). Research also suggests that systematic and explicit vocabulary instruction appears to be one method of instruction that can be highly effective for ELLs (Carlo et al., 2004). Therefore, for the purposes of this dissertation study, vocabulary enhanced systematic and explicit teaching routines (VE SETRs) were developed to explicitly teach vocabulary word meanings and strategies for Spanish speaking ELLs.

Research on Systematic and Explicit Instruction

Gunn et al., (2000) examined the effectiveness of an explicit and systematic supplemental reading curriculum program, *Reading Mastery* with ELLs (Engelmann, 2003). The intervention group was comprised of both ELLs and English speaking

students in grades 1 or 2 who were struggling readers. One hundred eighty four students received 30-45 minutes of daily supplemental reading instruction for 4 to 5 months in addition to their core reading core-reading program. *Reading Mastery* lessons included seven to nine short activities focusing on phonemic awareness, letter-sound correspondence, sounding out words, word recognition, vocabulary, oral reading fluency, and comprehension. The content was delivered using a teaching routine that employed the following steps: modeling new content, providing guided practice, and implementing individual practice and application.

Gunn et al., (2000) found that the intervention had statistically significant effects on reading achievement. According to the What Works Clearinghouse (IES, 2008) criteria, *Reading Mastery* had substantively important effects for four of the five measures immediately after implementation of the program (oral reading fluency, letter/word identification, word attack, and reading). Students demonstrated significantly higher scores on measures than students not receiving an intervention. One year later, three of the five outcome measures revealed substantively important effects (word attack, reading vocabulary, and comprehension). In a follow up study, Gunn, Smolkowski, Biglan, & Black, (2002) found that one year after the intervention, ELLs who did not speak English at the onset of the study profited as much from the intervention as ELLs who spoke English at the onset of the study. However, the study was limited due to small numbers of ELLs, which limited the statistical power of the analysis. The study revealed the effectiveness of explicit instruction, including vocabulary, using, and using *Reading Mastery*. However, the curriculum, *Reading Mastery*, was not developed to meet the specific linguistic or socio-cultural needs of ELLs. Therefore, it is not evident if the

intervention could have been more effective had it been developed to meet the specific needs of ELLs.

Shanahan and Beck (2006) synthesized studies that examined the enhancement of instruction of literacy elements (phonemic awareness, phonics, vocabulary, oral reading fluency, comprehension, writing, and spelling) for ELLs. The purpose of this synthesis was to understand to what extent explicit teaching of literacy skills benefited Spanish-speaking ELLs. Of the 17 studies synthesized in the report, including Gunn et al., (2000), the research suggests that the use of systematic and explicit instruction to teach reading skills, including vocabulary, improves reading achievement. Based on the variability of study designs, the research synthesis was unable to generalize the findings. However, of the 17 studies it reviewed, it was evident that explicit instructional routines that are effective with English speaking students are effective with ELLs (Shanahan & Beck, 2006).

One limitation of the synthesis was that only 6 of the 17 studies included comprehension measures, which also indirectly assessed vocabulary development. When comprehension was measured in the reported studies, the effects were not as strong as measures of phonemic awareness, phonics, or oral reading fluency. In some cases, studies showed no statistically significant improvement in comprehension (e.g., Gunn, Biglan, et al., 2000; Gunn, Smolkowski, et al., 2002). Therefore, although explicit instruction of skills such as phonemic awareness, phonics, or oral reading fluency are effective for ELLs, without clear vocabulary and comprehension instruction in Spanish or English, ELLs may struggle with vocabulary development and consequently reading comprehension.

Systematic and Explicit Teaching Routines (SETRs)

SETR templates or "tarjetas" were adapted by the Oregon Reading First Center from "templates" developed by the Western Regional Reading First Technical Assistance Center, a product of the National Center for Reading First Technical Assistance (2006). SETRs are a set of instructional teaching routines used to teach a variety of reading skills, including vocabulary. The vocabulary teaching routine has been developed based on the empirical research on explicit teaching of vocabulary.

The SETR vocabulary template first focuses on the selection of words by the teacher. In the case of the Vocabulary Enhanced (VE-SETR) instructional routine, the words were preselected for the teachers. The words were selected from the curriculum text, based on the following criteria specified by Biemiller and Slonim (2001): (a) unfamiliar and unknown, (b) critical for comprehending the text, (c) likely to be encountered in other content areas, (d) and require a detailed explanation. The VE SETR templates provided instructors with a clear lesson outline that walks them through the important steps of explicit vocabulary instruction. The instructors also used a graphic organizer to help students visually understand the steps of learning a new word and to provide visual support using pictures and written examples. The VE SETRs provided students with an explicit explanation of the vocabulary word in student friendly language (e.g., synonyms and antonyms are used in the explanation, to ensure that all students understand the words). The word was used in a complete sentence and students were provided a range of examples and non-examples. Students then generated examples to understand the meaning of the word. The teacher checked for understanding and corrected errors. Students practiced using

the word in a complete sentence and completed sentences using contextual clues. Finally, students were also provided opportunities to practice writing the word in a sentence, creating a picture representation of the word.

The template followed a routine used by the teacher in which the teacher used the "I do it, we do it, you do it" model (Archer, 2007). The teacher presented the word using key phrases such as, "My turn," then a signal such as, "your turn", for students to give a choral or individual response. VE SETRs were designed to provide clear teacher modeling, an opportunity for students to practice using the words, error correction procedures and teacher feedback.

Although there is no empirical research to support the effectiveness of SETRs, there is extensive research in the effectiveness of systematic and explicit instructional teaching strategies. It is hypothesized that students receiving instruction using the VE SETRs should increase their vocabulary and comprehension skills in Spanish.

Purpose of the Study and Research Question

In general, it is evident from an analysis of the research that there is a void in the area of vocabulary instruction for ELLs in English or Spanish. First, there is little empirical evidence that directly addresses vocabulary development for Spanish-speaking students learning to read in Spanish. Similarly, there are very few studies that examine the use of systematic and explicit teaching to teach vocabulary and comprehension to ELLs. Second, although there are a few studies that address vocabulary development, these studies have not determined which aspect of the instruction (e.g., either the design or delivery of instruction) yielded the most significant impact on vocabulary growth and reading comprehension. To understand the impact of vocabulary instruction, it is

important to study the specific effect, for example, of an explicit and systematic teaching routine used to teach vocabulary as part of a vocabulary intervention for students. Therefore, this dissertation study was designed to examine the impact of a daily 15-minute Vocabulary Enhanced Systematic and Explicit Teaching Routines (VE SETR) intervention using a systematic and explicit teaching template on the vocabulary development and reading comprehension of first grade Spanish-speaking ELL students when compared to students who received the SETR only instruction as measured by the Bilingual Verbal Ability Test (BVAT), Test de Vocabulario en Imagenes Peabody (TVIP), Indicadores Dinámicos del Éxito en la Lectura (IDEL) and the Depth of Knowledge.

Vocabulary Enhanced Systematic and Explicit Teaching Routines (VE SETR)

The study was designed to examine the efficacy of a vocabulary enhanced SETR (VE SETR) intervention on first grade, Spanish-speaking ELLs' vocabulary learning, and development. The quasi-experimental study included two elementary schools that have "early exit" Spanish language arts programs. In an early exit model, students are taught to read in Spanish in kindergarten through third grade, and then transition to reading English. The early exit model utilizes students' native languages for the purposes of early reading instruction for 2-3 years before students are transitioned to reading in English.

Within each of the two schools, 25 students from 4 classrooms were identified to participate in the study for a total of 50 students from 8 classrooms. Students were randomly assigned to a treatment group and a comparison group. One group of students received 75 minutes of core-reading instruction using the SETRs plus 15 minutes of vocabulary-enhanced instruction using the vocabulary template (VE SETR). The other

group of students received 90 minutes of the core reading program with the SETR only enhancement. The study examined whether the VE SETR vocabulary enhanced intervention improved vocabulary development, oral reading fluency, and comprehension for students in the treatment cohort.

Research Question

What is the impact of a daily 15 minute Vocabulary Enhanced Systematic and Explicit Teaching Routines (VE SETR) intervention, using a systematic and explicit teaching template on the vocabulary development and reading comprehension of first grade Spanish-speaking ELL students when compared to students who received the SETR only instruction as measured by the Bilingual Verbal Ability Test (BVAT), Test de Vocabulario en Imagenes Peabody (TVIP), Indicadores Dinámicos del Éxito en la Lectura (IDEL) and the Depth of Knowledge measures?

CHAPTER III

METHODOLOGY

Research Design

For this study, a pretest-posttest comparison-group design was employed. Students were randomly assigned to treatment or comparison groups to examine the efficacy of the VE SETR on vocabulary development of first-grade students in Spanish reading programs. This study was part of a larger four-year national study (2008-2012). A fixed-time design was employed in which allocated instructional time was fixed at 90 minutes per day for each group. Within the 90 minutes of daily instruction, students in the VE SETR group received 75 minutes of instruction in which the SETRs were implemented and 15 minutes of vocabulary specific instruction in which the VE SETR templates were implemented. In contrast, the comparison group received 90 minutes of the core curriculum, *Tesoros*, published by Macmillan-McGraw Hill (2008) instruction using the core curriculum and the SETR templates only. The dependent variables included the following measures: (a) TVIP: Test de Vocabulario en Imagenes Peabody PVT-III, (b) vocabulary subtests from the Bilingual Verbal Ability Test (BVAT), and (c) the vocabulary depth of knowledge assessment and (d) IDEL oral reading fluency. These measures were given at the beginning of the study (pretest), and at the end of the study (posttest) to examine growth and the differential effectiveness of the two approaches to teaching ELLs. Instructors were counterbalanced within the treatment group a total of four times during the 8-week intervention period, or every 2 weeks, to ensure that the instructor was not a variable in study design.

In the VE SETR study, two treatment schools were selected to participate. Within the two treatment schools, there were approximately 25 students participating in each school, for a total of 50 participants. Those participants were randomly assigned to either the Vocabulary Enhanced SETR (VE SETR) intervention condition or the comparison SETR only condition. Students were randomly assigned to comparison or treatment conditions using random student identification numbers.

In the VE SETR sampling plan, schools and participants were recruited based on their ELL program model. Schools were matched on key variables such as demographic data, test scores, and program structure. This matching strategy theoretically controlled for preexisting differences between schools (Murray, 1998; Shadish, Cook, & Campell, 2002).

Participants

VE SETR Student Participants

Participants in the study included 50 first-grade students who participated in the Spanish literacy program in two elementary schools in a suburban school district in Oregon. Each of the two participating schools had 24-26 first-grade Spanish-Speaking ELLs identified as students who received initial literacy instruction in Spanish. In each school, approximately 24 and 26 students were randomly assigned to the comparison or treatment group. Both schools shared similar demographics: 46-58% were ELL students and 48-53% of the students received free or reduced lunch, as noted in Table 1 below. Both schools qualified for Title I services. The group of students from each school was randomly assigned to a treatment or comparison group. Students' identification numbers were placed into a box and fifteen student ID numbers were randomly selected and

assigned to participate in the treatment condition (VE SETR) or the comparison condition (SETR only).

Table 1.

Characteristics of Participants

School	Enrollment	Percent of ELL	Percent of free or reduced lunch	Number of participants in the study
1	555	41%	48	27
2	584	34%	53	23

Although the students were randomly assigned, at Metzger Elementary, 6 of the 12 students in the comparison group received Title IA services. The treatment group also had 6 Title IA students. The students at Metzger were from 5 different homeroom classes. During regular Spanish reading instruction, students were pulled out from these 5 homeroom classes and split between two reading groups. One group was taught by a native Spanish speaker first grade classroom teacher and one taught by an ELL teacher who was also a native Spanish speaker. These groups were established by skill level based on IDEL oral reading fluency scores. Both teachers received appropriate training to participate in the study.

At Bridgeport Elementary, 6 of the 15 students who received the VE SETR intervention received Title IA reading services. Students who received Spanish reading instruction were pulled out from 4 homeroom classes. Reading instruction was provided by 2 classroom teachers and 2 instructional assistants. The small group instruction was

based on skill level as determined by oral reading fluency scores on the IDEL. Neither school was implementing vocabulary specific interventions at that time.

Students were identified to receive Title IA services if they were within the lowest 20% of their grade level in reading on the DIBELS or IDEL reading measure. Students who were indentified as Title IA received an additional 30-45 minutes of small group reading interventions during their academic school day, in addition to the 90 minutes of core reading instruction. These interventions were considered to be research based and focused on phonemic awareness, phonics, comprehension, and fluency.

VE SETR Teacher Participants

The teacher participants in each school were certified teachers and instructional assistants who provided Spanish reading instruction in first grade. There were 4 teachers and 5 instructional assistants from the two participating schools. The teachers and instructional assistants were counter balanced within schools and within the treatment and comparison groups in the implementation of the VE SETR. Certified teachers and instructional assistants in the treatment condition were trained to implement the VE SETR templates. The SETR templates were used to enhance the existing core curriculum, *Tesoros* (Duran, et al., 2008), published by Macmillan-McGraw Hill. The researcher conducted 4 observations of each instructor over the 8-week duration of the study using observation protocols found in Appendix D, to measure fidelity of intervention implementation.

The teacher participants in the comparison group were trained to use the SETRs only, but in the context of delivering the core-reading program. Teachers delivered 90 minutes of core reading instruction each day using the *Tesoros* reading curriculum

(Duran, et al., 2008) and the SETRs. The teachers in the comparison group taught the reading program following the specified scope, sequence, and instructional guidance of the *Tesoros* reading program with the use of the SETRs to teach all areas of reading (e.g. phonemic awareness, phonics, vocabulary, comprehension and fluency). The *Tesoros* curriculum included lessons in vocabulary.

At Metzger, one teacher was a native Spanish speaker from Puerto Rico. She had four years teaching experience in bilingual programs and an endorsement in special education. The second teacher had three years experience teaching English Language Learners and one year as a first grade classroom teacher. She was a native Spanish speaker from Colombia. The instructional assistant had been instructing small groups for 8 years and was a native Spanish speaker from Mexico. In this particular school, the instructional assistant and the teacher from Puerto Rico taught the VE SETR intervention group. The SETR comparison group was taught by the teacher from Colombia. The assistant and teacher were counterbalanced throughout the study.

In the second participating school, reading was taught in smaller leveled groups with two teachers and two instructional assistants. For the purpose of the study, three additional instructional assistants from the Title IA department were trained to provide the VE SETR intervention. There were a total of four instructional assistants who provided the VE SETR intervention and two teachers and two instructional assistants provided the SETR only comparison group reading instruction for the 90 minutes of reading instruction. One teacher was a native Spanish speaker from Puerto Rico and had one-year teaching experience and three years experience as an instructional assistant. The other teacher had six years teaching experience in bilingual programs and was a first-

generation Mexican-American with Spanish as her dominant language. The other three instructional assistants were all native Spanish speakers from Chile, Colombia and two were Mexican Americans.

Instructional Condition

The independent variable in the study was the instructional condition with two levels. One level of the instructional condition was the implementation of the SETR templates (SETR) for 90 minutes of classroom reading instruction. The other level was the implementation of the SETR templates for 75 minutes followed by the implementation of the vocabulary enhanced SETR instruction using the vocabulary template (VE SETR) for 15 minutes.

Vocabulary Enhanced Systematic and Explicit Teaching Routine (VE SETR)

The VE SETR focused on the teaching of 32 vocabulary words selected from the core curriculum program, *Tesoros*. The words were selected from the vocabulary words highlighted in the Macmillan reading curriculum program. Additional academic vocabulary words were selected from the curriculum based on the following criteria: (a) unknown words, (b) unfamiliar words critical to comprehending the text, and (c) words students are likely to encounter or need to know in other content areas. Four vocabulary words were introduced in a week, one per day, including one day for review.

The vocabulary enhancement templates incorporated the following format: (a) introduction of the word, (b) student oral repetition of word, (c) teacher explanation of word definition using examples and non-examples, (d) comprehension verification or student practice in receptive understanding of the word meaning, (e) student expressive practice using the word in a sentence and sharing with a partner, (f) use of a graphic

organizer to by teacher and students to organize word learning strategies, and (g) graphic representation of the vocabulary word for the students with the use of photos. Samples of the vocabulary enhancement templates are given in Appendix B. Students completed practice activities such as writing a sentence using the new word, and completing their personal copy of the graphic organizer used by the teacher to model the lesson as shown in Appendix B. The template followed the instructional scaffolding strategy of 'I' do it, 'we do it,' and 'you do it' (Archer, 2007).

The following example of a VE SETR lesson outlines the "I do it", "we do it" and "you do it" process. This example was translated from Spanish to English. The teacher had the word, definition, examples, and pictures of the word presented on a graphic organizer as she was teaching the word.

Teacher Prompt	Student Response
The word we are going to learn is *instructions*. What is the word?	*instructions*
We are going to divide the word in syllables. My turn: in/ struc/ tions/ Your turn:	in/ struc/ tions/
Now we are doing to read the word. My turn instructions. Your turn:	*instructions*
Now I am going to tell you the definition of the word instructions. My turn, *instructions* are necessary to understand how to make or do something. Your turn, what is the definition for the word instructions?	Instructions are needed to understand how to make or do something.
For example, a teacher gives instructions to her students so they know how to do their assignment. Another word for instructions is directions. Another example, is before you play a new game you have to read the instructions so you know the rules. When students do not know the instructions or direction, they do not know how to finish their work.	
Now I am going to use the word instructions in the following sentences.	

Before you use a new toy, you should read the instructions. The teacher gives instructions to her students before they start their work. My dad has to read the instructions before he puts together a new piece of furniture. Your turn, you are going to complete the following sentence with your partner. My father received a _____ and he did not know what do. So first, he read the instructions. The instructions helped him_____.	
Now we are going to create our own sentences using the word instructions. My turn, the student had to read the instructions in the book before he started his work or else he would not know what to do. Your turn, think of an example of a situation in which a person would need instructions. Please use a complete sentence.	
After you have said your sentence aloud, write the sentence in your vocabulary journal.	
Now take your vocabulary cards and complete the graphic organizer using your own example of the word instruction in a complete sentence.	

The VE SETR vocabulary words were pre-selected for the teachers from the curriculum, and templates were developed for the teacher to ensure fidelity of instruction and repetition of the vocabulary words throughout the instructional period. Templates were developed by the researcher and reviewed by native Spanish speaking first grade teachers.

Systematic and Explicit Teaching Routines Only (SETR only)

Students assigned to the SETR only condition also received instruction in the core reading program and were given enhanced instruction using the SETRs. The teachers had access to 18 templates and could use them at their discretion. Teachers were able to use the vocabulary template to teach new vocabulary words, but the templates did not have words pre-selected or examples provided. The 18 templates corresponded with the five

big ideas of reading. Therefore, as the teacher taught components of the core curriculum, such as phonics, phonemic awareness, vocabulary, and fluency, she would have the option of using the SETR templates. The SETR templates followed the same format of "I do it", "we do it", "You do it".

First-grade teachers began implementing SETR in the fall of 2008, but the study began four months later in the winter of 2009. Students assigned to the SETR only condition participated in the classroom reading instruction using the core reading curriculum, *Tesoros* (Duran et. al 2008), and were exposed to the same vocabulary words taught in the core curriculum. Teachers reinforced phonics skills, reviewed reading strategies, or introduced vocabulary using the SETR templates. However, the SETR vocabulary templates did not include the lesson completed for them. Therefore, teachers or instructional assistants were left to develop examples, non-examples and sentences on their own. They also did not have access to the graphic organizer or picture cards to reinforce the teaching of the word. Weekly observations of the SETR-only condition revealed that in one school, students were in small groups of 5-8 students and in the other school, all 15 students received whole group instruction using the core curriculum and SETR templates.

Data Collection-Pretest and Posttest Measures

The measures listed and described below were employed in the study as pretest and posttest measures.

Bilingual Verbal Ability Tests-BVAT

The BVAT (Munoz-Sandoval, Cummins, Alvarado, & Ruef, 1998) measures a child's ability to use two languages to negotiate the meaning of academic content. It

consists of three subtests from the Woodcock-Johnson Tests of Achievement-Revised (Woodcock & Johnson, 1989): Picture Vocabulary, Oral Vocabulary, and Verbal Analogies. The test yields an English proficiency score and a score that indicates the language skills the child has in his or her first language. Student performance on this measure may account for variance in student reading growth. The concurrent validity study was established on the English/Spanish bilingual population using as criteria measures eight well-known tests of verbal abilities (BVAT manual, 1998, p.74). The correlation coefficient was within the range of .7 to .9 on average. The predictive validity of the BVAT is based on correlations between the English language proficiency measures and five broad measures of school achievement of reading, math, writing, content knowledge and total achievement. "An examination of the median correlations indicates that all are substantial ranging from .65 to .85. This level of correlation between school achievement and a good full-scale intelligence battery" (BVAT manual, 1998, p.75). "Correlations of among the BVAT tests and BVAT cluster are reported for age levels 5 through 80 within the .7 to .9 range (BVAT manual, 1998, p.79).

Depth of Knowledge Vocabulary Assessment (DOK)

The Depth of Knowledge (DOK) Vocabulary assessment is the only measure that was used in the VE SETR study and not in the national SETR study. At pretest and posttest, students were tested on all 32-target words taught selected from the Macmillan-McGraw Hill *Tesoros* (Duran et al., 2008) curriculum's target vocabulary. Students were asked to define the meaning of the word presented orally by the examiner and to use the word in a sentence. Responses were audio taped for analysis. Target words were selected from a list of words taught in the curriculum's vocabulary lessons. Two alternate forms

of the vocabulary assessment were generated from the 32 total words taught. Alternate-form administration was counter-balanced so that the same numbers of students in the treatment and comparison conditions were assessed on the same forms at pretest and posttest. In the administration of the test, the students were asked to define the vocabulary word and use the vocabulary word in a sentence. The students were given a score of 0-2 for the definition, and 0-2 for the use of the word in a sentence for a total of 4 points for each word. Students were given a 1 if they demonstrated developing knowledge by defining the word in a simple way that expressed some knowledge but not a complete definition. They received a "2" if they expressed a fuller knowledge of the target word such as using a synonymous word or phrase to define the word. A second examiner verified the scores using the tool, which can be found in Appendix C.

The 32 tested words represented 16 verbs and 16 nouns. The words were selected from and organized by the themes in the *Tesoros* curriculum: family, animals, agriculture, neighborhoods, enjoying your neighborhood, and around the world.

TVIP: Test de Vocabulario en Imagenes Peabody PVT-III

The TVIP (Dunn, Padilla, Lugo & Dunn, 1986) is a measure of receptive vocabulary and a screening test of verbal ability. This individually administered, norm-referenced instrument is offered in two parallel forms. The TVIP: *Test de Vocabulario en Imagenes Peabody* is a measure of Spanish vocabulary based on the *Peabody Picture Vocabulary Test*. TVIP contains 125 translated items to assess the vocabulary of Spanish-speaking students. This was given to students in the December of 2008 and at the end of the study in March 2009 to measure growth. TVIP does not require reading, verbal, or written responses. The student responds by pointing to one of the pictures. The test was

normed on both Mexican and Puerto Rican standardization samples. "Correlations between scores on the TVIP and the K-ABC, Spanish were .25 to .56. The 125 stimulus words comprising the TVIP can be traced directly to their English counterparts in the PPVT-R, which was built on the original PPVT. General Ability Internal consistency reliability is .93" (Dunn et al., 1986; Manual, p. 3). The English version of the TVIP, The Peabody Picture Verbal Test-PPVT-III has an average correlation of .69 with the OWLS Listening Comprehension scale and .74 with the OWLS Oral Expression scale. "Its correlations with measures of verbal ability are: .91 (WISC-III VIQ), .89 (KAIT Crystallized IQ), and .81 (K-BIT Vocabulary)" (Dunn et al., 1986, Manual, p. 3).

Indicadores Dinámicos del Éxito en la Lectura (IDEL)

IDEL measures are a timed, standardized, individually administered set of Spanish measures edited by Baker, Good, Knutson, & Watson (2006). Oral Reading Fluency (ORF) is an individually administered test of accuracy and fluency with connected text designed to (a) identify children who may need additional instructional support, and (b) monitor reading progress (Baker, Good, Knutson, & Watson, 2006). Readability formulas were used to analyze the passage readability. "Alternate-form reliability of different reading passages range from .87 to .94" (Baker & Good, 2006, p. 6). Criterion-related validity with the Woodcock-Muñoz average score was .75 (Watson, 2005).

IDEL measures were administered in January and March to all students in the treatment and comparison groups. Student performance is measured by having students read a passage aloud for one minute. Words errors, such as word omission or substitutions of more than three seconds, are counted as errors. Words self-corrected within three seconds are scored as accurate. The number of correct words per minute

from the passage is the oral reading fluency rate. The benchmark goals are 20 words per minute in the winter and 40 in spring of first grade.

Test-retest reliabilities for elementary students in English ranged from .92 to .97; alternate-form reliability of different reading passages drawn from the same level ranged from .89 to .94 (Tindal, Marston, & Deno, 1983). "In Spanish, three week alternate-form reliability of passages in the middle of first, second, and third grade range from .87-.94" (IDEL 7a edición administration and scoring guide, 2007, p.31)" Criterion-related validity of FLO with the Woodcock-Muñoz Bateria-R Combined Scores of Amplia Lectura is .79 (Watson, 2005). The criterion-related validity of ORF with the Aprenda 3 Prueba de Logros is .64 at the end of second grade" (IDEL 7a edición administration and scoring guide p.31).

Pretest measures included the Bilingual Verbal Ability Test (BVAT), *TVIP: Test de Vocabulario en Imagenes Peabody PVT-III and Depth of Knowledge (DOK)* measure. The BVAT was given in September 2008 as part of the National SETR study. The TVIP and the DOK were collected in December 5-9, 2008 and the IDEL was collected January 12-13, 2009.The BVAT and IDEL pretests were given by a University of Oregon data collection team trained by the SETR project. A trained VE-SETR data collection team administered the TVIP and the DOK. The testing team received 2-hour training on the administering of both measures and a 30-minute refresher the first day of testing. All testers were shadowed on at least 2 tests to ensure reliability of test administration and scoring. The testing team was comprised of instructional assistants and some of the contracted SETR data collectors. Students did not know, nor did they work with some of the instructors on the data collection team.

The tests were administered in small group rooms, sometimes with two testers in one classroom. Due to space limitations, some tests were administered in the school library or classrooms. VE SETR and SETR test collectors administered the pretests and conducted the posttest collection. This team had been trained in administering the IDEL tests and had administered the IDEL in at least two data collection periods at least twice prior to the posttest data collection. In summary, they had administered the IDEL test a minimum of 40 times.

Procedures

Teacher Training

SETR training was conducted August 13-15, 2008, before the start of the school year for comparison and treatment instructors. All teachers received three full days of training in the summer and received two additional days of training during the school year in October and December, and a refresher three-hour training in February 13, 2009 using the SETR templates. The first training focused on instruction in using SETR, including the vocabulary template. The training had a hands-on practice component to ensure that teachers understood the structure of SETR and how to use it with the core-reading program. Teachers practiced using the VE SETRs, and were given feedback from trainers and participants. The trainer convened a follow-up training after the first two weeks of the intervention to discuss questions and to provide feedback and practice opportunities to instructors.

Teachers participating in the VE SETR study also received an additional training on December 18, 2008. Those teaching the treatment group of students received three-

hour training, specifically focused on the effective use of the vocabulary enhanced SETR (VE SETR). Teachers and instructional assistants received training in the research related to vocabulary development and instruction, as well as a detailed training and practice of each of the 8 components of the vocabulary template. Within each component, instructors clarified questions, practiced teaching the component, and received feedback from the trainer and peers.

The instructors also received coaching support from the researcher/trainer 4 times during the course of the 8-week study. This coaching support was provided once every other week for the duration of the implementation. A coaching form was completed by the observer summarizing what was observed, strengths of the lesson and next steps for improvement. Two follow up one-hour meetings were held between instructors and the trainer/researcher to clarify questions and reinforce important components of effectively using the vocabulary templates.

Fidelity of Implementation

Members of the SETR project research team observed and documented the fidelity of implementation of the SETR and the VE SETR conditions. Critical components of the intervention were identified and an observation checklist was identified to evaluate fidelity as shown in Appendix D. Research team members observed each instructor at least four times over the course of the 8 weeks. Research team members coached teachers and interventionists using feedback developed from the observation tool. Brief follow up coaching sessions were held for each interventionist twice during the study. The coaching sessions focused on reviewing and practicing instructional procedures. Fidelity observations were conducted four times in both participating schools

each school during the 8-week study. Observations focused on vocabulary instruction, delivery of instruction, student participation, and fidelity of template implementation.

Training of Data Collectors

A district data collection team was trained to administer and score all measures. Trainings for each measure were completed prior to the time of data collection and were conducted by members of the SETR research team or the VE-SETR team. The focus of the trainings was on the administration and scoring of each measure. The standardized procedure of administering and scoring each measure was emphasized in the training. Data collection teams had the opportunity to practice administering the test, receiving feedback, and asking questions. Data collectors were required to demonstrate reliability for administration and scoring of the measures.

Research Question

The primary research question for the study was the following: What are the effects of a vocabulary enhanced intervention using systematic and explicit teaching routines (VE SETR) on the vocabulary development and reading comprehension of first-grade Spanish-speaking students as measured by the Bilingual Verbal Ability Test (BVAT), the Test de Vocabulario en Imagenes Peabody (TVIP), Indicadores Dinámicos del Éxito en la Lectura (IDEL) and Depth of Vocabulary Knowledge (DOK) measures, when compared with the use of systematic and explicit teaching routines (SETR)? It was hypothesized that Spanish-speaking students in the VE SETR condition will make greater gains in vocabulary development in Spanish than Spanish-speaking students in the SETR only condition.

Data Analysis

An analysis of covariance (ANCOVA) was conducted to examine the effectiveness of the two SETR intervention conditions (VE SETR vs. SETR only) on pretests and posttest measures of the Bilingual Verbal Ability Test (BVAT), Test de Vocabulario en Imagenes Peabody (TVIP), Indicadores Dinámicos del Éxito en la Lectura (IDEL) and the Depth of Knowledge (DOK). The pretest was the covariate and the between-subjects factor was condition (treatment vs. control).

CHAPTER IV

RESULTS

The primary data for this study included student raw scores on the pretest and posttest measures of the Test de Vocabulario en Imagenes Peabody PVT-III (TVIP), Depth of Knowledge (DOK), Indicadores Dinámicos del Éxito en la Lectura IDEL, and the Bilingual Verbal Ability Test (BVAT). The pretests and posttests were given approximately 9 weeks apart during the study. Upon the study's completion, the SETR comparison group had 26 students remaining as participants in the study, and the VE SETR intervention group had 24 remaining participants. Two students moved out of the school district and their data were not included in VE SETR treatment group for analysis. Twenty-seven students were from Bridgeport Elementary and twenty-three from Metzger Elementary participated in the study. Of the total number of participants in the study, twenty-five students were identified to receive Title I services and twenty-five were not identified to receiving any additional reading support services.

Descriptive Statistics

Cross-tabulation procedures were conducted to determine whether the control and treatment groups were statistically significantly different for SES, ELL and Title I status between schools. The findings in Table 2 indicate that the groups were similar in terms of school (χ^2 (1) = 2.344, $p < .150$) and Title I status (χ^2 (1) = 2.344, $p < .150$).

Table 2

Pearson Chi-Square Results for Demographic Group Differences (N = 123)

Demographic Variable	χ^2	df	Sig.
School	.001	1	.982
Title I	.000	1	1.000

The Depth of Knowledge (DOK) Measure

The Depth of Knowledge (DOK) measure is comprised of two subtests. The students were asked to (1) define the word and (2) use the word in a sentence. Students were given a score from 0-2 for each word item in the subtest, with a total score for both subtests combined, ranging from 0-4. For the purposes of the data analysis the scores were analyzed separately and combined to determine if students demonstrated more growth in defining a word, using the word in a sentence, or both. The adjusted means and standard deviations for the DOK – Vocabulary Definition posttest measure are shown in Table 3.

Table 3

Adjusted Means and Standard Deviations for the Depth of Knowledge – Vocabulary Definition Test across time

DOK Definition	Treatment		Control	
	Mean	SD	Mean	SD

Pretest	11.38	7.87	17.81	8.91
Posttest	29.08	11.49	26.54	10.85

The findings in Table 4 indicate that after controlling for the DOK vocabulary definition pretest scores, students in the control condition ($M = 23.68$) had significantly lower DOK vocabulary definition scores than students in the treatment condition ($M = 32.18$; $F(1,47) = 12.00, p < .01$). This finding indicates that the differences between groups were statistically significant and that the VE SETR condition had a positive effect on the VE SETR treatment group. Moreover, according to the η^2 statistic reported in Table 4, it appears that that 49% of the variability on the DOK vocabulary definition measure can be explained or accounted for by, the pretest, while 20% of the variability on the DOK vocabulary definition measure can be accounted for by the VE-SETR. Figure 2 indicates that the change from pretest to posttest in the treatment group was significantly higher than the change from pretest to posttest in the control group.

Table 4

ANCOVA Results for the Depth of Knowledge – Vocabulary Definition Posttest Scores (N = 50)

Variable	MS	df	F	Sig.	η^2
Pretest	2915.69	1	44.78	.00	.49
Condition	781.60	1	12.00	.00	.20
Error	65.12	47			

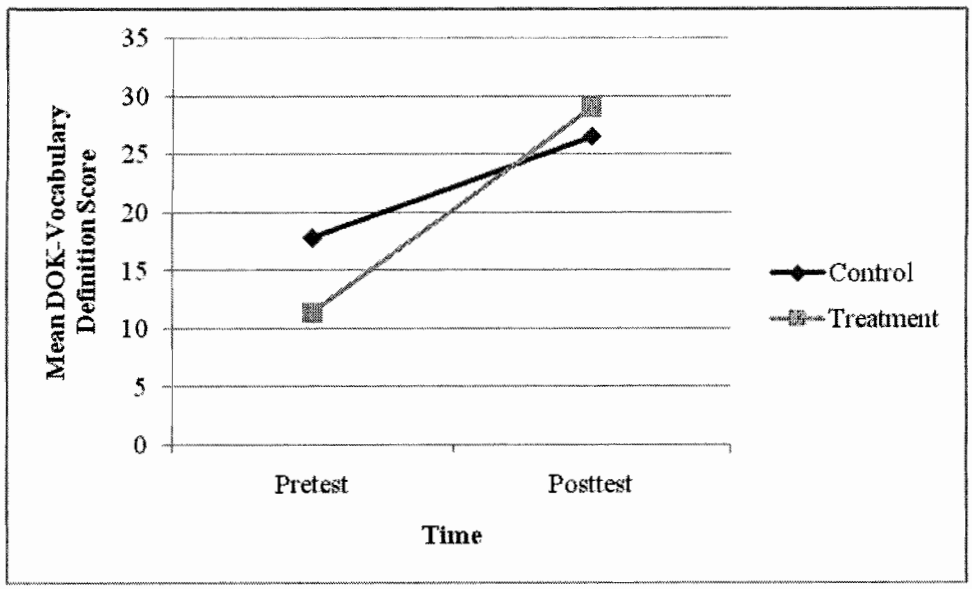


Figure 2. Mean DOK-Vocabulary definition score for the control and treatment conditions over time.

The DOK usage is a subtest in which students were asked to use a specific vocabulary word in a sentence to indicate that they understood how to use the word in context. The adjusted means and standard deviations for the DOK Vocabulary Usage Posttest measure are presented in Table 5.

Table 5

Adjusted Means and Standard Deviations for the Depth of Knowledge – Vocabulary Usage Test Over Time

DOK Usage	Treatment		Control	
	Mean	SD	Mean	SD

Pretest	17.54	9.71	25.77	11.99
Posttest	35.96	13.37	33.77	11.84

The findings in Table 6 reveal that after controlling for the DOK Vocabulary Usage Pretest scores, students in the control condition ($M = 31.29$) had significantly lower DOK – Vocabulary Usage scores than students in the treatment condition ($M = 38.65$; $F(1,47) = 5.19, p < .05$). This finding indicates that the differences between groups were statistically significant and that the VE SETR treatment condition also had a positive impact on vocabulary usage for students in the VE SETR treatment group. Moreover, according to the η^2 statistic reported in Table 6, it appears that that 30% of the variability on the DOK vocabulary usage measure can be explained or accounted for by, the pretest, while 10% of the variability on the DOK vocabulary usage measure can be accounted for by the VE-SETR. Figure 3 indicates that the change from pretest to posttest on the DOK-Vocabulary Usage mesure in the treatment group was significantly higher than the change form the pretest to posttest in the control group.

Table 6

ANCOVA Results for the Depth of Knowledge – Vocabulary Usage Posttest Scores

Variable	MS	df	F	Sig.	η^2
Pretest	2274.72	1	20.03	.00	.30
Condition	589.225	1	5.19	.03	.10
Error	113.59	47			

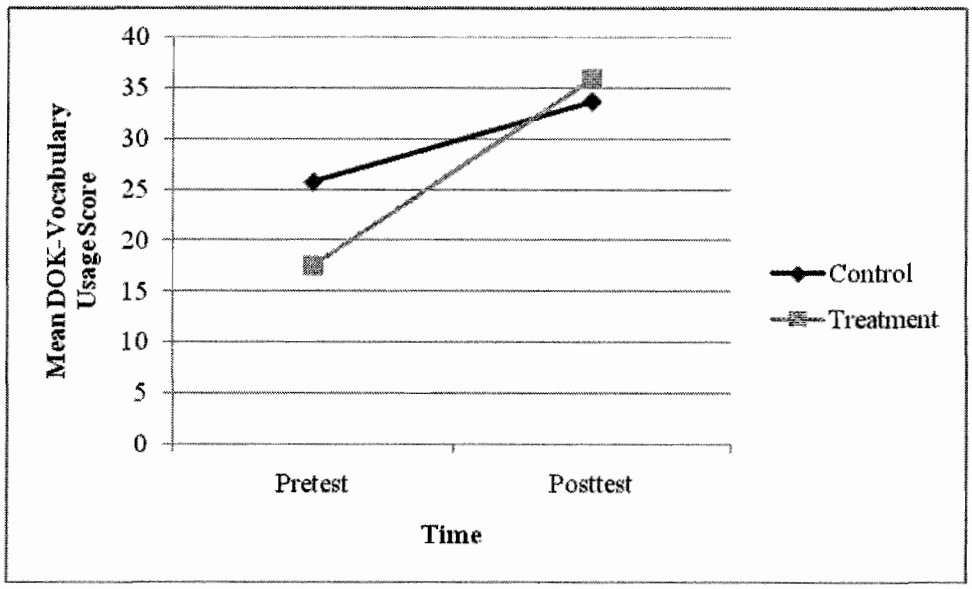


Figure 3. Mean DOK-Vocabulary Usage score for the control and treatment conditions across time.

The effect of the treatment on the Depth of Knowledge Vocabulary Definition and Usage test combined scores was similar to the effect of the individual definition and usage scores. The adjusted means and standard deviations for the DOK – Vocabulary Definition and Usage Total posttest measure are presented in Table 7.

Table 7

Adjusted Means and Standard Deviations for the Depth of Knowledge – Vocabulary Definition and Usage Scores Over Time

DOK Total	Treatment		Control	
	Mean	SD	Mean	SD
Pretest	28.92	17.09	43.58	20.19
Posttest	65.04	22.87	60.31	21.99

The findings in Table 8 indicate that after controlling for DOK – Vocabulary Definition and Usage Total pretest scores, students in the treatment condition ($M = 71.05$; $F(1,47) = 9.87, p < .01$) had significantly higher DOK – Vocabulary Definition and Usage Total scores than students in the control condition ($M = 54.76$). This finding indicates that the differences between groups were statistically significant and that the VE SETR intervention had a positive effect on the expressive vocabulary development of the VE SETR treatment group. Furthermore, according to the η^2 statistic reported in Table 8, it appears that that 44% of the variability on the DOK vocabulary usage and definition measure can be explained or accounted for by, the pretest, while 17% of the variability on the DOK vocabulary definition and usage measure can be accounted for by the VE-SETR. Figure 4 indicates that the change from pretest to posttest in the treatment group was significantly higher than the change from pretest to posttest in the control group.

Table 8

ANCOVA Results for the Depth of Knowledge – Vocabulary Definition and Usage Posttest Scores (N = 50)

Variable	MS	df	F	Sig.	η^2
Pretest	10509.79	1	36.29	.00	.44
Condition	2859.08	1	9.87	.00	.17
Error	289.59	47			

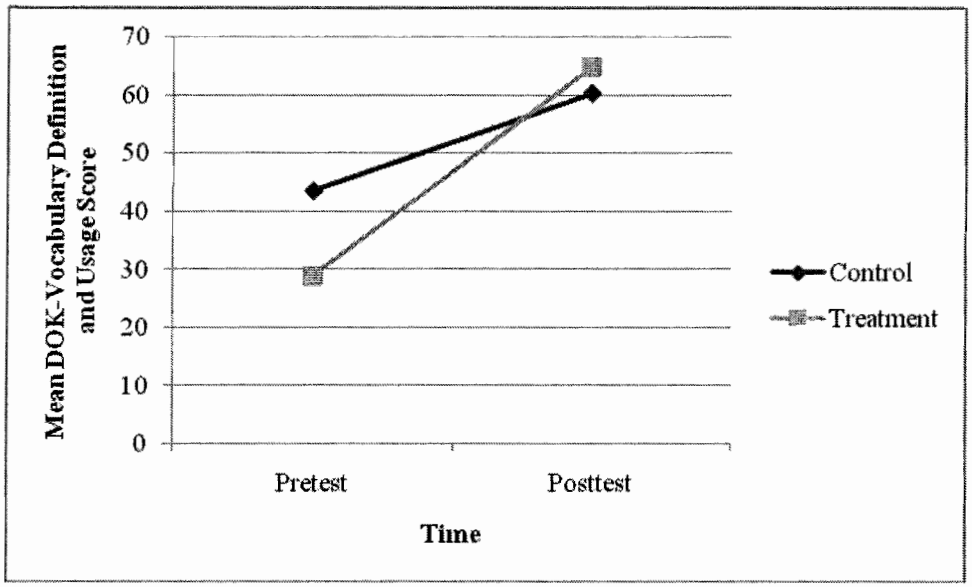


Figure 4. Mean DOK-Vocabulary Definition and Usage score for the control and treatment conditions across time.

The Bilingual Verbal Ability Test (BVAT)

The BVAT assessed each student's vocabulary skills in English and Spanish. The BVAT scoring yielded a variety of scores. Therefore, for purposes of the VE SETR data analysis, both percentile scores and W scores were analyzed. The adjusted means and standard deviations for the BVAT (W Scores) posttest measure are presented in Table 9.

Table 9

Adjusted Means and Standard Deviations for the BVAT (W) Scores Over Time

BVAT (W)	Treatment		Control	
	Mean	SD	Mean	SD
Pretest	443.83	12.18	450.77	11.60
Posttest	465.17	8.71	462.96	6.74

The findings in Table 10 indicate that after controlling for BVAT (W) pretest scores, students in the treatment condition ($M = 465.62$; $F(1,47) = 1.83$, $p = .18$) did not have significantly lower BVAT (W) scores than students in the control condition ($M = 462.55$) indicating that the VE SETR intervention was not statistically significantly different from the comparison group and did not have an impact on students' bilingual verbal ability as measured by the BVAT. Moreover, according to the η^2 statistic reported in Table 10, it appears that that 4% of the variability on the BVAT measure can be explained or accounted for by, the pretest, while 4% of the variability on the BVAT measure can be accounted for by the VE-SETR. However, figure 5 indicates the change from pretest to posttest in the treatment group was higher than the change from pretest to posttest in the control group.

Table 10

ANCOVA Results for the Bilingual Verbal Ability (W) Posttest Scores (N = 50)

Variable	MS	df	F	Sig.	η^2
Pretest	104.77	1	1.77	.19	.04
Condition	107.89	1	1.83	.18	.04
Error	59.05	47			

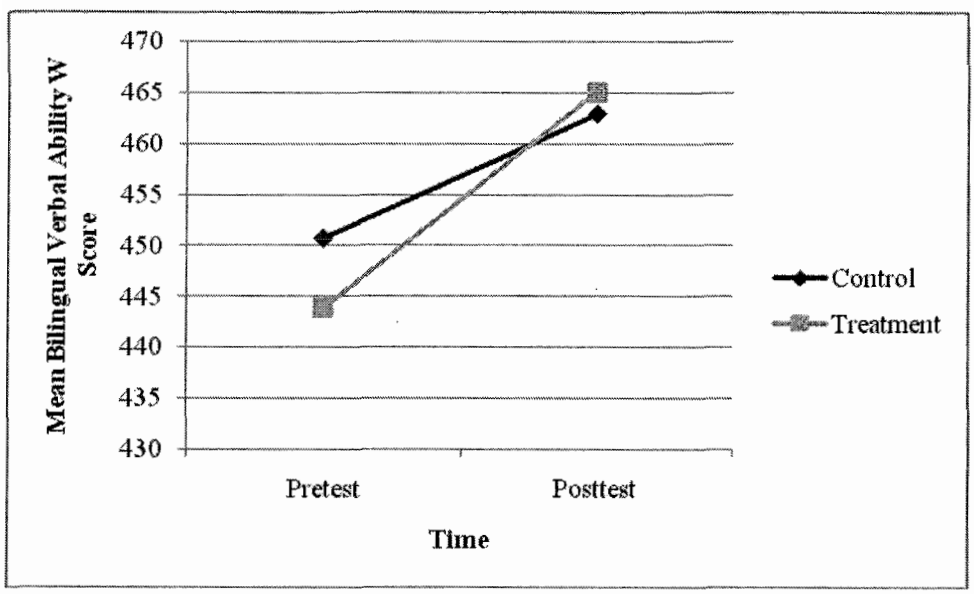


Figure 5. Mean Bilingual Verbal Ability score for the control and treatment conditions across time.

The effect of the treatment on the Bilingual Verbal Ability Test percentile scores is described below. The means and standard deviations for the Bilingual Verbal Ability (Percentiles) pre and posttest measures are reported in Table 11.

Table 11

Adjusted Means and Standard Deviations for the Bilingual Verbal Ability (Percentiles)

BVAT (P)	Treatment		Comparison	
	Mean	SD	Mean	SD
Pretest	9.13	15.39	15.58	18.83
Posttest	26.13	17.84	19.77	14.67

The findings in Table 12 reveal that regardless of condition, student scores increased significantly across time (F (1,48) = 12.03, $p < .01$). The students' pretest scores were lower (Marginal $M = 12.35$) than their posttest scores (Marginal $M = 22.95$). More importantly, the findings indicate that after controlling for BVAT (Percentiles) pretest scores, students in the treatment condition ($M = 26.13$) did not have statistically significantly lower BVAT (Percentiles) scores than students in the control condition ($M =$ 19.77; F (1,48) = 2.52, $p = .12$). Furthermore, according to the η^2 statistic reported in Table 12, it appears that that 3% of the variability on the BVAT percentile measure can be explained or accounted for by, the pretest, while 5% of the variability on the BVAT percentile can be accounted for by the VE-SETR. This finding indicates that the treatment of VE SETR did not have an effect on the treatment students' bilingual verbal ability. Figure 6 displays the change from pretest to posttest on the BVAT percentile scores for both the treatment group and control group.

Table 12

ANCOVA Results for the Bilingual Verbal Ability (Percentiles) across Time (N = 50)

Variable	MS	df	F	Sig.	η^2
Pretest	380.01	1	1.45	.24	.03
Condition	660.66	1	2.52	.12	.05
Error	262.20	47			

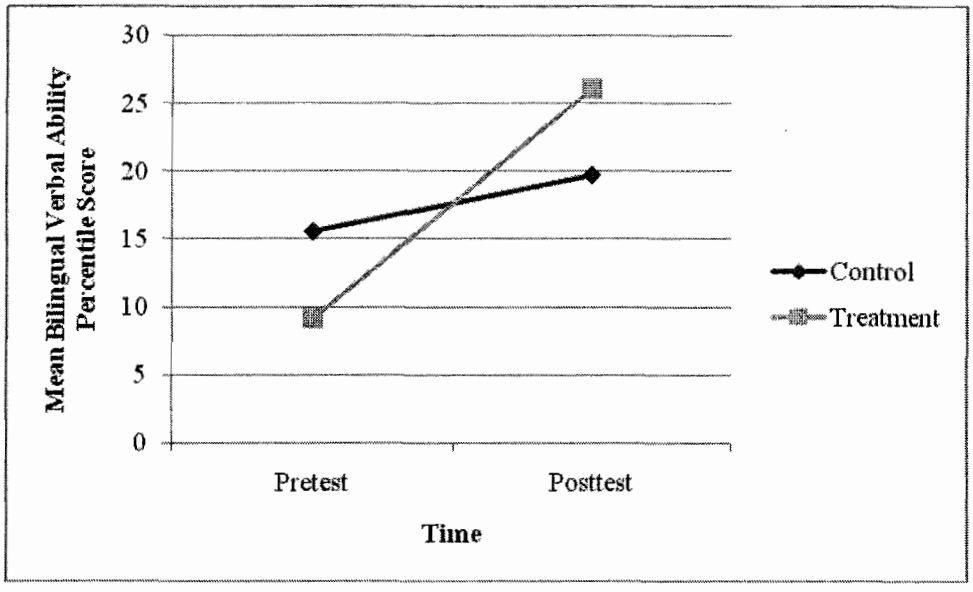


Figure 6. Mean Bilingual Verbal Ability percentiles for the control and treatment conditions across time.

The Test of de Vocabulario en Imagenes Peabody PPVT-III (TVIP)

The Test de Vocabulario en Imagenes Peabody PVT-III (TVIP) is a standardized test that focuses on receptive vocabulary skills. The means and standard deviations for the TVIP are reported in Table 13

Table 13

Adjusted Means and Standard Deviations for the TVIP Vocabulary Test (N=50)

PPVT	Treatment		Control	
	Mean	SD	Mean	SD
Pretest	42.58	10.46	48.38	7.49
Posttest	53.38	11.81	57.85	9.79

The findings indicate that after controlling for TVIP pretest scores, students in the treatment condition ($M = 54.98$; $F(1,47) = .23$, $p = .64$) did not have statistically significantly higher TVIP scores than students in the control condition ($M = 56.37$) as reported in Table 14. Moreover, according to the η^2 statistic reported in Table 14, it appears that that 20% of the variability on the TVIP measure can be explained or accounted for by, the pretest, while 1% of the variability on the TVIP measure can be accounted for by the VE-SETR. Therefore, a statistically significant interaction was not found which means that the VE-SETR intervention condition did not have an impact on treatment students' receptive vocabulary skills.

Table 14

ANCOVA Results for the TVIP Posttest Scores (N = 50)

Variable	MS	df	F	Sig.	η^2
Pretest	1106.67	1	11.56	.00	.20
Condition	21.71	1	.23	.64	.01
Error	99.71	47			

Indicadores Dinámicos del Éxito en la Lectura (IDEL) Oral Reading Fluency

Student performance on the Indicadores Dinámicos del Éxito en la Lectura (IDEL; Good et al 2003) was examined. Researchers have determined that criterion levels of performance on these measures correspond to levels of achievement on oral reading fluency that predict successful reading outcomes (Good et al, 2003). The adjusted means and standard deviations for the IDEL pretest and posttest measures are reported in Table 15 .

Table 15

Adjusted Means and Standard Deviations for the IDEL Posttest Scores (N = 50)

IDEL	Treatment		Control	
	Mean	SD	Mean	SD
Pretest	36.96	20.44	34.77	18.17
Posttest	49.88	22.11	52.19	21.26

The findings in Table 16 indicate that after controlling for IDEL pretest scores, students in the control condition ($M = 56.37$) had marginally higher IDEL scores than students in the treatment condition ($M = 54.98$; $F(1,47) = 2.87$, $p < .10$). Moreover, according to the η^2 statistic reported in Table 16, it appears that that 81% of the variability on the IDEL measure can be explained or accounted for by, the pretest, while 6% of the variability on the IDEL measure can be accounted for by the VE SETR. The growth of the treatment group between January and March was 12.92 words read correctly per minute, and the growth of the comparison group from January to March was 17.42 words read correctly per minute. As illustrated in Figure 7, the change from pretest to posttest in the treatment group was marginally lower than the change from pretest to posttest in the control group.

Table 16

ANCOVA Results for the IDEL Oral Reading Fluency Posttest Scores (N = 50)

Variable	MS	df	F	Sig.	η^2
Pretest	18355.94	1	205.67	.00	.81
Condition	256.02	1	2.87	.10	.06
Error	89.25	47			

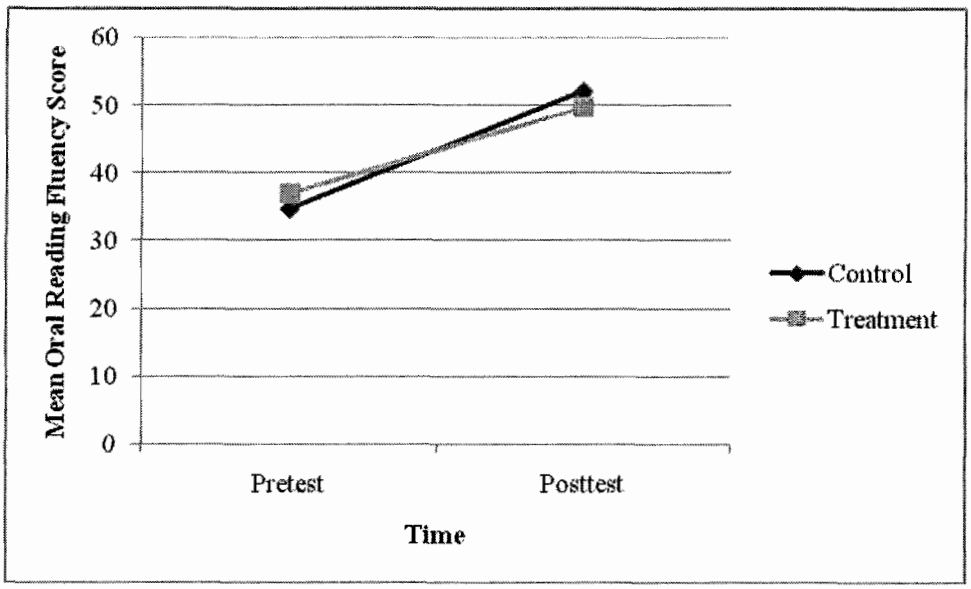


Figure 7. Mean Oral Reading Fluency score for the control and treatment conditions across time.

The findings suggest that there were no statistically significant differences between students in the comparison and treatment condition on the posttest measure of the IDEL scores (F (1,47) = 2,87, p = .10) as indicated in Table 16. This finding indicates that the VE SETR intervention did not have a positive effect on the students' oral reading fluency.

Overall, the results indicate that the VE SETR intervention had a positive effect on students expressive verbal ability skills as measured by the Depth of Knowledge (DOK) only, and no effect on the IDEL oral reading fluency measure, the BVAT, or the Peabody Picture Vocabulary Test (TVIP).

CHAPTER V

DISCUSSION

The consequences for English language learners who are struggling to achieve academically in U.S. schools have led researchers and educators to focus attention on literacy development for ELLs (August & Shanahan, 2006). Researchers have noted that effective literacy instruction for English learners in the elementary grades includes extensive and varied vocabulary instruction (U.S. Department of Education, 2007). Vocabulary knowledge is a major building block in children's early literacy development. It is considered foundational to comprehending text. Many children, especially English language learners, need support in acquiring the substantial vocabulary to become good readers (Silverman, 2009).

The VE SETR study research investigated the impact of a daily 15 minute vocabulary Enhanced Systematic and Explicit Teaching Routines (VE SETR) intervention on the vocabulary development and reading comprehension of first grade Spanish-speaking ELL students when compared to students who received the SETR only instruction as measured by the Bilingual Verbal Ability Test (BVAT), Test de Vocabulario en Imagenes Peabody (TVIP), Indicadores Dinámicos del Éxito en la Lectura (IDEL) and the Depth of Knowledge measures. A series of analysis of covariance statistical tests were conducted on student data to address the research question. The pretest was used as a covariate and the between-subjects factor was

condition (treatment vs. control) for each of the four measures. The following analysis examines the impact of the VE SETR intervention on the vocabulary development and reading comprehension of students as measured by the DOK, BVAT, TVIP and IDEL.

Depth of Knowledge (DOK)

A number of explanations could account for the positive effects of the intervention on the DOK vocabulary measure. The DOK measures assessed students' expressive vocabulary skills. The DOK measure focused specifically on the 32 target words taught in the study. Students were required to define each word and use it in a sentence. In the VE SETR lessons, students were first taught the definition of a word, how to use it in a sentence, and were provided multiple examples and non-examples of the word meaning. Students were taught the difference between defining a word and using it in a sentence. In the Macmillan *Tesoros* curriculum, these skills were not taught as systematically or explicitly. Students were given examples of a word, but there was less practice involved in using the word, and the words were not clearly defined using examples and non-examples. In addition, the word selection in *Tesoros* did not focus on teaching academic vocabulary (i.e. detail, conclusion, summarize etc.) while the VE SETRs focused on both Tier 2 (Beck et al., 2002) words and academic vocabulary.

The results of the DOK support the research literature that suggests explicit vocabulary instruction is effective for ELLs. Vaughn, Cirino, Linan-Thompson, Mathes, and Carlson (2006) in their study found that systematic and explicit instruction in which the teacher explicitly modeled new content and students were provided with guided and independent practice had a significant impact on student performance. Specifically, intervention students significantly outperformed students in the comparison group on

posttest measures of phonological awareness, word attack, vocabulary, word reading, and reading comprehension and language skills in Spanish. The VE SETRs were structured to provide students with similar opportunities for modeling, guided and independent practice and therefore, students demonstrated significant growth on the DOK measure.

Additionally, the National Reading Panel (2000) highlighted the following methods of effective vocabulary instruction: (a) providing students direct instruction on vocabulary required to learn a specific text; (b) providing multiple exposures to vocabulary words; (c) teaching students vocabulary that will likely appear in many contexts; (d) providing students vocabulary that is derived from content learning materials; (e) teaching vocabulary tasks that students fully understand and are within the context of their reading ability; (f) providing vocabulary learning that involves active engagement in learning tasks; (g) including repetition, richness of context, and motivation, which may also add to the efficacy of incidental learning of vocabulary; (h) utilizing computer technology to teach vocabulary; and (i) moving away from dependence on a single vocabulary instructional method toward a reliance on multiple strategies (National Reading Panel, 2000, p. 4). Except for using computer technology to teach vocabulary, the VE SETRs incorporated each of these recommendations in the teaching templates and, therefore, support the notion that systematic vocabulary instruction that incorporates the recommendations of the National Reading Panel, have a positive impact on vocabulary development in Spanish for Spanish speaking ELLs.

The Bilingual Verbal Ability Test (BVAT)

The BVAT measure assessed students in both English and Spanish in the areas of single-word expressive vocabulary, receptive and expressive tasks of retrieving a

synonymous word association, and the receptive and expressive task of retrieving opposite word associations. The BVAT tests were administered in English with the option to answer in Spanish if the answer was not known in English. The VE SETR intervention group demonstrated a slightly higher level of growth in English vocabulary from pretest to posttest than the SETR control group; however, the finding was not statistically significant ($M = 465.62$; $F(1,47) = 1.83$, $p = .18$). In the VE SETR templates teachers focused specifically on providing synonyms and antonyms when teaching vocabulary words. Although there were no statistically significant results indicating that the VE SETR intervention had a positive impact on vocabulary development, the pretest to posttest growth results suggest that students are transferring primary native language vocabulary knowledge to English, but to no greater extent than students in the SETR only condition.

Although the Umbel, Pearson, Fernandez, and Oller (1992) vocabulary study focused on receptive vocabulary of first grade Spanish speaking and bilingual students, the study found that students primary language provided a foundation for their English language development. Based on the results of the TVIP and PPVT, Umbel et al., (2004) found that learning two languages did not inhibit receptive language development in the first language, and appeared to provide a foundation for stronger performance in English. The VE SETR results of the BVAT may also support the possibility of first language vocabulary skills providing a foundation in the second language. However, in the absence of a control condition, this is mere speculation.

Test de Vocabulary Imagenes Peabody (TVIP)

The TVIP is a standardized test that focuses only on receptive vocabulary skills. Only two words that were tested on the TVIP were taught in the VE SETR. The results on the TVIP revealed no statistically significant differences between the VE SETR and SETR groups on TVIP scores. In the existing research, Carlo et al., (2004) reported that explicit and systematic vocabulary instruction had a strong positive effect on word learning, however, there were no gains on the Peabody Picture Vocabulary Test (PPVT). Although the PPVT measure did not reveal an improvement in receptive vocabulary, the ELL students showed improvement on completing cloze passages, measures of word association, and morphological knowledge of words, which are expressive vocabulary skills.

Indicadores Dinámicos del Éxito en la Lectura (IDEL)

On the IDEL posttest measure of oral reading fluency, findings indicated a slightly negative impact of the VE SETRs intervention on oral reading fluency. Several possible factors could also account for the negative effect of the intervention on reading fluency. In the study, all students were provided 90 minutes of reading instruction daily. In the Spanish literacy instruction much of the 90 minutes of instruction focused on fluency and reading practice. During the 15-minute VE SETR intervention, instruction did not focus on reading fluency. Instead, the intervention focused on vocabulary development. Therefore, students received 15-minutes less of direct oral reading fluency practice than those in the comparison group.

Although the IDEL was used in this study as a measure of fluency, it was also used as an indictor of a connection between fluency and comprehension and subsequently a

connection between vocabulary instruction and comprehension. The existing experimental research in vocabulary and comprehension is limited and therefore, unclear whether a connection can be made. In this 8-week study, the duration of the study was not long enough for vocabulary instruction to truly have an impact on fluency and comprehension.

VE SETR Intervention and Reading Comprehension

Although the existing literature suggests that "Vocabulary serves as the bridge between the word-level process of phonics and the cognitive processes of comprehension" (Kamil & Herbert, 2005, p. 4), the explicit linkage of vocabulary and comprehension, is very limited, at least experimentally. Vocabulary research has revealed important evidence that effective vocabulary instruction is essential to help students comprehend what they read (August, Carlo, Dressler, & Snow, 2005; Baumann et al., 2003; Nagy & Scott, 2000) however, there has been very limited experimental research in this area, and especially on native language vocabulary development and reading comprehension with Spanish speaking ELLs.

The IDEL oral reading fluency measure was used in the VE SETR study to determine if vocabulary instruction had an impact on reading fluency. Because the experimental research connection between fluency and comprehension is so strong, fluency should be a reliable and valid indicator of comprehension. Although an increase in fluency in the VE SETR treatment group could indicate a higher level of comprehension, the results of this particular study do not suggest a connection between vocabulary instruction and comprehension. Also, the limited duration of the VE SETR

study makes it difficult to ascertain if reading fluency and comprehension would have improved over a longer period of time.

This study's hypothesis stated that the VE SETRs would have a statistically significant effect on the vocabulary development of first grade Spanish literacy ELL students receiving the VE SETRs for 15 minutes daily for 8 weeks. Testing the proposed hypothesis revealed a statistically significant effect in favor of the treatment group on vocabulary growth only on one of the four measures, the Depth of Vocabulary Knowledge measure. Therefore, based on the analysis and interpretation of the data, the null hypothesis (i.e., no statistically significant differences between treatment and comparison groups on the DOK) is rejected.

The VE SETR study supports the existing literature and theories outlined in the theoretical framework and literature review of the study. For example, the results found on the BVAT in English could arguably offer support for Cummin's iceberg theory of language interdependence (Cummins, 1979), which asserts that as students are learning in their first language, the knowledge is transferred to their second language. Although the results can't be directly attributed to the VE SETR intervention, results support the literature and suggest that as students acquire vocabulary in their first language, they build a foundation to support vocabulary development in their second language. Furthermore, the National Reading Panel (2000) and Silverman's (2007) study that examined the effectiveness of an explicit and systematic vocabulary intervention, suggest the importance of explicit instruction. The VE-SETR supports that when students are provided with explicit and systematic vocabulary instruction, their vocabulary improves as demonstrated by the DOK results. Overall, the VE-SETR study supports that explicit

vocabulary instruction will improve vocabulary. However, the study did not demonstrate that vocabulary instruction improves reading fluency and comprehension.

Study Limitations

One primary limitation of this study was that of sample size. Although statistically significant results were found, the sample size was limited to 50 students. Another limitation of the study was that of determining which particular features of the VE SETR intervention were most effective for vocabulary word-level gains on the DOK. It is evident that the intervention has a positive impact on the treatment group's performance on the BVAT and DOK. However, it is unclear which aspects of the intervention were more effective than others in accounting for the active and effective ingredients of the VE SETR. Finally, a limitation of this study was the duration of the intervention. The study was conducted over 8 weeks, however, a longer duration would have allowed for stronger and more significant results.

Threats to Validity

There were also threats to internal validity in the VE SETR study. One threat to internal validity was the diffusion of treatment. Both the comparison and treatment groups were being taught with systematic and explicit teaching routines. The comparison group teachers were asked to continue using the SETRs while teaching all aspects of reading, including vocabulary. Therefore, although students did not receive daily vocabulary instruction with the vocabulary template, they did receive some vocabulary instruction, but arguably diffuse instruction, in their core-reading instruction.

Experimenter effects might also have been a threat to internal validity, because 3 of the 8 data collectors also served as treatment group instructors. This could account for students in the treatment group feeling more or less comfortable with some of the data collectors when tested.

Another possible threat to internal validity was a possible pretest effect. Students were exposed to the pretest 9 weeks before the posttest. Therefore, the exposure to the pretest with the same format could have influenced student growth, attributing to a pretest effect.

There is limited threat to the construct validity of this study. Because there was more than one method used to teach vocabulary, and to measure progress, there was no threat of mono-operation bias or mono-method bias.

One possible threat to external validity is the population itself. The external validity of the study would be stronger if the study is replicated with a larger sample of other Spanish speaking ELL students learning to read in Spanish.

Conclusions and Explanations

Research on effective vocabulary instruction for ELLs is very limited. However, the research that does exist supports the notion that systematic and explicit vocabulary instruction should yield positive results in student vocabulary development. The purpose of this study was to enhance the research literature by investigating the effect of systematic and effective teaching routines on first grade vocabulary development. The findings of this study suggest that systematic and explicit vocabulary instruction has a positive impact on vocabulary development as measured by the DOK. These findings support the recommendations of the National Reading Panel (2000) and highlight the importance of systematic and explicit vocabulary teaching, including providing multiple exposures to the words and a variety of strategies practicing the new word.

Recommendations and Implications

This study sought to examine the effect of a vocabulary-enhanced intervention on first grade vocabulary development. This research will add to the limited research in the area of vocabulary development for ELLs. Knowing that VE SETR intervention had a positive effect on one of the four measures can help teachers focus on the importance of systematic and explicit teaching of vocabulary for ELL students.

Further studies should be conducted that examine the specific components of the VE SETRs on vocabulary growth for ELLs. For example, a follow up study to determine if students retain the vocabulary learned and to what extent the specific words are transferred to English would represent a significant and important addition to the field of effective vocabulary research for ELLs. Additionally, considering that the vocabulary words were pre-selected from the curriculum, another follow up study could be to

examine how teachers select vocabulary words to teach, and extent to which they provide a systematic and explicit approach to teaching the words.

The results from this study suggest that teachers cannot ignore the importance of teaching vocabulary explicitly and systematically to keep ELL students from falling further behind in vocabulary development. Research indicates that vocabulary is a critical component of reading comprehension and overall reading success (August & Shanahan, 2006). ELL students are struggling academically in the United States and it is critical for researchers, teachers and school leaders to better understand how to effectively meet the academic needs of this growing population.

APPENDIX A

VE SETR TEMPLATES

Tarjeta #17A	Procedimiento #1 para enseñar palabras específicas Vocabulario
Pasos	Guión del maestro
Actividad Preparación Selección de palabras	Enseñar palabras específicas. La instrucción de palabras específicas incluye, pero no está limitada a las oportunidades mostradas abajo para exposiciones múltiples de las palabras. Tenga lista las palabras que vaya a usar en esta actividad. • Escoja palabras que sean desconocidas • Escoja palabras que sean críticas para la comprensión del texto • Escoja palabras que los estudiantes vayan a necesitar en un futuro • Escoja palabras que sean difíciles y necesiten interpretación
1. Presentación de la palabra	Ejemplo: Fabuloso La palabra que vamos a aprender es fabuloso. ¿Qué palabra? *Fabuloso.* Vamos a dividir la palabra en sílabas. Todos. */fa/ /bu/ /lo/ /so/* Ahora vamos a leer la palabra. ¿Palabra? (Dé la señal) *fabuloso* Otra vez, ¿Palabra? (Dé la señal) *fabuloso*
2. Definiciones directas. Use una explicación que sea fácil de entender.	Mi turno. Escuchen,si algo es fabuloso significa que es estupendo o maravilloso.
3. Ejemplos del	Escuchen, ¿Cuál palabra es igual que fabuloso – o.k. o super?

uso de la palabra. Use sinónimos y antónimos.	• ¿Por qué super va con fabuloso? • ¿Es *fabuloso* si te caes y raspas tu rodilla? ¿Qué podría ser? ¿Terrible o maravilloso? • El muchacho tuvo un día *fabuloso* en el parque. ¿Tuvo él un buen día ó un día terrible? • El concierto fue el mejor que yo he escuchado. Cada nota parecía perfecta. ¿Estoy hablando acerca de algo *fabuloso* o de algo terrible?
4. Uso de la palabra en una oración completa. Los estudiantes demuestran su entendimiento clasificando con otras palabras	Nombre algunas cosas que sean *fabulosas*. Nombre algunas cosas que no sean fabulosas. Escuchen, • El muchacho tuvo un día fabuloso en el parque. ¿Tuvo él un buen día ó un día terrible? • El concierto fue el mejor que yo he escuchado. Cada nota parecía perfecta. ¿Estoy hablando acerca de algo *fabuloso* ó de algo terrible?
5. Verificación de la comprensión de la palabra. Componga una oración novedosa.	Vamos a crear oraciones nuevas con "fabuloso". Mi turno, • María pensó que su carro de color rojo era fabuloso porque brillaba en el sol, y se podían abrir todas las puertas. Ahora ustedes. (Si los estudiantes no responden, ayúdelos a crear oraciones haciendo preguntas.) Por ejemplo: ¿Cómo puede tener una familia un día fabuloso? ¿Por qué es una bicicleta nueva fabulosa? (Una bicicleta nueva es fabulosa porque es mi primera bicicleta—y es muy rápida.)
6. Examen individual. Relacione la definición con experiencias propias	Voy a dar un ejemplo de un día fabuloso que tuve y por qué fue fabuloso ese día. Yo fui a la playa la semana pasada. Tuve un día fabuloso porque encontré muchas conchas bonitas. Ahora describan ustedes un día fabuloso. Si los estudiantes no contestan, diga: Yo sé que tuviste un día fabuloso cuando fuimos al acuario. Describe por qué fue fabuloso ese día.

Tarjeta #17B	Procedimiento #2 para la instrucción de palabras específicas Vocabulario
Pasos	Guión del maestro
Actividad Preparación Selección de palabras	Enseñar palabras específicas. Tenga listas las palabras que vaya a usar en esta actividad. • Escoja palabras que sean desconocidas • Escoja palabras que sean críticas para la comprensión del texto • Escoja palabras que los estudiantes vayan a necesitar en un futuro • Escoja palabras que sean difíciles y necesiten interpretación
1. Presentación de la palabra	Ejemplo: Investigar La palabra que vamos a aprender es investigar. ¿Qué palabra? *Investigar.* Vamos a dividir la palabra en sílabas. Todos. */in/ /ves/ /ti//gar/* Ahora vamos a leer la palabra. ¿Palabra? (Dé la señal) *investigar* Otra vez, ¿Palabra? (Dé la señal) *investigar*
2. Definiciones directas.Use una explicación que sea fácil de entender.	Mi turno, Escuchen, investigar es buscar información acerca de algo que uno quiere saber.
3. Ejemplos del uso de la palabra. Use la palabra en ejemplos de oraciones.	Voy a usar la palabra en las siguientes oraciones: • Voy a investigar de dónde sacó mi hermanita tanto dinero. (Voy a buscar información que me diga de dónde saca el dinero.) • María va a investigar las razones por la cuales sus vacas se están enfermando. (Va a buscar la causa, va a buscar algo que le diga por qué las vacas se enferman.)
4. Uso de la palabra en una	Ahora ustedes hagan una oración con "investigar." Tienen un minuto para terminar la siguiente oración con el compañero

oración completa. Los estudiantes demuestran su entendimiento utilizando la palabra en una oración completa.	que está a su lado: Escuché_____en el jardín de mi casa, voy a investigar qué o quién lo está haciendo. Por ejemplo: Escuché un silbato en el jardín de mi casa, voy a investigar quién está haciendo ese ruido. Escoja estudiantes al azar para que compartan las oraciones que pensaron con el resto de la clase.
5. Verificación de la comprensión de la palabra. Pulgar arriba, pulgar abajo.	Ahora les voy a decir unas oraciones con la palabra investigar. Si la palabra está mal usada entonces ustedes me muestran sus pulgares hacia abajo y si uso bien la palabra en la oración, me muestran los pulgares hacia arriba. • Escuché un ruido en la cocina, voy a investigar qué hizo ese ruido._____ Muy bien, voy a descubrir qué pasó. • La maestra me mandó investigar la vida de los insectos. Muy bien, la maestra quiere que encuentre información acerca de la vida de los insectos. • Voy a investigar mi almuerzo. Muy bien, no tiene sentido, no se investiga el almuerzo. • Me gustaría investigar por qué los elefantes viven por tantos años. Muy bien, quisiera saber por qué los elefantes viven por tantos años. • Voy a investigar dónde están escondidos mis regalos de cumpleaños. Muy bien, voy a buscar los regalos porque quiero saber donde están escondidos.
6. Examen	Ahora, escriban en su cuaderno 2 oraciones con la palabra

individual Los estudiantes completarán oraciones escritas con las palabras de vocabulario enseñadas.	investigar.
7. Actividades	• Usar la palabra en una oración (Candyland) • Terminar la frase usando la palabra apropiada. • Cuatro cuadrados…definición, dibujo, ejemplos y no ejemplos • Tarjetas con la palabra por un lado y la definición al reverso ("Flashcards".)

Lección 1	**Vocabulario** **Palabra: separar**
Pasos	**Guión del maestro**
1. Presentación de la palabra	Palabra: separar **La palabra que vamos a aprender es** *separar.* **¿Qué palabra?** *separar* **Vamos a dividir la palabra en sílabas.** **Mi turno se/ /pa/ /rar/** **Todos.** */se/ /pa/ /rar/* Ahora vamos a leer la palabra. Mi turno ***separar*** **¿Palabra?** (Dé la señal) *separar* **Otra vez, ¿Palabra?** (Dé la señal) *separar*
2. Definiciones directas. Use una explicación que sea fácil de entender.	**Mi turno.** **Ahora voy a decirles la definición de la palabra separar** **Separar** separar es hacer que dos o más personas o cosas dejen de estar juntas, o poner algo en grupos. **Tu turno, ¿Qué significa la palabra separar?** **Muy bien** separar es hacer que dos o más personas o cosas dejen de estar juntas, o poner algo en grupos.
3. Ayuda gráfica Antes de la lección escriba la palabra, la definición y ponga el dibujo en el "graphic organizer"	**(Enséñeles la palabra, la definición y ponga el dibujo en el "graphic organizer")** **La palabra es....** **La definición**
4. Ejemplos del uso de la palabra. Use sinónimos y antónimos.	**Escuchen, ¿Cuál palabra es igual que separar – dividir o juntar o unir?** • **Vamos a separar las silabas o unir las silabas** • **¿Por qué dividir va con separar?** • **Si la maestra separa la clase en dos grupos ¿Ella divide o une la clase?** • **Los muchachos separan los crayones blancos de los de color. ¿Se juntaron o se dividieron los crayones?** • **La niña puso los juguetes juntos en grupos. ¿Ella los separó o los juntó?**
5. Uso de la palabra	Nombre algunos ejemplos de algo que sea *separado.*

en una oración completa. Los estudiantes demuestran su entendimiento clasificando con otras palabras	Nombre algunos ejemplos de algo que no sea *separado*. **Escuchen,** • **El maestro de fútbol separa el equipo en dos grupos. ¿Se divide o junta el equipo?**
6. Verificación de la comprensión de la palabra. Componga una oración novedosa.	**Vamos a crear oraciones nuevas con "separa".** **Mi turno,** • **María separó los papeles rojos de los papeles blancos.** **Ahora ustedes.** (Si los estudiantes no responden, ayúdelos a crear oraciones haciendo preguntas.) Por ejemplo: ¿Cómo la maestra puede separar cosas en la clase?
7. Exámen individual. Relacione la definición con experiencias propias	**Doy un ejemplo de algo que es separado.** • **Yo puse la ropa blanca en una pila y la ropa negra en otra.** • **La ropa esta separada porque no esta junta, esta en dos grupos.** • **Ahora describan ustedes algo que puede ser separado.** Si los estudiantes no contestan, diga: **Describe por qué fue separado**
8. Actividades	Tarjetas de notas. Pídale a los estudiantes que usen las tarjetas para terminar la oración y practicar leyendo la palabra y la definición. Las tarjetas de notas incluyen lo siguiente: • Una explicación que sea fácil de entender • Una oración que ilustre el significado de la palabra • Un dibujo • Ejemplos y no-ejemplos
9. Oraciones chistosas	Pídale a los estudiantes que usen la palabra separar en una oración chistosa. **Ejemplo:**

Lección 2	**Vocabulario** **Palabra: salvaje**
Pasos	**Guión del maestro**
1. Presentación de la palabra	Ejemplo: Salvaje **La palabra que vamos a aprender es salvaje.** **¿Qué palabra?** *Salvaje.* **Vamos a dividir la palabra en sílabas.** **Mi turno** */sal/ /va/ /je/* **Todos.** */sal/ /va/ /je/* Ahora vamos a leer la palabra. Mi turno ***salvaje*** **¿Palabra?** (Dé la señal) *salvaje* **Otra vez, ¿Palabra?** (Dé la señal) *salvaje*
2. Definiciones directas. Use una explicación que sea fácil de entender.	**Mi turno,** **Ahora voy a decirles la definición de la palabra salvaje** **Salvaje quiere decir que vive libremente en la naturaleza, sin estar al cuidado de alguien.** **Tu turno, ¿Que significa la palabra salvaje?** **Muy bien! salvaje quiere decir que vive libremente en la naturaleza, sin estar al cuidado de alguien.** No es un animal doméstico como un perro o un gato.
3. Ejemplos del uso de la palabra. Use la palabra en ejemplos de oraciones.	**Voy a usar la palabra en las siguientes oraciones:** • Un animal salvaje vive en su ambiente natural y no con personas. • El hombre tiene que tener cuidado de no molestar a los gorilas salvajes que estudia.
4. Ayuda gráficas Antes de la lección escriba la palabra, la definición y ponga el dibujo en el "graphic organizer"	**(Enséñeles la palabra, la definición y ponga el dibujo en el "graphic organizer")** **La palabra es....** **La definición**
5. Uso de la palabra en una	**Escuchen, ahora voy a dar ejemplos de algunos animales que sean salvajes y algunos animales que no sean**

oración completa. Los estudiantes demuestran su entendimiento clasificando con otras palabras	**salvajes. Si es** • **El gorila, la jirafa y el elephante, son animales salvajes.** • **Una Zebra es un animal salvaje por que no vive con humanos.** • **Mi gato no es un animal salvaje por que no vive solo en el bosque, vive conmigo.**
6. Verificación de la comprensión de la palabra. Componga una oración novedosa.	Vamos a crear oraciones nuevas con "salvaje". Mi turno, • Los gorilas salvajes juegan en la selva. Ahora ustedes. (Si los estudiantes no responden, ayúdelos a crear oraciones haciendo preguntas.) Por ejemplo: ¿Que hacen los animales salvajes? ¿Por qué los animales salvajes no pueden vivir con humanos/personas?) clase?
7. Exámen individual. Relacione la definición con experiencias propias	Voy a dar un ejemplo de qué hacen los animales salvajes. o Yo fui a la selva tropical. Yo vi un animal salvaje viviendo en los árboles, se llama un mono. o También yo vi un caballo salvaje corriendo en las montañas. o Ahora describan ustedes un animal salvaje. o Si los estudiantes no contestan, diga: o Yo sé que viste un animal salvaje en el zoológico cuando fuimos **Describe por qué ellos son salvajes.**
8. Actividades	Tarjetas de notas. Pídale a los estudiantes que usen las tarjetas para terminar la oración y practicar leyendo la palabra y la definición. Las tarjetas de notas incluyen lo siguiente: • Una explicación que sea fácil de entender • Una oración que ilustre el significado de la palabra • Un dibujo • Ejemplos y no-ejemplos
9. Oraciones chistosas	Pídale a los estudiantes que usen la palabra salvaje en una oracion chistosa. **Ejemplo:**

Lección 3	**Vocabulario** **Palabra: proporcionar**
Pasos	**Guión del maestro**
1. Presentación de la palabra	Ejemplo: Proporcionar **La palabra que vamos a aprender es proporcionar.** **¿Qué palabra?** *proporcionar.* **Vamos a dividir la palabra en sílabas.** **Mi turno** */pro/ /por/ /cio/ /nar/* **Todos.** */pro/ /por/ /cio/ /nar/* Ahora vamos a leer la palabra. Mi turno, ***proporcionar*** **¿Palabra?** (Dé la señal) *proporcionar* **Otra vez, ¿Palabra?** (Dé la señal) *proporcionar.*
2. Definiciones directas. Use una explicación que sea fácil de entender.	**Mi turno,** **Ahora voy a decirles la definición de la palabra** *proporcionar* *proporcionar* **significa dar a a alguien lo que necesita** **Tu turno, ¿Que significa la palabra** *proporcionar***?** **Muy bien!** *proporcionar* **significa dar a a alguien lo que necesita.**
3. Ejemplos del uso de la palabra. Use la palabra en ejemplos de oraciones.	**Voy a usar la palabra** *proporcionar* **en las siguientes oraciones:** • **La maestra de arte proporciona papel, pinturas, y pinceles a los estudiantes?** • **La biblioteca proporciona libros** • **Qué te proporciona un supermercado?**
4. Ayudas gráficas antes de la lección escriba la palabra, la definición y ponga el dibujo en el "graphic organizer"	**(Enséñeles la definici**ón de la palabra en el "graphic organizer")
5. Uso de la palabra en una oración	**Ahora ustedes hagan una oración con "proporcionar."** **Tienen un minuto para terminar la siguiente oración con el compañero que está a su lado:**

completa. Los estudiantes demuestran su entendimiento utilizando la palabra en una oración completa.	**La mamá proporciona_____ para sus hijos.** **Por ejemplo: comida, juguetes.** Escoja estudiantes al azar para que compartan las oraciones que pensaron con el resto de la clase.
6. Verificación de la comprensión de la palabra. Pulgar arriba, pulgar abajo.	Ahora les voy a decir unas oraciones con la palabra ***proporciona***. Si la palabra está mal usada entonces ustedes me muestran sus pulgares hacia abajo y si uso bien la palabra en la oración, me muestran los pulgares hacia arriba. • **La biblioteca proporciona libros a los estudiantes!** Muy bien, La biblioteca proporciona libros. • **Voy a proporcionar chicle a mi escritorio.** Muy bien, no tiene sentido, no se puede proporcionar chicle a un escritorio. • **La maestra proporciona lápices a los estudiantes** Muy bien, la maestra proporciona lápices. • **Me gustaría proporcionar ropa y comida para las personas que lo necesitan.** Muy bien, quisiera proporcionar ropa y comida a las personsas que necesitaban ayuda. • **Voy a proporcionar nieve a la maestra.** Muy bien, no tiene sentido.
7. Exámen individual Los estudiantes completarán oraciones escritas con las palabras de vocabulario enseñadas.	**Ahora, escriban en sus cuadernos una oración con la palabra proporcionar.**
8. Actividades	**Tarjetas de notas. Pídale a los estudiantes que usen las tarjetas de notas para terminar la oración y leer la palabra. Las tarjetas de notas incluyen lo siguiente:** • **Una explicación que sea fácil de entender** • **Una oración que ilustre el significado de la palabra** • **Un dibujo**

	• **Ejemplos y no-ejemplos**
9. Oraciones chistosas	**Pídale a los estudiantes que usen la palabra proporcionar en una oracion chistosa.** **Ejemplo:**

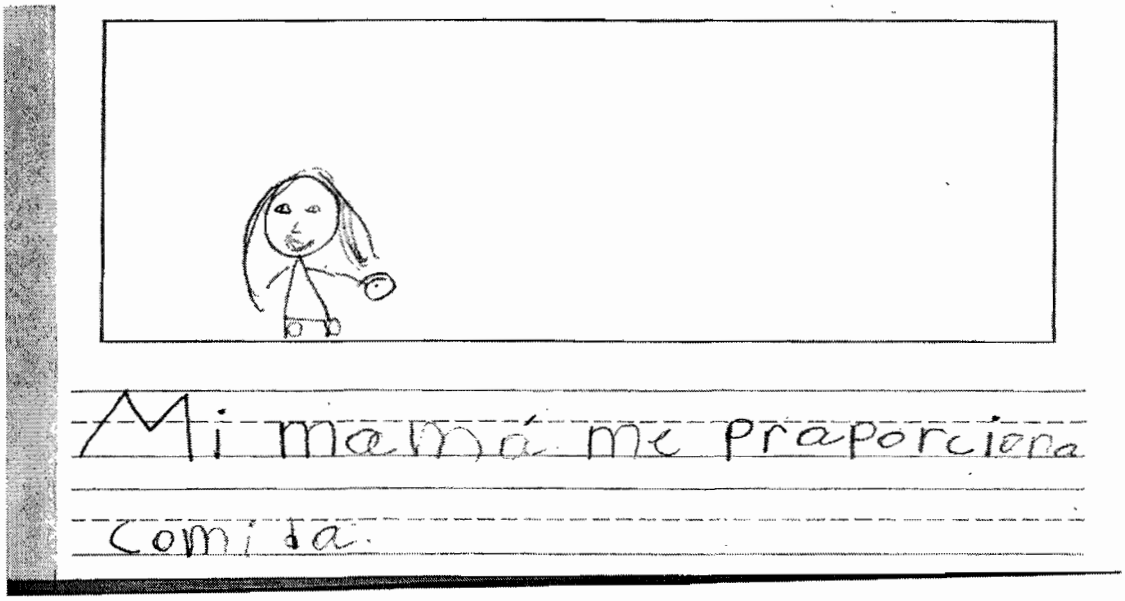
Lección 4	**Vocabulario** **Palabra: diferente**
Pasos	**Guión del maestro**
1. Presentación de la palabra	**La palabra que vamos a aprender es** *diferente*. **¿Qué palabra?** *diferente* **Vamos a dividir la palabra en sílabas.** **Mi turno,** */Di/ /fe/ /ren/ /te/* **Todos.** */Di/ /fe/ /ren/ /te/* Ahora vamos a leer la palabra. Mi turno, ***diferente*** **¿Palabra?** (Dé la señal) *diferente* **Otra vez, ¿Palabra?** (Dé la señal) *diferente*
2. Definiciones directas. Use una explicación que sea fácil de entender.	**Mi turno,** **Ahora voy a decirles la definición de la palabra** *diferente* **Una persona o cosa es** *diferente* **cuando no es igual ni se parece al resto. Tu turno, ¿Que significa la palabra** *diferente*? **Muy bien!** *diferente* **cuando no es igual ni se parece al resto.**
3. Ejemplos del uso de la palabra. Use la palabra en ejemplos de oraciones.	**Voy a usar la palabra** *diferente* **en las siguientes oraciones:** • **Hay que respetar a los demás , aunque peinsen de forma diferente.** • **Los gemelos tienen camisas diferentes, una es azul y la otra es roja.** • **Hay muchos niños de paises diferentes en la clase de primer grado.**
4. Uso de la palabra en una oración completa. Los estudiantes demuestran su	**Ahora ustedes hagan una oración con "diferente" Tienen un minuto para terminar la siguiente oración con el compañero que está a su lado:** **Mi hermano y yo tenemos_____diferentes.** **Por ejemplo: ideas, juguetes, salones, camas, ropa**

entendimiento utilizando la palabra en una oración completa.	Escoja estudiantes al azar para que compartan las oraciones que pensaron con el resto de la clase.
5. Ayuda gráfica Antes de la lección escriba la palabra, la definición y ponga el dibujo en el "graphic organizer"	**(Enséñeles la palabra, la definición y ponga el dibujo en el "graphic organizer")** **La palabra es....** **La definición**
6. Verificación de la comprensión de la palabra. Pulgar arriba, pulgar abajo.	Ahora les voy a decir unas oraciones con la palabra diferente. Si la palabra está mal usada entonces ustedes me muestran sus pulgares hacia abajo y si uso bien la palabra en la oración, me muestran los pulgares hacia arriba. • **El tigre es diferente del elefante.** **Muy bien, el tigre no es igual que el elefante.** • **Voy a comer la diferente.** Muy bien, no tiene sentido, no se puede comer la diferente. • **La abuela y sus nietos** tienen ideas diferentes sobre fútbol. **Muy bien, probablemente, la abuela no tiene el mismo interés sobre fútbol.** • **Me gustaría diferente la nieve.** **Muy bien, no tiene sentido, diferente no es un verbo o acción.** • **Voy a cuidar de mi hermanito.** **Muy bien**
7. Examen individual Los estudiantes completarán oraciones escritas con	**Ahora, escriban en sus cuadernos 1 oración con la palabra diferente.**

las palabras de vocabulario enseñadas.	
8.Actividades	**Tarjetas de notas. Pídale a los estudiantes que usen las tarjetas de notas que incluyen lo siguiente:** • **Una explicación que sea fácil de entender** • **Una oración que ilustre el significado de la palabra** • **Un dibujo** • **Ejemplos y no-ejemplos**
9. Oraciones chistosas	**Pídale a los estudiantes que usen la palabra diferente en una oración chistosa.** **Ejemplo:**

APPENDIX B

VE SETR GRAPHIC ORGANIZER



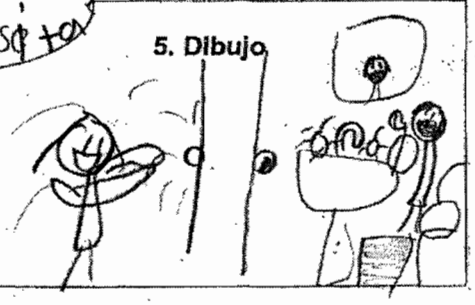
3/2/09

1. Palabra
necesitar

2. Definición
necesitar sinifica que no puedo estar sin algo.

3. Oración
Yo necesito ir al Baño.

4. Ejemplos
Yo necesito comer.

5. Dibujo


Monse

1.
Salvaje

2. Definición
Salvaje quiere decir que vive libremente en la naturaleza, sin ser cuidado por el hobre.

3. Oración
los gorilas son Salvaje porque viven en el Solojeco

4. Ejemplos
una cebra es un animal Salvaje porque vive en el Solojeco

5. Dibujo


APPENDIX C

DEPTH OF KNOWLEDGE ASSESSMENT

Directions for Administration

1. Place examiner probe on clipboard and position so that student cannot see what you record.

2. Say these specific directions to the student:

"I'm going to ask you about some words. I'll ask you to tell me what each word means, then I'll ask you to use the word in a sentence. For example, if I say 'what does sad mean?' you could say, 'Sad is when you are not happy.' If I say 'use the word sad in a sentence' you could say, 'I was sad when my ice-cream fell on the floor.'"

"Now it's your turn. What is a chair?"

CORRECT RESPONSE: If student gives a correct response, say:	INCORRECT RESPONSE: If student does not respond or gives an incorrect definition, say:
"Very good."	*"A chair is something you sit in."*

"Now use the word 'chair' in a sentence."

CORRECT RESPONSE: If student uses the word correctly in a sentence, say:	INCORRECT RESPONSE: If student does not respond or uses , say:
"Very good."	*"I sat in my chair all day at school."*

"If you don't know what a word means, or how to use a word in a sentence, it is OK to say, 'I don't know.'"

Begin recording, say the student's ID number and "DOK", and start the test.

For each item, say *"What does _____ mean?"* or *"What is a _____?"* After the student responds, say *"Now use the word _____ in a sentence."*

3. *Record the exact words the student provides in the space provided.* If the student does not reply repeat the prompt once. If the student still does not respond, mark "NR" (for 'no response') on the answer sheet and go to the next word. If the student responds by saying, "I don't know" write the "DK" (for 'don't know') on the answer sheet.

4. If the student gives a partial or ambiguous definition, prompt by saying, *"Tell me more about what _____ means"* or *"Tell me more about a _____."* This prompt may be used once for each item. Do not prompt if a definition is clearly wrong or if the child says "don't know". Do prompt if the child gives a zero point answer, but that answer indicates that the child MAY HAVE some correct knowledge about the meaning of the word. If a prompt is given, write "P" on the answer sheet.

5. Continue administering the remaining words until you complete the list. *Administer all words regardless of student accuracy.* Encourage responses with neutral praise (Example: I like how hard you are working). If the student becomes frustrated it is ok to tell them that, they will not know some of the words and that is ok!

6. If the student provides a definition for a word that is correct but does not supply the definition sought, prompt the student by saying, *"Do you know another meaning for the word ___?"*

7. If a student acts out a word (e.g., snore), prompt the student by saying, *"Tell me what ___ means using words."* (If the student is not able to provide the definition in words, write "acted out" on the score sheet.

8. If the student begins to ramble or becomes off-task, redirect the student back to the task.

9. If a student does not hear the target word correctly, record the response and administer the prompt "Tell me more about what _____ means" or "Tell me more about a _____." During the prompt, say the target word very clearly and distinctly. If the student still does not hear the target word correctly, record the response and continue the assessment.

   Example:

   E What does squirm mean?

   S That's an animal that lives in the dirt.

APPENDIX D
VE-SETR FIDELITY CHECK

Site (Circle One): ·····Metager·····Bridgeport×			
Teacher: ×	# of Students in Group: ×		
Date: ×	Beginning Time: ×	End Time: ×	
Observer: ×			

	The instructor:	# of times vocab word used	
Presenting the word	___ introduced the word and gave a clear explanation of the activity. ___ elicited a group response to repeat the word. ___ prompted the students to divide the word in syllables. ___ prompted students to read the word together and repeat the word. ___ modeled reading the word. ("I do it") ___ elicited whole group response together. ("We do it")	Instructor: Group: Student:	
Direct definition	___ gave a clear and student friendly definition of the word.		
Examples of using the word in a complete sentence	___ gave clear examples of how to use the vocabulary word using examples and non examples. ___ gave at least 3 examples and 3 non-examples of the word in a complete sentence.		
Checking for understanding	___ used activities to check for understanding such as thumbs up thumbs down, whole group oral response, or finishing a sentence starter to verify students could determine the correct use of the word in a sentence. ___ provided immediate feedback for students if they made an error.		
Individual response	___ provided at least 3 opportunities for individual responses. ___ called on students in a varied order. ___ provided immediate feedback for students if they made an error.		
Practice activities	___ provided opportunities for students to practice creating sentences with partners, writing the word in a sentence or completing a sentence starter on a graphic organizer card.		
Use of graphic organizer	___ had the word, definition and examples written on the graphic organizer. ___ referenced the graphic organizer as he/she introduced the definition, sentences and examples in the order of instruction.		
Pacing	___ provided quick paced instruction. ___ used signals to prompt student response. ___ provided postive reinforcement.	**Total**	
Comments:		**Totals:**	Total: Out of: 20

APPENDIX E

NATIONAL SETR STUDY

This study is a part of a larger 4 –year national study (2008-2012). In the national study, 18 schools located in Oregon have participated in the first year of the study and an additional 18 schools in Texas will be added in the second year. Schools were recruited based on their ELL program model. The national SETR study employed a pretest-posttest comparison-group design with schools randomly assigned to treatment or comparison groups to examine the efficacy of the SETR on vocabulary development of first-grade students in Spanish reading programs.

Participating schools were matched on both demographic variables and key instructional variables, such as core reading curriculum and allocated time on Spanish and English instruction. Schools were randomly assigned to an experimental condition that has employed the Systematic and Explicit Teaching Routines, (SETRs) or to a comparison condition that has employed the core-reading program without the SETRs. Schools will participate in their assigned condition for three academic school years as part of the national longitudinal study.

In each school, teacher participants were nested within the school and student participants were nested within the treatment and comparison conditions. Only those schools that build literacy achievement in Spanish and transition students to English literacy using an early exit model (August & Shanahan, 2006) were included in this study. Schools were also selected based on the amount of time and type of reading instruction that ELLs receive (Baker et al., 2006). Several measures were employed to examine potential mediator and moderator variables to serve as statistical controls in the

literacy achievement models (Jaccard & Turrisi, 2003; Murray, 1998; Rosenthal & Rosnow, 1991).

Participants in the national study are part of a four-year longitudinal study entitled "Reading Intervention with Spanish-Speaking students: Maximizing Instructional Effectiveness in English and Spanish." This research is funded by the U.S. Department of Education grant, which was awarded to Drs. Baker, Linan-Thompson, and Edwards-Santoro of the University of Oregon and the University of Texas at Austin. Schools in the Tigard-Tualatin school district with Spanish literacy programs were recruited to participate in the study and district principals have agreed to participate in the national study.

The University of Oregon Institutional Review Board has approved the study. Prior to the beginning of the study, parents of participating students received passive consent letters explaining the goals of the study and the procedures of the data collection. The study followed all guidelines for human subjects' protections and confidentiality. The treatment and comparison schools in the national study shared common features in order to increase the internal validity of the study. Schools shared similar populations of Spanish-speaking ELLs. The schools all shared the common instructional focus of providing Spanish-speaking ELLs initial literacy instruction in Spanish, then transitioning students to English.

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