

PROMISING PRACTICES FOR SUPPORTING THE LITERACY  
DEVELOPMENT OF ENGLISH LANGUAGE LEARNERS

by

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A Project Submitted to the Faculty of  
The Evergreen State College  
In Partial Fulfillment of the Requirements  
for the degree  
Master in Teaching  
2013

This Project for the Master in Teaching Degree

by

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has been approved for

The Evergreen State College

by

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June 2013

## ACKNOWLEDGEMENTS

I wish to thank my faculty and my first mentor teacher for fostering me through this arduous journey of becoming a teacher. I also thank my friends, who've provided much emotional support and answers to all my absurd questions. Finally, I send thanks to all the students I worked with during student teaching last fall; they've taught me much more than any quantitative or qualitative ever study ever could.

## ABSTRACT

This paper seeks to answer the question: What teaching practices support the English literacy skills of English language learners? Framed in the aftermath of the whole language versus phonics debate, it summarizes research of varying designs showing the effects of whole language, skills-based, and balanced literacy approaches to teaching English language learners. Findings are that bilingual students transfer metacognitive skills from L1 to L2, and that explicit, systematic instruction in phonics, phonemic awareness, spelling, vocabulary, writing, and reading comprehension is effective for increasing the literacy development of ELLs if used along with varied, authentic texts, opportunities for students to use their new vocabulary in various real world contexts, student choice, and peer-assisted learning strategies. This is a crucial exploration to serve the over 5,318,164 English language learners enrolled in public schools in the U.S.

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## CHAPTER ONE: INTRODUCTION

### **Introduction**

Literacy is not a single thing; it extends beyond encoding or decoding of print. It surrounds us daily, from food packages to messages on a screen. While students in the public K-12 school system of the U.S. swim through a sea of literacy contexts in the English language, language minority students, limited English proficient students, and English language learners often drown. To access content in all areas, all students need basic literacy skills--how to read, write, and understand language in a multitude of contexts. How best to teach literacy skills has one of the great experiments of public education; how to do this for non-native speakers of English has often been a shot in the dark. The guiding research question of this paper is: What teaching practices support and develop the English literacy skills of English language learners? This paper examines research that will help answer the guiding question by exploring a variety of teaching methods for English language learners, limited English proficient students, language minority students, and struggling readers.

The “reading wars” of the 1980s and early 1990s refer to the national debate about how best to teach children to read; it centered around phonics versus whole language instruction and rose in part from a national movement to reform education. From Lyndon Johnson to Barack Obama, president after president has claimed to want to be the “education president” and taken measures they believed would improve public education and educational access to the underprivileged. Title I of the 1965 Elementary and Secondary Education

Act (ESEA) introduced a system of federal grants to low income schools. In 1983, Ronald Reagan's National Commission on Excellence in Education issued the widely cited report *A Nation At Risk* and called for greater accountability in school performance to inform federal funding decisions. Both the Improving America's Schools Act of 1994 and the No Child Left Behind Act of 2001 cemented the practice of test score accountability for use of federal funds and created national standards for education (Cross, 2011). Proponents of phonics-based instruction cited a decline in reading test scores in the 1990s that they saw as a result of whole language instruction. They also cited studies indicating that phonics-based instruction produced better test scores (Reyhner, 2008). Several researchers hold that explicit systematic phonics lessons are necessary for learning to read and write (Adams & Bruck, 1995; Beck & Juel, 1995; Chall, 1967; Ehri, 1991; Foorman, Francis, Fletcher, Schatschneider & Mehta, 1998). Edelsky, Draper, and Smith (1983) said that from their own collective experience over a 26-year period in public elementary schools, from the organization and tasks demanded by reading and achievement tests, and from "numerous other bits of evidence", they saw a skills theory as the prevailing orientation of teaching literacy (Edelsky et. al, 1983). The dominant pattern of reading instruction involves relatively homogenous groups working out of a basal reader and the accompanying workbook or skills sheets. The time spent on workbook activities, skills, and drills is greater than the time spent reading (DeFord 1981). Many teachers use a blend of phonics and whole language approaches in their classrooms, while others stick to one. All of them must be prepared to change

their instructional practices accordingly to accommodate their ELL students. Researchers continue to study how best to support language minority students, millions of whom struggle daily to learn content and communicate in English, often failing out of school. The teaching of reading is a responsibility and right often placed solely on the English language arts teacher, but research shows that reading is an essential mediator for successful learning in all content areas (Brown, 2007). Teachers in all content areas need to be prepared to support ELLs to successfully interact with texts and language in their classrooms. This paper examines the effects of different types of instruction on the literacy skills of English language learners.

### **Rationale**

In the aftermath of the “reading wars”--a debate that, in the words of one California state legislator, was "worse than abortion", there are over 5,318,164 English language learners enrolled in public schools (pre-kindergarten through grade 12). This number represents approximately 10.7 percent of the total public school student enrollment (Malagon, 2011). Although on average, Latino students' National Assessment of Education Progress (NAEP) reading levels have generally been at the same level since 1998, their average performance is substantially lower than Caucasian students of European heritage (Fitzgerald et al., 2008). Nearly four-fifths (79%) of ELL students are Hispanic native Spanish speakers and approximately 2.9 million Hispanic students are enrolled in U.S. high schools, representing 17% of all secondary public school students, yet they are less likely than their non-Hispanic peers to complete high school. While the

high school graduation rate for White students is 75%, only an estimated 53.2% of Hispanic students who enter 9<sup>th</sup> grade will complete the 12<sup>th</sup> grade and graduate high school with a regular diploma (Kohler & Lazarín, 2007).

Unfortunately, many teachers have low expectations for ELLs, viewing them to be at a cognitive disadvantage because they are not native speakers of English.

Their solution has often been to offer these students "compensatory education," which attempts to teach basic skills that they seemingly lack (Diaz & Flores,

2001). The ways in which ELLs in the U.S. are regarded in the classroom and taught has major implications for their success in U.S. society, self-efficacy, and

sociocultural justice in general. In both reading instruction in a first language and ESL instruction, teachers may use whole language approach, phonics-based, or

balanced literacy approaches to teach ELLs how to read, write, and

communicate in English. Investigating the effects of different teaching strategies,

including whole language informed practices, and skills-focused instruction, on

the reading, writing, and communication of English language learners will help

educators make better decisions about how to help ELLs communicate in English

and learn content in English only classrooms--research that is especially relevant

given that nearly 43% of all teachers have at least one English language learner

in their class (Zehler et al., 2003). Also of note is that school psychologists

receive more referrals in the area of reading than any other school-based

concern (Bramlett, Murphy, Johnson, Wallingsford, & Hall, 2002). Research in

how best to increase literacy skills for ELLs is pertinent to many school

personnel. Knowledge of how best to teach literacy skills to Latino/a and

Hispanic ELLs is particularly relevant for educators in Washington state, which has the 12th largest population of Hispanics in the U.S. (U.S. Bureau of Census, 1992-a).

### **Historical Background**

The phonics-centered (also referred to in this paper as skills-based or phonics-based) approach to teaching reading involves direct instruction, usually to the whole class, using practice materials created to emphasize specific phonics concepts (Stahl, 1998). Explicit, systematic phonics instruction teaches phonics before sight words and separately from connected reading. Children are taught letter-sound relationships before whole words. Mastery of a set of symbols comes first; children learn sounds, letters, and letter combinations to be able to read whole words. Directing children to "sound out" words is a common phonics technique (Lemann, 1997). A phonics teacher directly tells the children what he or she is trying to teach. He or she might say, "The letters s and h make the sound /sh/." Conversely, a whole language teacher might ask, "What sounds do you hear in the words, shell, ship, and she?" (Mesmer, 2005). According to Stahl et. al. (1998), "early and systematic emphasis on teaching children to decode words leads to better achievement than a later and more haphazard approach" (p. 339). Good phonics instruction involves ongoing assessment to make sure phonics instruction is having the desired effect (Mesmer, 2005). Critics say that the teaching of language as isolated skills divorces it from its real and functional use in society (Norris & Hoffman, 1993). They also say that it takes so much classroom time that little time is left for students to use the skills (Eldredge, 1995;

Norris & Hoffman, 1993; Reutzel & Cooter, 1992).

Opponents of phonics-based instruction view reading as a developmental process in which the early stages of developing the alphabetic principle are necessary for later skilled-reading, even though those early skills may be rarely needed at the later stages. Whole language is not a program or method of teaching reading, but a philosophy of education that draws heavily on the theories of Vygotsky and others (Goodman, 2003, p. 254). The theory holds that children learn to read and write English the same way they learn to speak it--through a "natural, unconscious process best fostered by unstructured immersion" (Lemmann, 1997). Teachers who espouse a whole language view of learning focus more on the learner than the content being read. While content is important, whole language teachers believe that content can only be understood and seriously studied when learners are actively involved in the learning, participating in what will be learned, and relating what they are learning to what they already know (Goodman, 1989). The whole language philosophy of learning views the systems of language—grapho-phonetic, syntactic and semantic—to be interactive aspects of the reading process. Far from being separate, they encase meaning--the main purpose for reading: "Meaning is the core enwrapped in a syntactic structure and sheathed with a phoneme-grapheme system" (Harste & Burke, 1977, p. 37). Whole language approaches place a child's interests and patterns of literacy development at the center of the curriculum, with instruction focused on helping children monitor and improve their own reading and writing processes (Dahl, 2000). Whole language teachers do not assign students grade-

level curriculum materials, but provide a wide variety of reading materials appropriate for each student. All language skills are seen as developmental that should not be taught in isolation (Kuball & Peck, 1997). Whole language teachers claim that students who can write well can usually read well too. They focus less on instruction and attempt to immerse learners in functional and purposeful activities, using authentic experiences, cooperative learning, audio-visual aids, gestures, and other extralinguistic cues (Adunyarittigun, 1993). Whole language teachers first teach larger units of language and then move to smaller units by providing a rich array of texts wherein unfamiliar words can be skipped, addressed later, or guessed from context (Lemann, 1997). Weaver (1990) claimed that an added benefit of whole language classrooms was that behavior problems subside because students are more actively involved in learning and given the opportunity to develop self-control rather than submit to teachers' demands (p. 25).

Critics of whole language included a number of parents anxious about whether their children are getting enough of "the basics" (Clarke, 1987; Delpit, 1986; Cambourne, 1988). Others criticisms deal with the apparent chaos, lack of structure, and concern over standards in whole language classrooms. The whole language movement that took off in the early 1970's was a grassroots movement started by Frank Smith, a psychology professor at the University of Victoria, B.C., and Kenneth Goodman, a professor of education at the University of Arizona. However, the debate between phonics and whole language instruction goes back to the 1920's. As progressive education became a national cause, schools

started switching from phonics to whole-word reading instruction (Lemann, 1997). An assumption of what became known as the whole-word approach was that the knowledge of letter-sounds would naturally follow once whole-word recognition was established (Smith, 1978). It was not until some time later that doubt began to be expressed about the effects on some children of this whole-word initial emphasis.

Considerable controversy existed between the two approaches to reading instruction until recently. The phonics vs. whole language debate historically focused around the question of whether whole language denies students instruction about letter-sound relationships (Dahl, 2000). Cañado (2006) compared whole language to phonics and suggested that a good deal of phonics instruction is necessary in second language acquisition. Other studies (Edelsky, Altwerger, & Flores, 1991; Newman & Church, 1990) dispelled the myth that whole language teachers do not teach phonics. Other studies have shown that whole language and phonics are not a dichotomy and that these approaches should be used in tandem. Though there is much research on the effects of different approaches to literacy instruction on mainstream (native English-speaking) students, little research exists showing the effects of these instructional approaches on the literacy development of ELLs. By the early 1990's, studies found that Spanish-speaking ELLs in the U.S. receive more skill-based instruction than do English-speaking children (Bilingual Education Office Categorical Support Program Division, 1990; Cummins, 1989; Diaz, Moll, & Mehan, 1990; Los Angeles Unified School District Board of Education, 1989;

Perez, 1992, Thonis, 1989; Weaver & Padron, 1992). Gursky (1991) noted that Spanish-speaking children in phonics-based programs begin to fall noticeably behind by the fourth grade (Kuball, 1997). Yates & Ortiz (1991) noted that treating language-minority students as low-achieving native English-speaking students and teaching them a watered down curriculum denies them equal access to high-quality education. A scant but increasing body of research over the last decade has argued that ELLs are better served by whole language classrooms because the developmental processes that naturally occur in first language acquisition also occur in second language acquisition. While some policymakers portray whole language as responsible for low student achievement and propose increased use of phonics-based approaches, some research has found that U.S. students in whole language programs are performing at higher and higher levels each year.

### **Definitions**

English language learners (ELLs) are the focus of this paper. An English language learner is defined by the state of Washington as "a student whose primary language is a language other than English and who have English language skill deficiencies that impair their learning in regular classrooms" (Malagon, 2011). By far, the majority of ELLs in the U.S.—80 percent—are Spanish speakers (Goldenberg, 10). It must be noted that the term *ELL* does a poor job of capturing the diversity of the English language learner population (even children whose native language is English are English language learners). Yvonne and David Freeman (2002) discussed three different categories of ELLs:

newcomers with adequate formal schooling in their home country (AFS), newcomers with limited formal schooling in their home country (LFS), and the long-term English learner (LTEL). Weaver (2008) added a fourth category-- generational English learners (GELs)--students whose parents and grandparents speak English, but not the standard English learned in a supportive school classroom. These students struggle with both "the language of their heritage and with English, but are treated by the school system as native English speakers needing remediation" (p. 261). Weaver (2008) said that teachers who use these terms are in danger of viewing these students in terms only of their English proficiency, thereby mentally reducing them to one aspect of their total being (149).

This paper uses Ovando's description of whole language which condenses the views of Willis, Goodman, and Smith: "whole language focuses on using language, focusing on meaning first, getting students to write early and often, accepting invented spelling for beginners but expecting conventional spelling as students advance in the writing process, exposing students to high-quality literature and authentic texts from diverse writing genres, allowing students to make choices in reading, and encouraging all to be voracious readers" (Ovando, 2003).

This paper defines phonics-based (or skills-based) instruction as teaching in which: teachers make abundant use of basal readers and worksheets; children are taught letter-sound relationships and build toward whole words (Strickland, 1998); children are asked to produce sounds of letters that appear in isolation

(Anderson, Hiebert, Scott, & Wilkinson, 1985); children blend isolated sounds (Anderson et al., 1985); children receive explicit instruction in the sound structure of oral language (Snow, Burns, & Griffin, 1998); instruction is direct and involves learner practice (Dahl, Scharer, Lawson, & Grogan, 1999); practice materials are crafted to emphasize specific phonics concepts (Dahl et al., 1999); instruction is in letter–sound relationships, and practice is in decodable text (Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998). Sound/letter or decoding orientations focus on teaching the reader to learn to manipulate the relationships between the symbols of speech (sounds) and the graphic symbols that represent them (letters). Meaning is then reached through the sound-letter system.

Balanced Literacy is a philosophy and framework for reading instruction that combines the best practices of both phonics-based and whole language approaches—explicit, systematic teaching of phonemic awareness and phonics as well as rich and varied literature and writing practice (Honig, 2000). It involves read alouds, guided reading, shared reading, independent reading, and word study. A key aim of balanced literacy is helping students to become effective independent readers.

The term "at-risk" refers to children who are at risk for poor reading outcomes: their level of performance and/or rate of improvement are dramatically below that of peers (based on classroom, school, district, state, or national norms). The definition of at risk as described in this paper includes children who are learning to read in a second language. As McLaughlin (1987) noted: "For many minority language children, reading is the beginning of schools failure" (p.

57).

Word attack is mentioned in several of the studies. It refers to all of the skills that allow a reader to convert graphic symbols into intelligible language (lingualinks).

### **Limitations**

This paper is limited in scope by a lack of quantitative research that shows the effects of whole language instruction on the reading, writing, and communication of English language learners. Apart from the work of Edelsky, very little research has examined the effects of whole language instruction on the writing development of Spanish-speaking children (Kuball, 1997). Another limitation of this paper is that the studies focus on teaching ELLs to read in an English language arts context. There are few studies that show the effectiveness of different literacy practices in other content-area classrooms, such as science and mathematics. A final limitation is the fact that the majority of the studies in this paper examine subjects that are in the primary and elementary grades, which decreases the transferability of the results.

### **Statement of Purpose**

This paper critically examines 30 research studies to reveal their findings and to analyze the strengths and shortcomings of their designs. The purpose of this critical review is to determine what current research demonstrates about how best to support and improve the literacy skills of ELLs, focusing on whole language, skills-based, and balanced literacy methods of instruction. It will answer the question, "What teaching practices support the English literacy skills

of English language learners?"

### **Summary**

The best way to teach children reading skills has been dividing educators for over a century and came to a head in the educational reform era of the 1980s and 1990s. While some teachers embraced a whole language philosophy that says children should be immersed in the experience of reading in order to learn how to read and write, others held that teaching children the smallest components of language first—phonics—is the only successful way to teach reading. The most current research has shown that both frameworks for literacy instruction are equally valuable and should be used deliberately and carefully. English language learners make up a significant percentage of U.S. classrooms and pose an additional challenge for educators, who wade through research trying to determine the best practices for helping these students succeed academically. This paper will explore the research available on the effects of different teaching strategies on ELLs with the goal of revealing best practices for improving literacy and content learning for ELL students.

## CHAPTER TWO: CRITICAL REVIEW OF THE LITERATURE

### **Introduction**

Chapter One presented an overview of the divide on teaching reading skills that ruled educational debates of the 1980s and 1990s. Many studies showed that teaching phonics increased reading comprehension as evidenced by test scores. Compelled by high-stakes testing after education mandates such as No Child Left Behind, schools began to use more and more phonics instruction in the teaching of reading skills. Proponents of whole language held firmly that in order to become fluent readers, they must use all four of the cueing systems--not just graphophonics--to make meaning from text. Prominent scholars in the arena of reading have concluded that the dichotomy between whole language and phonics was false to begin with and should be overshadowed by focusing on achieving the right balance of both methods. The combination of the two approaches, often described as Balanced Literacy, has continued to evolve over the last few years as new research has revealed the benefits of both phonics and authentic reading (Pearson, 2004). This paper draws on the most current research investigating whole language and skills-based approaches, and research showing the efficacy of combining these approaches. Chapter Two reviews 30 studies that examine the effects of various practices on English Language Learners and struggling readers. Each of these studies are summarized and analyzed, based on the researchers' conclusions. The research examined in this chapter is divided into the following sections: Studies comparing that practices for native English speakers are also effective

for ELLs; studies examining skills-based/phonics-based interventions; studies that examine the value of bilingualism, biliteracy and metacognition skills for ELLs; studies that examine whole language approaches to literacy learning; and studies examining whole language practices combined with skills-based/phonics based instruction (balanced literacy approaches).

### **Literacy Teaching Methods For Native English Speakers Compared to Those for ELLs**

This section contains studies by Baker & Good (1995) and Fitzgerald, Amendum, and Guthrie (2008) which compare the effectiveness of programs for bilingual/non-native English speaking students and native English-speaking students and shows that Curriculum-Based Measurement (CBM) is a valid assessment for both groups, and that the literacy development of both groups of students is similar, respectively. The findings in these studies contribute to research showing language acquisition patterns of ELLS (of any age) to be similar to those of native speakers (Weaver, 2008, p. 150). The utility of such research benefits both English language learning (no matter the native language of the learner) and good practices for language teachers.

Published norm-referenced tests (PNRTs) are assessments that give an estimate of the test individual within a predefined population. They can only be used to measure gains over a long period of time with groups of students. They are a poor way to measure student learning for many reasons, chiefly because they cannot differentiate poor performance due to learning difficulties, poor instruction, or effective instruction on content not on the test (Baker & Good,

1995). Garcia (1991) argued that Hispanic students may be systematically underestimated when they are administered PNRTs. Curriculum-based measurement (CBM) has the potential to address many of the flaws of PNRTs. On CBM reading measures, students read aloud for a minute from randomly selected passages (from the general education reading curriculum). Because they are sensitive, brief, and have many forms, CBMs can be used repeatedly to evaluate student progress over time. The validity of CBM is well established (e.g., Deno, Mirkin & Chiang, 1982; Fuchs, Fuchs & Maxwell, 1988; Marston, 1989; Shinn, Good, Knutson, Tilly & Collins, 1992).

Using a nonequivalent control group design, Baker and Good (1995) measured the reliability, validity, and sensitivity of Curriculum-Based Measurement (CBM) reading on 76 second grade Hispanic students who are bilingual in English and Spanish, finding that CBM reading was as reliable and valid for bilingual students as for English-only students.

The subjects were 76 second grade students from two elementary schools in a rural school district Washington state. Both schools were comprised of primarily Mexican-Americans (over 60% of the students in each school). The community in which the study was conducted has the fourth highest percentage of Hispanics in the state (62.2%) and the highest percentage of residents in the state who speak Spanish in the home (56.7%). The area is one of the poorest in the state, with 29.1% of the residents living below the official poverty line (U.S. Bureau of Census, 1992-a). Two samples of subjects were recruited--a core sample and an extended bilingual sample. Thirty-three of the bilingual students

were identified as limited English proficient and provided with ESL services.

Reading measures included CBM reading, Stanford Diagnostic Reading Test (SDRT), and a Teacher Rating Scale. Data were collected over a 13-week period. The core sample of English-only and bilingual students was administered CBM measures only. All students received CBM and ELF testing 2 times weekly for 10 weeks. The SDRT reading comprehension subtest was re-administered to the same students during week 13.

Differences between the English-only and bilingual groups were not significant on CBM reading measures of point or level of performance, indicating that students in both groups read approximately the same number of words correctly per minute on the first day and throughout the study. Students in the English-only group scored significantly higher than students in the bilingual group on both SDRT score and SDRT reading comprehension subtest. The bilingual group scored significantly higher on the ELF (English language fluency) level ( $M = 21.6$ ) than on the SLF (Spanish language fluency) ( $M = 13.4$ ) with  $t = 7.45$  and  $p < .05$ ). The reading and language skills of the English-only students and the bilingual groups were not significant on CBM reading measures of point or level of performance, indicating that students in both groups read approximately the same number of words correctly per minute on the first day and throughout the study. Findings suggest that CBM reading is more highly related to reading than to language for bilingual students and that CBM is reliable, as least as reliable for bilingual students as it was for English-only students as a valid measure of English reading proficiency.

The design of the study strengthened its validity by controlling for maturation, history, and testing. The fact that subjects were required to read an average of 20 words correctly per minute on CBM to partake in the study was a major threat to the validity and likely accounted for at least some of the subjects' success with the measure. The subjects were limited to 2nd grade students, so the results are not generalizable to all other groups.

Fitzgerald, Amendum, and Guthrie (2008) conducted a study with a time series design to examine whether the pattern of young Latino English language learners' reading growth (for instructional reading level, word and sound level features of reading, comprehension, and fluency) across two years was the same as the pattern for monolingual native-English-speaking peers' growth, and if so, whether one group outperformed the other, finding that the pattern of Latino English-language learners' reading growth across two years was the same as their native English speaking peers' growth.

Of the two elementary schools chosen, one was Eden, a school in a moderately sized city and the other was Hatterson, in the largest city in the state of North Carolina. There were 122 subjects--73 at Hatterson and 49 at Eden. In the first year of the study, half of the children in all first and second-grade classrooms were randomly selected for the study, except that to the extent possible, all Latino English-language learners were included. Across both schools, 66 children moved from first into second grade (at Hatterson 40; at Eden 26). Fifty-six children moved from second into third grade (at Hatterson, 33; at Eden 23). Seventy were females (44 at Hatterson; 26 at Eden). Fifty-two were

males (29 at Hatterson; 23 at Eden). The families of these students were not significantly different from the native English-speaking students at the school, in terms of socioeconomic level. All students were in all-English classrooms, and all reading instruction for all students was done in English. The Latino students received no native-language instruction.

Over two years, the researchers collected data at two schools in two different districts. Two cohorts of children were followed for two years. In one cohort, children who began school in first grade were followed into second grade. In the other cohort, children who began school in second grade were followed into third grade. Reading assessments were done at the beginning, middle, and end of each of the two years, with all children receiving the same set of assessments. Four reading assessments were individually administered in counterbalanced fashion. They were the following: (a) Oral Reading of Successively Difficult Passages (Bader & Weisendanger, 1994; Barr, Blachowicz, & Wogman-Sadow, 1995; Clay, 1993); (b) Basic Sight Vocabulary (Barr et al., 1995); (c) Hearing Sounds in Words (Clay, 1993; Johnston, 1992); and (d) Phonics Knowledge (adapted from Shefelbine, 1995). Six reading variables were created: Instructional Reading Level; Reading Words in Isolation; Phonological Awareness; Phonics Knowledge; Comprehension; and Fluency. The assessments were selected to: (a) assess critical features of early reading development supported by prior research, (b) ensure use of assessments that have been widely used in practice and in prior research, and significantly, (c) represent authentic assessments that are typically used in school settings.

The researchers conducted a series of repeated measures analyses of variance and covariance. For Instructional Reading Level, the pattern of Latino English-language learners' reading growth across two years was the same as the pattern for monolingual native-English-speaking peers' growth. That is, the interaction of Language Status with time was not significant ( $F = 1.32, p > .25$ ). For Instructional Reading Level, one group did not outperform the other. There was no main effect of Language Status ( $F = 2.27, p > .13$ ). There was a significant time main effect ( $\eta^2 = .65$ ). Students, on average, performed better at each consecutive point in time. The overall pattern of growth across the two years was different for the two groups. While the native-English-speaking students began the year with quite well developed Phonological Awareness on average, the Latino students began at a lower level and their growth witnessed a steep learning curve over the course of the Year 1. By the end of Year 2, their average level (97.38%) was equivalent to their peers' (98.60%).

The effects of maturation were controlled for because data was collected at multiple points in time during the developmental growth of the students. Internal and external validity was threatened due to testing effects--subjects' change in performance over time was likely due (at least partly) to the fact that they were familiar with the test. Another flaw in is that the authors did not control for history effects--in other words, events in the participants' lives may have caused changes in their behavior, not the treatment. The authors did not explain how they controlled for instrumentation effects, or how changes in subjects' performance may have been due to changes in experimenter methods or

instruments. However, the results of the study are strong because the researchers took many measurements across a period of 2 years, and interrater reliability was strong.

The two studies in this section suggest various things about the literacy development of ELLs. The study by Fitzgerald et al. (2008) supported evidence that patterns of literacy development are similar for both ELLs and native English speakers. Baker and Good (1995) found Curriculum-Based Measurement to be a reliable indicator of the reading skills of ELLs. Both support the premise that a good teaching practice of teachers working with ELLs is understanding how language develops and how to assess reading skills. Teachers who have an awareness of the English reading development of ELLs can provide better instruction by knowing what is developmentally appropriate reading instruction.

### **Skills-Based Interventions for English Language Learners**

There is evidence of the benefits of intensive tutoring for the English literacy development of students whose primary language is Spanish (e.g., Gunn et al., 2000, 2002; Quiroga et al., 2002; Neal & Kelly, 1999). The majority of the effective interventions have provided explicit, systematic phonics instruction along with opportunities for application of the alphabetic principle in text. Krashen (2003), a proponent of whole language approaches, said that a limited amount of explicit grammatical assistance can be helpful at the right time (Weaver, 2003). For English-speaking students who have adequate decoding skills but are not fluent readers, interventions including repeated reading of connected text have promoted improved oral reading fluency (Dowhower, 1987; Herman, 1985;

O'Shea, Sindelar, & O'Shea, 1985; Rasinski, 1990; Samuels, 1979; Sindelar, Monda, & O'Shea, 1990; Weinstein & Cooke, 1992), which in turn supports comprehension (National Reading Panel, 2000). Research on the effectiveness of these instructional practices for bilingual students who are learning to read in English is scarce. This section examines 14 studies that show the effects of various intervention programs on the vocabulary development, reading comprehension, and phonological awareness of ELLs. These interventions are typically rooted in a skills-based/phonics-based philosophy, using direct instruction, basal readers, and explicit teaching of isolated literacy skills.

### **Vocabulary Interventions**

Research has suggested that a major impediment to reading comprehension for Latino English language learners and lagging readers is low vocabulary, particularly low frequency academic words encountered in middle and secondary school texts which affects comprehension of those texts (García, 1991; Nagy, 1997; Verhoeven, 1990). Carlo, August, McLaughlin, Snow, Dressler, Lippman, Lively and White (2004) noted that the gap between the vocabulary skills of lower SES and middle SES students is large--approximately 6,000 words at school entry (as cited from Hart & Risley, 1995). Addressing the needs of second language learners is crucial, as they often arrive in U.S. classrooms in second or third grade with no English vocabulary at all. Good spelling is also thought to help children learn letter/sound relationships and develop strong vocabulary. Research points to a relationship between word knowledge and reading achievement (Blachowicz et al., 2006). The studies in

this subsection examine the effects of explicit, systematic interventions in vocabulary and spelling on ELLs (Cañado, 2006; Mancilla-Martinez, 2010).

Using a nonequivalent control group design with two control groups and one experimental group, Cañado (2006) examined the effects of an explicit, systematic intervention program in English spelling on 43 third cycle primary education students (aged 10 to 12) in Granada, Spain, finding that experimental students made greater gains than control students in five dimensions of spelling: visual/auditory, morphological, orthographic, semantic, and capitalization and punctuation.

The researcher studied the five dimensions of spelling before developing an intervention program, which drew the students' conscious attention to those spelling aspects, after its conclusion one year later, and six months following the finalization of the treatment. The central aim of the study was to describe the development of the experimental and control groups' orthographic knowledge over the course of fifth grade and into the first quarter of sixth grade. The subjects were students in a private primary school serving mostly families from a middle class socioeconomic background. There were already three existing groups of students, what Seliger and Shohamy (1989) called 'natural' groups--in the sense that they existed prior to the research (as required by Spanish law, students in the 3rd cycle of primary education were assigned randomly to groups). One of the groups was randomly chosen to be the experimental group, and the remaining two groups were considered control groups. The groups were made up of homogenous students to ensure the control groups represented the

same population as the experimental group. An initial verbal intelligence analysis (ERV) was conducted to check such homogeneity. Because no statistically significant difference was found in the scores, the groups were regarded as homogenous. There were 24 students in control group 1 (23 boys and one girl), 19 students in control group 2 (14 boys and 5 girls), and 24 students in the experimental group (17 boys and 7 girls).

Three tools were used to measure orthographic performance (this was the dependent variable). The first was an English spelling test made up of a well-established taxonomy of spelling concepts important for mastery by the end of primary education. To test visual/auditory, morphological, orthographic, and semantic dimensions, and capitalization and punctuation, the students completed a dictation exercise, a free composition, and a proofreading test of spelling error recognition and correction. In addition, all three methods were designed to help students consider the significance of English writing and spelling outside of the classroom: the text dictation was a note from the students' mother, asking them to do some food shopping; the free writing, a description of their best friend, required by the Interpol, as they had gone missing; and the proofreading, an email from a Welsh penpal. To ensure test reliability and validity, two university experts and six 5th grade teachers examined it and found that it was slightly difficult and excessively long. The authors shortened the dictation and proofreading task. To assess the effectiveness of the spelling test, it was administered to 261 students over a three-week period. The test was found to be reliable (Kuder-Richardson formula 21--coefficient = 0.95). The results between

the experimental and control groups on the pre-test were barely distinguishable-- 100% of students in all three groups did not attain the criteria in each of the eight aspects of the visual/auditory dimensions of English orthography tested.

The treatment (independent variable) was the explicit and systematic intervention program for the teaching of English spelling. The intervention program was implemented over the course of an academic year. Direct, explicit spelling instruction was given in the English classroom for an average of 15-20 minutes per class, twice a week. The program focused on the spelling layers, predictable patterns, and testing facets included in the pre-, post-, and delayed post-tests. Word hunts, writing sorts, gap-filling, unscrambling, matching, multiple choice, flashcards, crosswords, and other activities were used in the program. The program taught orthographically challenging spelling words, which were cyclically rearranged so that students could be provided with feedback and extensive evaluation could be done. The program also modeled spelling strategies to foster independence, ownership, and personalization in the spelling process.

After the intervention program, the spelling post-test was administered in the same manner as the pre-test. To conduct a qualitative diagnosis of orthographic knowledge, the researchers calculated percentages, means, standard deviations, and range. The control groups found the individual word dictation the most difficult, followed by proofreading, text dictation, and the free composition. One hundred percent of the students did not meet the spelling criteria in the visual/auditory dimension. The explicit instruction was not found to

remedy the spelling weaknesses diagnosed in the experimental group. The control groups did not make as much progress on rules for adding plurals and suffixes as did the experimental group. In capitalization and punctuation, there was scarce or little improvement in the control groups, as opposed to noticeable progress in the experimental groups. The results suggest that drawing students' attention to orthographic rules and patterns is as important as working with these aspects of spelling, and that explicit instruction produces long-term gains.

The main weakness of this study is the absence of p values--the author reported only percentages of students who did not attain the criteria in each of the tests required for passing. This is a large flaw for a quantitative study because there is no way to verify to readers the probability of attaining the results that were achieved given that the null hypothesis is true (the intervention has no effect on students' spelling). A strength of the study was that the researchers chose "natural control groups" that were already randomized and fairly homogenous. However, it is important to consider that the sample size of the three groups was small (24 students in control group 1, 19 in control group 2, and 24 in the experimental group), and that the author did not discuss any variation within or between the groups. Failure to report on variation within or between the control and experimental groups is a weakness of this study. Another major weakness is the location of the study. While it may be fairly easy to assemble a "homogenous" sample group in Spain, which is a relatively genetically homogenous country (Gayán, 2010), it is doubtful that the study would be transferable to an American city as diverse as say, Philadelphia or Seattle.

There is some research suggesting that the writing skills of language minority students are improved by vocabulary instruction and the opportunity to use new words (Calderon et al., 2005; Carlo et al., 2004; Perez, 1981; Ramirez, 1986; Vaughn-Shavuo, 1990). Mancilla-Martinez (2010) drew on the research base of effective vocabulary instruction to design a quantitative study examining the effects of an explicit vocabulary intervention on the literacy outcomes of 5th grade language minority students. Using a nonequivalent control group design, they studied the effects of a 20-week quasi-experimental vocabulary intervention designed to improve Spanish-speaking language minority students' vocabulary and writing on two samples of fifth graders (N = 24, N=25) in a predominantly Latino/a, low-income urban school, finding that the treatment group gained knowledge of a larger number of target words than did the contrast group and that the treatment group students were generally better at determining their own word knowledge.

The subjects were from an urban K-8 school in the Northeast that was predominantly Latino/a and low-income. The school was a site for Strategic Education Research Partnership (SERP), an organization with the goal of improving student outcomes by producing well-established research. There were only three fifth-grade classrooms in the school; two were mainstream English classrooms and the other was a self-contained classroom for recent immigrants that did not participate.

The researchers used Word Generation (WG), a research-based 20-week vocabulary intervention designed to build academic vocabulary across the

content areas (words students might see on academic texts and in tests, but not in spoken language--such as *infer* and *element*). The program centers on the weekly presentation of five high-utility target words to be learned in the context of brief passages. Other components of the program were classroom discussion, weekly debates, exposure to frequently-occurring academic language in various contexts, cultivation of study strategies, and weekly persuasive writing related to that week's discussion. Both treatment and contrast groups were administered pretests in the fall of 2006 and posttests in the spring of 2007. These tested for word comprehension, word reading, reading comprehension, and writing. Treatment and contrast groups were compared on all measures prior to the beginning of the intervention. Posttest performance was examined by conducting Bonferoni t-tests on the gain scores (change from pretest to posttest). Standardized effect sizes (Cohen's *d*; Cohen, 1988) were computed using differences in mean performances divided by the pooled standard deviation. The classroom teachers implemented WG for at least 15 minutes daily, 5 days a week.

The treatment and contrast groups scored very similarly on the pretest. On the posttest, the treatment group showed greater gains in knowledge of vocabulary words than did the contrast group (six WG vocab words as opposed to one). On average, students in the treatment groups knew more of the target words from pretest to posttest. Over the 20-week period, students used an average of two of the five weekly target words in their weekly essay (SD=1.21). Finally, in the area of writing, overall writing quality improved for all students.

Individual Growth Modeling results indicate that the average writing quality score at the beginning of the intervention was 4.53 (SD = 1.05; scale of 0-9 points), with an average growth of .04 points per week. Further, individual growth modeling revealed the treatment students' overall writing quality improved over the course of the 20-week intervention, even though writing instruction was not part of the intervention, and improvements in students' writing quality were larger during the last 10 weeks of the intervention. The findings suggest that word awareness is critical for comprehension, and students should be encouraged to ask when they do not know the meanings of words, and that sustained vocabulary instruction with multiple opportunities for practice in various contexts (like the WG weekly debates) leads to improvements in students' writing; this is more effective than short-term interventions.

A key strength of this study was its internal validity: there was no subject attrition and the groups were evenly matched. Also, the results are repeatable from one study to another. A weakness was its objectivity--the subjects were chosen for convenience as they were attending a school that participated with the research organization funding the study.

The studies in this subsection highlight the flaws and the benefits of explicit spelling instruction. The study by Cañado (2006) examined the results of an explicit spelling intervention and showed that explicit spelling intervention was not effective for the ELLs in the study, while the study by Mancilla-Martinez (2010) found explicit vocabulary instruction to increase the vocabulary and writing skills of ELLs. The factor that made the Word Generation intervention (in

the Mancilla-Martinez study) successful was the opportunity for students to use their new vocabulary in various real world contexts. The study by Cañado (2006) supports this philosophy by showing the value of consciousness-raising in English spelling instruction and the role of practice in learning a foreign language. Cañado argued that helping students develop their spelling skills by explicitly teaching orthographic features led to those features being transferred to spontaneous writing, focusing less on form and more on meaning.

### **Interventions To Increase Reading Comprehension**

The Reading First Program of the Leave No Child Behind Act of 2001 (NCLB; P.L 107-110 H.R.I) was established to improve reading skills for all children. Under NCLB, selection of core reading programs and additional interventions is guided by scientifically based reading research (SBRR), which derives largely from two important reviews of the literature on reading. *Preventing Reading Difficulties* (Snow, Burns, & Griffith; 1998) and the National Reading Panel report (NRP; 2000). These influential reports summarized 20 years of research demonstrating that reading difficulties can be prevented by explicitly and systematically teaching phonological awareness, phonics, fluency, vocabulary, and reading comprehension (Calhoon et al., 2007). Explicit instruction in comprehension strategies such as prediction, summarization, and questioning— for example, the widely used “reciprocal teaching” (Palincsar and Brown, 1984) or Bereiter and Bird’s (1985) think-aloud method— has been shown to be useful with poor first-language readers, and some evidence suggests it would also be useful with second-language readers who have

comprehension difficulties (e.g., Barnett, 1989; Casanave, 1988; Cohen, 1990). The studies in this section show the effectiveness of reading interventions for ELLs and struggling readers (Calhoon et al., 2007; Denton et al., 2004; De la Colina, 2001; Gunn et al., 2000; Ross & Begeny, 2011).

Using a nonequivalent control group design, Calhoon, Al Otaiba, Cihak, King, and Avalos (2007) found that a supplemental peer-mediated reading program improved the reading achievement of 76 first grade English language learners in a Title 1 elementary school in the southwestern United States.

The researchers measured the effects of the PALS (Peer Assisted Learning Strategies) program, which is recommended as a supplement to classroom core reading instruction and typically requires 20-25% of the 90-minute reading block for approximately half of the academic year. The subjects were pretested by the following measures of reading achievement: letter naming fluency (LNF), phoneme segmentation, and nonsense word fluency (NWF). Forty-three of the students received 60 PALS instruction sessions, lasting 30-35 minutes each, three times a week, for 20 weeks. This involved four Sounds and Words activities that required students to say the sounds they heard and sound out words with 3-5 phonemes. In the second half of PALS, which consisted of a 15-minute story sharing session, partners previewed trade books and made predictions about the story, took turns reading the story, and then retold the story. Once a week, teachers allowed students to select books from a collection of authentic texts in the school's media center. Thirty-three students made up the contrast group, who used basal readers and a Houghton Mifflin textbook as the

official core reading program. To establish that there were no pretreatment differences between the PALS and contrast conditions, the authors conducted a series of one-way ANOVAs, finding no significant differences between the PALS and control conditions ( $p > .05$ ). Results of the PALS intervention showed significant differences across time on phoneme segmentation fluency ( $r=.53$ ,  $p = .001$ ), NWF ( $r=.50$ ,  $p = .001$ ), and oral reading fluency ( $r=.51$ ,  $p = .001$ ), meaning that PALS was shown to be an effective program for improving the reading achievement of ELLs.

These findings support prior PALS research in monolingual English first-grade classrooms. PALS appeared to be more effective for ELL students than English-proficient students in developing NSW and LNF. The results are noteworthy given that most ELLs in the study began first grade with little knowledge of letter names. This quasi-experimental study was well designed, accounting for factors such as history, testing, and instrumentation. Maturation, however, was not fully accounted for. Because the subjects were in first grade, it is hard to prove that the PALS program accounted for their growth—because they are in a period of rapid growth, first graders will typically always improve in reading skills no matter the intervention. Another possible source of concern is regression. The control and treatment groups were tested three times (during fall, winter, and spring), so it is possible that the students improved their scores because they had taken the same test before, therefore regressing towards the mean score. Another source of weakness in this study is the limited sample size and type. The samples were limited to students in two-way bilingual programs

(TWBI) and Hispanic students. This study should be replicated with a larger sample and a wider range of ELLs. The researchers claimed that it is likely that the positive effects of PALS in this TWBI classroom was due to participants' high levels of engagement, opportunity to use literacy skills, time spent reading, and structured literate discourse about stories, which are all instructional strategies that have been associated with long-term positive effects for ELL students (Graves et al., 2004). Based on this statement, it is likely that student engagement, practice, and literacy-rich environments are important factors in any program for ELLs.

Given the wealth of evidence on the effectiveness of supplemental reading instruction in enhancing the reading development of struggling native English readers, Denton, Anthony, Parker, and Hasbrouck (2004) believed that similar approaches would benefit children learning to read English as their second language. They also believed that interventions which included explicit phonics instruction and repeated reading of connected text would be as effective for ELLs as they are for native English readers, especially when used with direct instruction in English phonology and opportunities to apply skills in connection with text (Gunn et al., 2000, 2002). Denton et al. (2004) used a nonequivalent control group design to examine the effects of two English reading tutoring interventions on 93 Spanish-dominant English language learners, finding that the Read Well intervention program resulted in improvement in bilingual students' ability to read bilingual words.

The subjects were 93 students (48 males and 45 females) from five

schools in a Central Texas school district who were bilingual and (with Spanish as their native language). All were recommended by their teachers for tutoring because of difficulty learning to read in English. Twenty-two students were in 2nd grade, 37 were in third grade, 28 were in 4th grade, and six were in 5th grade. All ranged in age from 7 to 12 years with a mean age of 9 years old.

Researchers wanted to address whether students in the Read Well and the Read Naturally programs had significantly higher rates of growth over 10 weeks in English decoding and comprehension than students in non-tutored comparison groups. It was not their purpose to compare the two programs. The Read Naturally intervention consisted of repeated reading of connected text, vocabulary and comprehension instruction in the context of reading, and goal-setting and progress monitoring. The researchers modified the program by adding and extending vocabulary activities. Tutors taught high-frequency words of expository passages before students read them. The Read Well program included a series of small excerpts read from a series of books. Each unit teaches a letter-sound or letter combination. In the implementation, tutors monitored students' progress using unit tests included in the program. Of the 93 subjects, 19 were in the Read Well treatment group, 14 were in the Read Well comparison group, 32 were in the Read Naturally treatment group, and 28 were in the Read Naturally comparison group. Students in both programs (Read Naturally and Read Well) were tutored three times per week for 40 minute periods over 10 weeks during the school day, outside of students' classrooms. Students attended an average of 22 sessions.

For the Read Well treatment and comparison groups, the researchers calculated WRMT-R standard score means and standard deviations. The treatment group gained an average of 4.06 standard score points during the 10-week intervention. The researchers conducted repeated-measures ANOVA to examine the interaction between group and change in raw scores on the WRMT-R sub-tests. The within-subjects factor was change in raw score between pretest and posttest. The interaction between change in score and group was statistically significant only for the word identification subtest ( $F = 5.70, p = .023$ ), meaning that the Read Well program had minimal effect as a whole. For the Read Naturally program, the researchers also conducted a repeated measures mixed ANOVA to examine the interaction between group and change in raw scores on each of the WRMT-R subtests and found no statistical significance for the interaction between group assignment and change in raw scores, indicating that the modified Read Naturally program failed to lead to growth in word identification, work attack, or passage comprehension as measured by the WRMT-R. The researchers speculated that lack of growth in the Read Naturally students may have been due to inadequate instruction in English vocabulary; they cited that adequate vocabulary has been identified as critical for the comprehension of text in a second language (Brisbois, 1995; Fischer & Cabello, 1981; Grabe, 1991).

The control group design of the study lent internal validity by controlling for history, maturation, and testing. The study lasted only ten weeks, which controls for these factors but signifies that regression is not controlled for--progress in

Read Naturally may have been due to students' familiarity with the test. The authors provided vital statistics such as mean scores and standard deviations, but failed to provide p values for all measures. The small sample size in the study was a clear flaw, authors did not discuss the fact that the small sample size may have led to insignificance in the results. Also, the shorter, less intensive intervention may have biased the results against supporting the researchers' hypothesis that the intervention programs would significantly improve children's reading abilities. In other words, although the tutored students made progress in word identification, the intervention was too short to witness effects in raising the comprehension, vocabulary, and decoding skills of the ELLs. This suggests that explicit vocabulary and comprehension instruction alone is ineffective in raising the literacy skills of ELLs. Klingner & Vaughn (1996) showed that the teaching of cognitive and metacognitive comprehension strategies is most effective when students have the requisite decoding skills and verbal proficiency. The Read Well program, which led to greater student performance than the Read Naturally program, included a pretest in each unit and concentrated on letter-sound relationships that were different between English and Spanish (the students' first language). Thus, it built on students' prior knowledge. This key trait of the Read Well program adds to the preponderance of research showing that activating prior knowledge is essential to increasing reading comprehension (McKeown, 1992; Langer, 1984; Long, Winograd, & Bridget, 1989; Stevens, 1980). Though there were flaws in the study, the results suggest that activating prior knowledge is important in any content area instruction; this is a good practice for all

students, not only ELLs.

Using a pretest/posttest design with 12 different groups (containing 4-6 students each), De la Colina, Parker, Hasbrouk, and Lara-Alecio (2001) found that an intensive reading intervention among low-achieving at risk students in the first and second grade Spanish/English bilingual classrooms was valuable when conducted with fidelity and if students were highly engaged.

The participants of the study were 74 second and first grade students in four transitional Spanish/English bilingual classrooms (with approximately 18 students per classroom) during the reading/language arts period. The school was in a small city in southeast Texas in a district composed of 13, 500 students in 12 schools. Sixty-three percent of the students were economically disadvantaged. Their ESL categories were beginner or non-English speaker (NES). Most were second-generation Mexican American immigrants. They were selected based upon performance on an initial skills test--they were only selected if they could orally read 30-60 words correctly per minute on a first reading of a Spanish story at either first or second grade readability.

The study examined the Read Naturally fluency intervention for at risk beginning L1 Spanish readers in grades one and two, combining 3 instructional methods—repeated reading, teacher modeling, and progress monitoring. The intervention was implemented with three groups of students for 45 minutes a day, three times a week for twelve weeks for Group 1, ten weeks for Group 2, and eight weeks for Group 3. The Read Naturally program, translated into Spanish, was used. This involved the students self-graphing scores of words correct per

minute before and after individualized and repeated practice. Seven semi-weekly reading probes (created by the first author, a certified Spanish interpreter) were given. These were designed to be similar in average word length, average number syllables per word, average sentence length, and topic. To control for invalid results due to passage differences, the authors counterbalanced the administration of these probes by students within groups and classrooms. Students were assessed individually for reading fluency by ORF (oral reading fluency) number of words per minute. Interscorer reliability was established prior to the study at Kappa = .94. Fidelity was monitored through direct observation during weekly visits to individual classrooms by a member of the research team who also completed a fidelity of implementation checklist at mid-program for each classroom--teachers monitored themselves on the same checklist prior to and after completion of the fidelity checklist completion by the visiting researcher.

The authors conducted ANOVAs on the Week 0 ORF scores at each grade level to determine if level of engagement groups were initially equivalent in ORF skills at the beginning of the study, showing non-significant F test results (the groups were essentially similar). Visual analysis shows a clear increase in mean performance levels between phases for H-Engaged students only. Most students showed overall improvement over the 12-week study; however, the researchers note that this was not necessarily due to the intervention. There was a clear pattern of reading comprehension improvement from the first to the last assessment, with high engagement group showing greater improvement than the low engagement group. The average gain for the high engagement group (grade

1) was 38 percent correct points and 34 percent correct points for 2nd grade. The low engagement group (grade 2) gained only five points. Growth in all six H-engaged groups reached statistical significance whereas none of the six low engagement groups did so. Regardless of treatment group or phase, most students improved measurably in oral reading fluency and reading comprehension. The most significant results were for high engagement (grade 1), with  $F = 27.0$ ,  $p < .01$ , and high engagement group (grade 2), with  $F = 40.0$ ,  $p < .003$ . The length of the time within the Read Naturally treatment was not a strong predictor of student gains--many students in the shortest intervention (4 weeks) progressed as much as those participating the longest (12 weeks). Another finding was that students' ORF improved more than their reading comprehension, which was not surprising as the Read Naturally intervention dedicates much more time to fluency practice than to vocabulary and comprehension.

Several factors strengthened the internal validity of the study's design: classroom and teacher effects were controlled by embedding treatments within classrooms; treatment group equivalency was achieved by random assignment; data were analyzed separately for grades 1 and 2, using both visual analysis of graphs and statistical analyses of differences in phase-based slope intercepts at the intervention line, pre to post test differences and mean differences between baseline and intervention phases. Researchers discussed how they controlled for regression, noting that the trend line slope changes between phases. The study of the design is flawed and does not control for several factors including history,

maturation, testing, and instrumentation. Because there is no control group, it is unclear whether the Read Naturally intervention had a positive effect on the subjects. Positive effects of the program were shown to occur only when student levels of engagement were high. The findings contribute to existing empirical studies that show the success of reading intervention in Spanish in the U.S. (Bernal, 1994), but it is clear that the Read Naturally intervention does not support vocabulary development or reading comprehension for ELLs, a finding supported by the research of Denton et al. (2004). The program alone would likely not support the abilities of ELLs to make meaning from text and become stronger readers. A key factor in the success of the ELLs who underwent the intervention was motivation. When engagement was high, reading comprehension was high. This adds to well-known research showing that student engagement with reading is directly related to achievement in reading (Kamil, 2003). This suggests that teachers working with ELLs should aim to increase their engagement by increasing their motivation to participate in class activities. This favors a whole language philosophy, which advocates using texts and literacy activities that are meaningful to students and relevant to their lives.

Using a nonequivalent control group design, Gunn, Biglan, Smolkowski, and Ary (2000) found that supplemental instruction in reading for Hispanic and Non-Hispanic students in kindergarten through Grade 3 increased their skills on measures of word attack, word identification, oral reading fluency, vocabulary, and reading comprehension.

The participants of the study were 256 students selected from an

experimental evaluation of a comprehensive program to prevent academic and social failure (sic) among at-risk early elementary school children. The Schools and Home in Partnership (SHIP) project is being conducted in school districts in three small Oregon communities, each of which has a significant Mexican-American population. Children in grades K-3 were screened on measures of aggressive social behavior and reading (or pre-reading) skill and randomly assigned to receive or not to receive intervention. Students from nine elementary schools in three school districts were recruited for the study. The authors chose all students who were below grade level on screening measures of reading or prereading skills for participation. Fifty-five percent were males and 45% were females. Sixty-two percent of the students were Hispanic and 38% were non-Hispanic.

The authors gave a pre-intervention assessment in the fall (Time 1) and a second assessment 4-5 months later, in the spring of that academic year (Time 2). They assessed students a third time 15-16 months after instruction, in the spring of the following academic year (Time 3). Instructional assistants were observed weekly during the first month of supplemental instruction and twice a month afterwards to document the fidelity of the implementation. Using the pre-assessments, the authors placed students in Reading Mastery if they were beginning readers in first or second grade. This teaches phonemic awareness and sound-letter correspondence, as well as how to sound out and blend words. Third and fourth graders below reading level were placed in the appropriate level of Corrective Reading, an intervention program that teaches phonic and

structural analysis, decoding, comprehension, and exercises to increase fluency and accuracy.

The researchers conducted ANOVAs to examine the interactions of dependent variable (Woodcock-Johnson Letter-Word Identification, Woodcock-Johnson Word Attack raw score, and oral reading fluency). Assessments at Time 2 showed that Hispanic children had significantly lower oral reading fluency ( $F = 7.126, p < .008$ ), and their change on the Woodcock Word Attack subtest was almost significantly less than the change for the non-Hispanic children ( $F = 3.487, p < .065$ ). Assessments at Time 3 showed that intervention students outperformed control students on Woodcock-Johnson Letter-Word Identification ( $F = 5.867, p < .016$ ), Word Attack ( $F = .25.786, p < .001$ ), Reading Vocabulary ( $F = 8.832, p < .003$ ), and Passage Comprehension ( $F = 6.225, p < .014$ ). The effect on oral reading fluency for this time did not reach significance ( $F = 3.709, p < .056$ ), meaning that the supplemental instruction had little to no effect on the oral reading fluency of the ELLs tested.

Citing a report that says there is no clear evidence that pull-out instruction is better than in-class instruction or vice versa (Gelzheiser, Meyers, & Pruzeck, 1992), the researchers stated that the strength of the supplemental instruction was in the design and delivery, not the setting. They determined that attrition was a threat to internal validity by examining the interaction between attrition status and intervention condition on Time 1 reading measures. Regression effects threaten the internal validity of the results as the subjects were given the same tests over time. The researchers did not mention that maturation of the subjects

affected the results, and this is a major concern for students in kindergarten through 3rd grade. Overall, the study supports a growing body of research that suggests instruction and practice in alphabetic reading skills increases ELLs' ability to decode words and become fluent in word recognition.

Reading fluency is normally defined as a student's ability to read with speed, accuracy, and proper expression (Ross & Begeny, 2011). Though widely recognized as one of the five essential components teachers should target during early reading instruction, U.S. data reveal that approximately 40% of fourth-grade students are “nonfluent” readers (Daane, Campbell, Grigg, Goodman, & Oranje, 2005). Given the importance of reading fluency and the paucity of research on the effectiveness of fluency-based intervention strategies for ELLs, Ross and Begeny (2011) conducted a study with a one-group pre-test/post-test design over the course of 8 weeks to determine the relative effects of two intervention packages for ELLs on 5 second grade ELLS in one rural school in the Southeast, finding that all students improved on at least one of the two standardized reading measures.

The subjects were five 2nd grade students from one rural school in the Southeast. Each student's first language was Spanish and each received ESL services at their school. Socioeconomic data could not be provided but 32% of the students in their school received free or reduced-price lunch. Four students read below 67 words correct per minute (WCPM) on the Dynamic Indicators of Basic Early Literacy Skills test (DIBELS). One student scored above 67 WCPM but was included in the study because her teacher expressed significant

concerns about her reading fluency.

The interventions studied were capable of being implemented by educators in less time than previously reported fluency-based interventions for ELLs (Denton et al., 2004; Malloy et al., 2007). The authors administered two assessments at the beginning and end of the study to better understand the potential benefits of students receiving the interventions implemented: DORF Benchmark passages and the Test of Word Reading Efficiency. Trained graduate and undergraduate psychology students served as the trainers responsible for implementing intervention procedures and assessing student performance. A separate reading passage was used during each session, developed from first and second grade DIBELS progress monitoring materials. The authors generated vocabulary lists by selecting three difficult words from each of the reading passages previously described. They used the Merriam-Webster Dictionary to provide English definitions and the Spanish word equivalent for each selected word. They alternated the treatments to assess relative differences between small group intervention (SG), one-on-one (1/1) delivery, and no-treatment control (NTC); this is a common method in comparison studies, particularly those comparing fluency reading interventions. Participants received at least seven sessions of each intervention condition and four sessions of the NTC condition. All intervention conditions occurred in the morning and in a predetermined, random order to minimize potential confounding variables (e.g., differences in student performance due to the day of the week). Procedures during the 1/1 conditions included: Listening Passage Preview (in which the trainer paused from

reading a story to call on the student to read the net word in the passage approximately five to seven times during the reading); Repeated Reading (the student read the passage aloud for 1 minute while the trainer kept track of words read incorrectly); Retell (the student was asked to say everything he or she remembered about the story); Phrase-Drill Error Correction (the trainer chose four phrases for the student to practice that were difficult for him or her to read during the most recent Repeated Reading), and Vocabulary Instruction, which involved several strategies to help students learn the definitions of three pre-selected words from the day's passage. To measure procedural integrity, researchers observed each trainer's implementation during 43% (SG), 21% (1/1), and 40% (NTC) of the sessions.

The researchers determined Immediate and retention gains by calculating words correct per minute (WCPM) gain scores. Using graphical analysis, each student's gain scores were examined individually. Differences between pre- and post-project scores for the DORF Benchmark passages were analyzed by comparing each student's expected growth (according to national norms of weekly WCPM improvements) to their actual growth over the 8-week period. All students improved on at least one of the two standardized reading measures that were administered at pre-and post-project. Three students made improvements of at least half of a standard deviation on the Total Word Reading Composite of TOWRE and the Sight Word Efficiency subtest. Four students improved in WCPM by over 7.04 words. All five students made significantly more growth in the 1/1 treatment compared to the NTC condition ( $p \leq .01$ ). Two students made

significantly greater gains in the SG treatment compared to NTC condition ( $p \leq .01$ ). Overall, the results indicated that the one on one and small group interventions are likely to be more effective than no treatment.

A key strength of the study is that the authors discussed how they measured procedural integrity and explained their reasoning behind the use of SEM analysis. Internal validity is strengthened by the random assignment of treatment conditions. Also, the process and product of data collection and analysis are auditable by an outside party. The small sample size (5 subjects) is the most obvious weakness of the study; another was a lack of member-checking. Because intervention implementation occurred for only 8 weeks, the external validity of the findings was limited due to the small and specific sample used, and outcome measures did not measure other important areas of reading. Overall, the findings are commensurate with reading fluency intervention research with non-ELLs. They suggest that fluency-based 1/1 interventions are effective for many students with reading difficulties (e.g., Chard et al., 2002) and that SG interventions offer a promising approach for effectively improving students' reading fluency (e.g., Begeny & Martens, 2006; Kuhn, 2005).

The findings in this subsection highlight good teaching practices for supporting the literacy development of ELLs and highlight the problems that occur with instruction that is unconnected to meaningful texts and experiences for students. Denton et al. showed an intervention using explicit instruction with repeated reading of connected text to be successful, though the study was flawed. The study by De la Colina et al. (2007) showed an intervention to be

successful only when students were highly engaged. Again, this finding favors a whole language philosophy of teaching, which says students will increase their literacy skills and make more meaning from texts if they are interested in them. The study by Gunn et al. (2000), which examined supplemental reading instruction that taught students how to sound out and blend words, had several flaws but show the value of explicitly teaching decoding skills to supplement reading comprehension. The study by Ross and Begeny (2011) found that fluency-based one-on-one reading instruction is effective for struggling readers, which favors neither side of the whole language-phonics debate. In sum, the findings in this subsection support the use of peer-assisted learning strategies, practice in decoding skills, using text relevant and meaningful to students, explicit vocabulary instruction connected with meaningful contexts for practice.

### **Interventions to Increase Phonological Awareness**

Phonological awareness (PA) is an understanding of the sound structure of oral language. Research over the last decade has established that phonological deficits are a precursor to reading disabilities (Wagner & Torgeson, 1987). Dickinson and colleagues (2004) found evidence of cross-linguistic transfer of PA (as measured through deletion detection and rhyming tasks) in Spanish-English bilingual preschool children (Ayre et al., 2010). Research is beginning to demonstrate that PA is a core cognitive ability, independent of a child's spoken language—a skill that, once acquired, is available to children regardless of the language they speak (Cisero & Royer, 1995; Durgunoglu, Nagy & Hancin-Bhatt, 1993; Gottardo, Yan, Siegel, & Wade-Woolley, 2001; Leafstedt,

2002; Richards, 2004). According to Leafstedt, Richards, and Gerber (2004), when students lack phonological awareness, they are greatly disadvantaged in learning to decode new words. Interventions are relatively short (300-600 minutes) and are designed to teach students to identify, manipulate, and produce sounds in words. The studies in this section examine the effectiveness of different methods of teaching phonological awareness to ELLs to increase their literacy skills (Leafstedt et al., 2004; Ehri, 2004; Vaughn et al., 2006; Faust & Kandelshine-Waldman, 2011; Kamps et al., 2007; Vadasy & Sanders, 2010).

Leafstedt, Richards, and Gerber (2004) used a nonequivalent control group design to study the effects of a 10-week intensive PA intervention on 64 kindergarten English learners, finding that students who received intervention made significant growth in word reading when compared to a cohort of kindergarten students receiving general kindergarten instruction.

The subjects were 64 kindergarten students (46 for the control group, 18 for the intervention group). Two students in the intervention group moved away prior to the post-test, leaving 16 students in the final analysis. The control group was selected from a longitudinal study that was conducted two years prior to the present study. 18 students from one intact kindergarten class participated in the intervention—8 girls and 10 boys. Seventeen of the students were English learners and spoke Spanish at home. Parents reported an average of 1.5 children's books in the home. The 46 students in the control group had backgrounds similar to those in the intervention group. Both groups were composed of students from the same school, a Title 1 school where 74% of the

students were Hispanic, located in a semi-rural community in California composed primarily of Spanish-speaking families. Teachers of these students reported that PA instruction was not a part of the current curriculum and that they did not have the resources to teach these skills. Students in both groups exhibited similar general risk factors, which the authors defined as low income, limited English, low parent education level, and limited literacy resources in the home.

Pre-test assessments were administered in the first months of school (October-November) for both groups. The researchers tested all students in English on phonological measures by asking which of two pictured words, pronounced by the examiner, either rhymed or started with the same sound as pictured prompt, also spoken by the examiner. They also tested students on word reading, pseudoword reading, and vocabulary (pretest only). In these tasks, students identified a series of letters by name, read a list of real words, stated letter sounds, and decoded nonwords. Students received intervention instruction by a certified special education teacher and researcher. The examiners conducted post-tests three weeks after instruction concluded. A researcher who was also a certified special education teacher conducted the intensive instruction. Students received an average of 300 minutes of small group instruction (three to five students). Students completed 3 five-minute activities during each session, which were modified each week based on individual student performance as well as group performance during intervention and fluency probes. In one activity, students were shown three pictures and asked to identify

which words sounded the same or began with the same sound. As students progressed in these rime and onset skills, segmenting and blending activities were added. The teaching methods were based on the Core Intervention Model (CIM) developed by Project La Patera (Gerber & English, 2003). These methods are grounded in direct instruction; objectives are set, skills are taught intensively and explicitly, students are provided opportunities for many correct responses and praised immediately, frequently, and abundantly for correct responses.

The examiners calculated means and standard deviations for pretest and posttest PA in all measurement categories (early PA and late PA). They conducted a series of repeated-measures analyses to examine changes in performance from pretest to posttest on word reading, pseudoword reading, Early PA, and Late PA. They also examined comparisons across time of testing (pre vs. post), group (control vs. intervention), and ability level (high, middle, low). The intervention group outperformed the control group in early and late PA ( $F = 653.29, p < 0.000$  and  $F = 83.37, p < 0.000$ , respectively). They also outperformed the control group in pseudoword reading ( $F = 40.25, p < 0.000$ ). The ELLs made growth in both PA and word reading, but it was not determined if they performed at a level comparable to monolingual students. ELLs who received this specific, explicit intervention outperformed control group students, even though those in the control group had significantly higher vocabulary scores than those in the intervention group.

The external validity is strengthened by the fact that results have been replicated in other studies (Gunn et al., 2002). An obvious weakness of the study

is its small sample size and the fact that the control group contained 46 students while the intervention group contained only 16, suggesting that the results might not be representative or stable. Even though the results are statistically significant, the sample size may not be large enough to mean anything on a practical level. Internal validity is also threatened by regression effects and the rapid maturation of the kindergarten students—these factors, not the intervention, may have accounted for increased performance over time. The researchers did not discuss possible regression towards the mean, though they were clear and transparent about other weaknesses of the design (testing, history, and maturation).

The Reading Rescue (RES) program is a tutoring intervention for struggling readers in kindergarten through 3rd grade and ELLs needing remediation. It teaches strategies aligned with the five components of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Reviews of the effectiveness of the RES program show that in the majority of studies, students who received the intervention made greater gains in reading achievement during first grade than students who did not receive the program (D'Agostino & Murphy, 2004; Elbaum, Vaughn, Hughes, & Moody, 2000; Shanahan & Barr, 1995). Students in high-poverty schools and those from families whose first language is not English are populations that have been neglected in studies on the effectiveness of RES, and were the subjects of a study by Ehri, Dreyer, Flugman, and Gross (2007). The researchers found that 64 struggling first-grade language-minority readers who received RES

intervention outperformed the control group in posttest measures, outperformed those who received the small group intervention adopted by the district, and that the majority of RES students reached average reading levels on nationally normed tests whereas controls did not.

The participants of the study were primarily language minority students in 1st grade from five low-SES urban public schools that had implemented the RES tutoring intervention for 2-3 years and three comparable schools that had not implemented RES but hoped to do so in the future (C2). All schools were located in the same district in a large metropolitan city. The majority of the students were from homes where Spanish was the first language, and 95% of them qualified for free or reduced price lunch. 64 received RES intervention and 70 did not.

School personnel administered pretests, posttests, and tutoring. The pretest included GMRT-4, which was a multiple choice test that measured knowledge of letter-sound correspondences and students' ability to read high-frequency words. The pretest also included the Iowa Test of Basic Skills, an informal reading inventory, and a RES Classwide Screening Assessment. The tutoring intervention began in December, occurred during school hours and consisted of "easing in" sessions followed by regular instructional sessions and an "easing out" period. Lessons taught fluency, phonological awareness, phonics, comprehension, and vocabulary development. To apply these learned strategies and skills, students reading fiction and nonfiction small, illustration books from the Ready Readers series (Englebretson, Hiebert, & Juel, 2000). Tutors completed lesson record sheets as they tutored to assess characteristics

of tutoring and tutors' adherence to procedures. Performance of the group receiving RES tutoring was compared to the performance of two different configurations of the same control students.

ANOVAs of scores on all seven pre-tests revealed that the groups did not differ in entry-level reading skills ( $p > .05$ ). Results of the ANCOVAs applied to posttest measures showed that RES-tutored students decoded significantly more words and comprehended text significantly better than both control groups. RES-tutored students outperformed control students in writing lowercase letters ( $F = 5.48, p < .05$ ), segmenting and blending phonemes ( $F = 18.23, p < .01$  and  $F = 5.22, p < .05$ , respectively), reading sight words and pseudowords ( $F = 34.00, p < .01$  and  $F = 11.30, p < .01$ , respectively), generating plausible spellings of words ( $F = 5.66, p < .01$ ), and reading and comprehending text ( $F = 33.16, p < .01$ ). This suggests that small group interventions are effective for increasing the literacy skills of ELLs.

The researchers discussed how the selection of participants may have contributed to the effectiveness of the intervention (only those who knew at least 17 letters yet received low scores on the other literacy tasks and lacked any test-reading ability). This strengthened the internal validity of the research design. The researchers also noted that the Reading Rescue program was developed in cooperation with the University of Florida and that the study was conducted by people neither employed nor affiliated with the funding agencies of the program, further strengthening its external validity. Regression threatens the validity of the results, as do maturation effects. The authors pointed out that the subjects

selected knew at least 17 letters yet received low scores on other literacy tasks and lacked any text-reading ability. Pointing out that knowledge of letter names is the best single kindergarten predictor of success in learning to read (Scarborough, 2001). Because subjects already possessed this skill, they may have been easier to tutor in the RES intervention. Another limitation of the study is that it shows only the short-term effects of the RES intervention.

Under the premise that English language learners, like monolingual English speakers, learn to read through phonological decoding and spelling-sound patterns, Vaughn, Mathes, Linan-Thompson, Cirino, Carlson, Pollard-Durodola, and Francis (2006) employed a nonequivalent control group design and found that a 7 month English intervention improved English letter naming skills, phonological awareness, and reading skills for 22 students in a transitional bilingual program in a Texas elementary school.

The researchers designed the intervention to teach the sounds in English and how they relate to letters. They introduced high-frequency words prior to having students read them in the stories. The intervention used six instructional practices in reading that are effective for beginning readers who are ELLs: explicit teaching, promotion of English language learning, phonemic awareness and decoding, vocabulary development, interactive teaching that maximizes student engagement, and instruction that produces opportunities for accurate responses with feedback for struggling learners. The instructional design included systematic and explicit instruction for teaching phonemic awareness, phonemic decoding skills, fluency in word recognition and text processing,

construction of meaning, vocabulary, spelling, and writing. Treatment students outperformed control students on phonological awareness, word attack, fluency, comprehension, and oral language outcome measures.

There were no statistically significant differences on pretests between intervention and contrast children, in either language. Four bilingual teachers provided the intervention in English to treatment participants in six small groups of three to five students for 50 minutes a day, 5 days a week, from October through May. Typical lessons included short activities and word games to address phonemic awareness, word recognition, connected text fluency, oracy and vocabulary development. Intervention and contrast students did not differ in their ability to name English letters ( $F = 3.86, p > .05$ ), or there were no statistically significant differences in the letter-naming skills of the two groups. In phonological awareness, intervention students outperformed contrast students after adjusting for pretest performance ( $F = 10.01, p > .03$ ), with mean scores of 62.6 and 51.6, respectively. Intervention students also demonstrated greater ability than contrast students to apply phonic and structural analysis skills to phonetically produce regular nonsense words in English. ELL students who were provided the intervention program responded favorably for beginning reading skills, including comprehension ( $F = 8.46, p > .06$ ). The results of the study suggest that interactive teaching that maximizes student engagement, and instruction that produces opportunities for accurate responses with feedback for struggling learners increases the phonemic awareness, decoding and vocabulary development of ELLs.

The quasi-experimental design of this experiment accounted for factors such as history, testing, instrumentation, and mortality. However, regression is a source of concern in this study and those like it. Because there was a pretest in October and a posttest in May, scores may have regressed toward the mean. Maturation is also a threat to the validity of this study because the subjects were first graders. As in the study described above by Calhoun et al. (2006), the subjects experienced rapid rates of maturation and improvement in reading skills over the period of the study. The researchers said that the gains made in letter naming, letter-sound identification, phonemic awareness, nonword repetition, English oral language, word reading, fluency, and comprehension could be explained by the principle that some skills in Spanish reading may support the development of skills in English reading. A final threat to the validity of this study is the fact that the subjects were arguably better prepared for success as a result of the intervention than other subjects: they were chosen from schools where the overall instructional program for ELLs could be considered good or very good. The criteria the researchers used to select schools to participate included the requirement that their ELLs had 80% pass rates or higher on the state reading assessment in third grade. The schools provided academically rigorous kindergarten programs to prepare students as readers.

Tests of reading ability have included the classic Missing Letter Effect (MLE), wherein subjects identify a specific letter in words while reading a text for comprehension (Healy, 1976). Faust and Kandelshine-Waldman (2011) said reading is the process of extracting and constructing meaning from text, which

involves complex bottom-up and top-down processes. Bottom-up processes involve the use of grapheme units, individual and multiple letters that lead to semantic information becoming available. Top-down processes use word identification and various sources of information to reveal semantic information. Difficulties can occur in both of these processes (e.g., insufficient conceptual world knowledge and failure to generate inferences), and different approaches to reading instruction, namely those which are the focus of this paper (whole language approaches and phonics approaches), have been developed to address the difficulties in reading acquisition. Faust and Kandelshine-Waldman (2011) examined the effects of two different letter detection tasks on the processes involved in reading in normally achieving as compared to low achieving elementary school readers, finding that the whole language approaches to reading instruction (ARI) did not compensate for difficulties in bottom-up processes of low-achieving readers and that any improvement in basic processes involved in reading proficiency produced by whole language ARI for both low achieving and normal achieving readers dissipated by grade three.

The participants of the study were 1, 505 students attending first to sixth grade, 455 of whom were being taught to read with the phonic approach (focusing on the learning of sounds (phonemes) represented by letters (graphemes) through repetition and practice), 492 by the global approach (extracting meaning of words from context while implementing top-down processes), and 562 by the eclectic approach (incorporating principles of the previous two approaches with direct and indirect instruction. All of the subjects

were native Hebrew speakers. The text for the letter detection task included a short story with three comprehension questions to determine that the students had read the story for comprehension. The experiment took place at school two months before the end of the school year. Teachers were asked to grade each child on two scales of reading ability--fluency and comprehension. The response categories ranged from one (poor ability) to six (excellent ability).

Researchers conducted a four-way analysis of variance (ANOVA) and revealed significant effects for word type ( $p < .01$ ), meaning the type of word (e.g., content or function) read by the student was a large factor in the students' ability to comprehend the text. Contrast tests of statistical significance for the main effect of ARI showed statistically significant significance omission rates for the whole language ARI as compared with either the eclectic ARI or the phonic ARI ( $p < .01$ ). The three-way interaction between reading level, type of word, and ARI failed to confirm this study's central hypothesis that in low achieving readers who learn to read by the whole language ARI, the impact of context on the letter detection task will be higher, reducing the difference between them and normally achieving readers. In other words, the study did not show that that the whole language reading instruction had higher letter detection rates. However, the statistically significant main effect for ARI indicated that the normally achieving and low achieving readers who had been taught to read by the whole language ARI emitted higher omission rates for all types of words. Thus, the whole language ARI appeared not to have facilitated top-down processes that are related to reading proficiency. The researchers interpreted that the whole

language approach also led to less attention being paid to letter detail.

History is a factor well controlled for in this design because it was not an intervention that lasted a significant amount of time, but a single day of data collection. Testing, instrumentation, and regression are also well controlled for. The authors described their data collection procedures in detail and because only one test was given in each category, there was no chance for regression effects. The main threat to the internal validity of this study lies in its design. The researchers used a static group comparison to compare the effects of whole language ARI (group 1) and phonics-based ARI (group 2) on letter detection tasks for both high ability and low ability readers. In other words, they did not conduct a pretest, performed no interventions, and conducted tests only once. With no pretest results as a point of comparison, it is unclear how much progress the subjects actually made with both approaches. The authors did not discuss limitations of their study beyond saying that reading speed and general language knowledge may have affected subjects' performance, yet did not perform tests to measure these at the beginning of the study. Finally, the findings of this study are less transferable to contexts as would be found in the United States, particularly in Washington state, which has a higher population of native Spanish speaking ELLs than Hebrew speakers.

Using a nonequivalent control group design, Kamps et al. (2007) examined the effects of evidence-based secondary-tier intervention and outcomes on 318 (170 ELL and 148 English-only) students from six elementary schools, finding greater outcomes for ELL students participating in secondary-tier

interventions using curricula with a direct instruction approach and small groups.

The participants of the study were selected from a larger experimental investigation examining the effects of schoolwide three-tier intervention models at the Kansas Center for Early Intervention in Reading and Behavior. The study included 16 schools over a five-year period--10 schools in the experimental group and 6 schools in the comparison groups. Schools were randomly assigned using a stratified procedure with ranking of schools by SES status and random selection of one from each pair as experimental or comparison. The criteria for selecting subjects were that students were enrolled in one of the previously described schools, had obtained parental consent, and the students had participated in the larger study during first and second grade. A total of 164 males and 154 females participated. 148 were English only and 170 were ELL students. Spanish was the primary language for 99 of the ELL students (other languages included Somalian, Sudanese, and Vietnamese). Students at risk for reading failure and students enrolled in secondary-level reading intervention were the focus of the study. The experimental schools included 3 urban and 3 suburban schools. Eighty-four percent or more students received reduced-cost lunch.

Following the National Reading Panel's recommended reading skills for learning to read English, the researchers implemented secondary reading interventions that differed both in curriculum and grouping size. In the experimental schools, researchers used a direct instruction approach with three packaged curriculum: *Reading Mastery* (SRA, 1995 edition), *Early Interventions*

*in Reading* (Mathes & Torgesen, 2005), and *Read Well* (Sprick, Howard, & Fiddanque, 1998). All three packages use structured and sequenced scripted lessons with a heavy focus on phonemic awareness, including phonics instruction, and a philosophy of teaching to mastery. The authors arranged the students into groups of 3 to 7 students. Researchers used two measures of early literacy skills, the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and the Woodcock Reading Mastery Test on a pre- and post-test basis. Fidelity measures included checklists with questions regarding use of procedures as outlined in the curriculum guide, instructional features such as modeling, error correction, guided feedback, and pacing, and management of disruptive behaviors. To address the first research hypothesis (main effect for experimental and comparison group students--all ELL and English students in the schools), a repeated measures ANOVA was conducted for the first grade Nonsense Word Fluency (NWF) and the second grade Oral Reading Fluency (ORF) on DIBELS. To address the second hypothesis (comparison of progress of ELL to English-only students enrolled in the secondary interventions), the researchers conducted a repeated-measures ANOVA by experimental groups and language, and compared group means for students based on primary language (English and ELL), experimental versus comparison group, and intervention type (direct instruction versus ESL/balanced literacy). To address the third hypothesis (comparison of ELL students by intervention type), researchers conducted an ANOVA for ELL students for their slope or rate of growth as suggested in prior RTI studies (Fuchs & Fuchs, 2006). They measured differences between

experimental and comparison groups using ANOVAs across all six participating schools, indicating significant differences for the NWF measure in first grade for the change over time between the experimental and comparison school groups ( $p = .000$ ). For NWF, researchers found significant differences between the experimental groups ( $F = 10.800$ ;  $p = .001$ ), but not between the ELL and English-only students. For ORF, researchers found differences between experimental groups and control groups ( $F = 12.385$ ;  $p = .001$ ). The direct instruction group scored higher from fall to spring than for the ESL/balanced literacy group. Fifty to sixty percent of the ELL students in direct instruction interventions were at benchmark for NWF at the end of the first grade based on the DIBELS subtest. Only 17% of the students in the ESL/balanced literacy group were responsive to intervention. Findings suggest that secondary-level reading interventions are highly effective for teaching early literacy skills to first and second grade ELL students and that students enrolled in interventions described as "ESL literacy services" did not do as well as students in direct instruction. In general, the study highlights the benefits of RTI (response-to-intervention, or tiered instruction) for ELLs.

The external validity of this study is strengthened because findings are consistent with other studies (Gunn et al., 2000; Linan-Thompson et al. 2006; Vaughn et al. 2005) that show the benefits of secondary-level small group reading instruction as an early intervention for ELL students. Limitations of the study were the unequal group sizes and the fact that few subjects in the comparison group were enrolled in balanced literacy reading interventions using

small groups as the primary intervention, thus the study did not have a true control group across grade levels.

Vadasy and Sanders (2010) conducted a study to determine the efficacy of supplemental phonics instruction for 84 low-skilled language minority (LM) kindergarteners at 10 urban public schools, finding that treatment students significantly outperformed control students at posttest in alphabets, spelling, passage reading fluency, and comprehension but were significantly less responsive to treatment on word reading.

The participants of the study were found at 12 urban public elementary schools known for relatively large proportions of language minority student enrollment (LM was defined as a student who primarily uses a language other than English at home). The parental consent rate was 62%, which was in alignment with the mean 66% active consent rate found across 124 published school-based intervention studies (Bloom-Hoffman et al., 2009). The five most frequent languages of students in the sample were Spanish (49%), Vietnamese (15%), Somali (11%), Chinese (6%), and Tagalog (3%). The final sample (after attrition) included 67 treatment students (38 of whom were LM) and 81 control students (46 LMs) from 24 classrooms across 10 schools that had 75% of students receiving free or reduced lunch.

The goals of the researchers were to examine the benefits of supplemental phonics-based instruction for LM kindergarten students at risk for reading difficulties, to consider the influence of classroom time afforded to phonic instruction, and to investigate whether English vocabulary knowledge influences

treatment response for LM students in particular. Students assigned to the treatment condition received individual systematic and explicit phonics instruction including letter-sound correspondence, phonemic decoding, spelling, and assisted oral reading practice in decodable texts. Paraeducators who implemented the instruction received a set of 70 scripted lessons (with 7-8 activities per lesson). Tutoring was conducted during the school day, outside the classroom. In a typical session, tutors spent 20 minutes on phonics activities and 10 minutes scaffolding students' oral reading practice in decodable text. Instruction occurred 30 minutes a day, 4 days per week, over a period of 18 weeks. Six research staff members were trained to conduct on-site fidelity observations of paraeducators with their assigned students. They determined interrater reliability; they calculated the internal consistency of the fidelity observers' mean implementation ratings for the videotaped sessions (Cronbach's alpha was .97). Researchers measured receptive vocabulary at pretest with the norm-reference Peabody Picture Vocabulary Test IIIA (Dunn & Dunn, 1997). They measured alphabetic knowledge at screening and posttest as the mean of two naming measures: letter names and letter sounds correctly produced in 1 minute. They measured phonological awareness at screening/pretest and posttest with the composite standard score of three subtests from the Comprehensive Test of Phonological Processing (Wagner et al., 1999), Blending Words (pretest), Elision (pretest), and Sound Matching (screening). They measured reading at pretest and posttest with the mean standard score of the Word Attack and Word Identification subtests from the Woodcock Reading

Mastery Test. Passage reading fluency was assessed at posttest only using the mean words read correctly in 1 minute on 2 grade level story passages. Finally, the researchers assessed comprehension at posttest only with the standard score of WRMT-R/NU Passage Comprehension subtest.

Treatment students significantly outperformed controls on every posttest except phonological awareness, averaging 13.54 more letters correct per minute. Treatment effects for spelling and comprehension increased with classroom time afforded to phonics instruction. In other words, the phonics intervention had a positive outcome on the literacy skills of the language minority students studied.

The results of this study align with earlier research on supplemental, one-to-one code-oriented instruction for non-LM at risk kindergarteners (Vadasy & Sanders, 2008a, 2008b; Vadasy et al., 2006a; Jenkins, Peyton, Sanders, & Vadasy, 2004)--this increases the external validity. A weakness of the study is its design, which only included one type of student (language minority) in its subject population.

Most of the studies in this section provide strong evidence in favor of instruction in phonological awareness for ELLs. Leafstedt et al. (2004) studied the effects of a 10-week phonological awareness intervention on 64 kindergarten ELLs, finding it to have a positive impact on their reading comprehension scores. The regression effects and small sample size threaten the validity of the results, but other studies in this subsection have similar findings about short-term phonological awareness interventions, thus strengthening validity. Ehri et al. (2007) studied the effects of the Reading Rescue (RES) intervention on 64 first

grade language minority students. The intervention focused on phonemic awareness, phonics, fluency, vocabulary, and comprehension and had positive effects on the subjects' reading comprehension and oral fluency, suggesting that phonics tutoring programs such as RES can be beneficial for ELLs. Vaughn et al. (2006) studied the effects of a 7 month English intervention on 22 students in a transitional bilingual program, finding that it improved English letter naming skills, phonological awareness, and reading skills. Though the small sample size is a threat to the validity of the results, the benefits of phonological awareness interventions are clear in this study and elsewhere. Faust and Kandelshine-Waldman (2011) examined the effects of two different letter detection tasks in normally achieving as compared to low achieving elementary school readers, finding that the whole language approaches to reading instruction (ARI) did not significantly improve reading ability, though the results are questionable due to the static comparison design of the study. The researchers did not conduct a pretest, performed no interventions, and conducted tests only once. The study by Kamps et al. (2007) gave positive support for secondary tier interventions using direct instruction and showed the benefits of secondary-level small group reading instruction as an early intervention for ELL students. Limitations of the study were the unequal group sizes and the fact that few subjects in the comparison group were enrolled in balanced literacy reading interventions using small groups as the primary intervention, thus the study did not have a true control group across grade levels. Vadasy (2010) studied the effects of phonics-based tutoring on 84 low-skilled language minority kindergarten students, finding the intervention to

improve their spelling, vocabulary, and reading fluency.

### **Bilingualism, Biliteracy, and Metacognition**

A review of research studies conducted by the National Literacy Panel on Language-Minority Children and Youth concluded that bilingual education has an edge over English-only methods (August and Shanahan, 2006). But in the first random-assignment study to compare the effectiveness of bilingual education and English-immersion approaches with ELLs over a period as long as five years (conducted by Johnson Hopkins University), researchers found that Spanish-speaking children learn to read English equally well regardless of whether they are taught primarily in English or in both English and their native language. According to Jimenez et al. (1996), the research on metacognitive development of bilingual readers is scant, but a few studies suggest that bilingualism may enhance children's capacity for conscious reflection of how they learn language. Hosenfeld (1978) suggested that second-language learning is unique and may bring about greater awareness of cognitive processes. Vygotsky (1962) viewed learning a foreign language as "conscious and deliberate from the start" (p. 109). He suggested that cognitive differences might exist between bilingual and monolingual children in their awareness of language and its functions. Some research supports his hypothesis: Ianco-Worrall (1972) found that 4- to 5-year-old bilingual children in South Africa understood to a greater extent than comparable monolingual children that language is arbitrary--that is to say, they understand that there are several names for the same concept. Wong, Fillmore, and Snow (2003) argued that all children need to learn cognitive strategies for

reading and writing. Jiménez, García, and Pearson (1994), who studied the reading strategies of bilingual Latino/a students who are successful readers, agreed that cognitive strategies might help ELLs develop academic literacy, as did Vaughn and Klinger (2004). The studies in this section show that teaching metacognitive reading skills in students' native languages increases literacy for ELLs (Jimenez, Garcia, & Pearson, 1996; Olson & Land, 2007).

Jimenez et al. (1996) conducted a case study to examine how bilingualism and biliteracy affect metacognition of eight bilingual Latino/a children identified as successful English readers, three monolingual Anglo students who were successful English readers, and three bilingual Latino/a students who were less successful English readers, finding that three strategies were unique to the successful Latino/a readers.

Fourteen 6th and 7th grade students from three schools in two school districts participated in the study. Their selection was based on their ranking as readers of English, ability to think aloud while simultaneously reading silently, fluent oral language proficiency in English, and capability and willingness to read in Spanish. Their categorization as successful and less successful English readers was based on a standardized reading test in English.

Data was gathered using measures of prior knowledge, both unprompted and prompted think-alouds, interviews, and passage recalls. All of the texts for the think-alouds were chosen from instructional materials used in schools (textbook selections, encyclopedias, and trade books). Questions and prompts were aimed at uncovering students' metacognitive strategies for reading

informational text. There were two stages of data collection, the first consisting of group meetings in each school to fill out background questionnaires and conduct measures of prior knowledge. The second stage of data collection involved three individual student sessions with each of the successful Latina/o students wherein they described all their thinking as they silently read the texts. They were prompted by questions such as "What are you thinking about?" and "Tell me as much as you can about what you are thinking." Analysis resulted in identification of 22 different strategies, ten of which were particularly appropriate for qualitative analysis because of the amount of verbalization that accompanied their use. Interview data was coded and analyzed using the constant-comparative method (Glaser & Strauss, 1967). Prior knowledge and recall data were used to triangulate the findings (or further understand students' use of reading strategies). Findings show that readers used 22 distinct strategies organized into three broad groups (text-initiated, reader-initiated, and interactive). Three of the strategies were found to be unique to the successful Latina/o readers: (a) they actively transferred information across languages, (b) they translated from one language to another but most often from Spanish to English, and (c) they openly accessed cognate vocabulary when they read, especially in their less dominant language. In addition, the successful Latina/o readers frequently encountered unknown vocabulary items whether reading English or Spanish text, but they were able to draw upon an array of strategic processes to determine the meanings of these words. The less successful Latina/o readers used fewer strategies and were often less effective in resolving comprehension difficulties in

either language. They also frequently identified unknown vocabulary, but unlike the successful Latina/o readers, weren't as frequently able to construct plausible interpretations of text. The researchers concluded that bilingual Latina/o students benefit from instructional environments that encourage and promote access to their Spanish language strengths.

This study had reasonable credibility--the researchers clearly described how data was gathered and how coding categories were derived. They were also transparent in their decision-making about texts used, questions asked, and limitations of the small sample size. There is also triangulation-- the data comes from many sources, such as background questionnaires, think-alouds, interviews. However, the study lacks credibility in the fact that there was no member checking--at least the researchers did not mention if they showed their findings to participants before publication. Another weakness of the study, which the researchers attest to, is the small sample size. Because the study was designed to gather a large amount of data from a small population of subjects, the findings lack transferability. English and Spanish are similar languages, but it is unknown whether research may be applied to other populations of ELLs. Finally, the materials chosen by the researchers were done so on the basis of characteristics such as length, appeal to young readers, and whether the passages were intact and had not been constructed for the purposes of experimentation. Thus, it is possible that the use of different texts may have produced different results. The fact that the authors described the weaknesses of the study in detail is in fact a strength. Added to the dependability of the study--

the results are consistent with those by Goldman 1984, Hosenfield (1878), and Vygotsky (1962)--this study demonstrates that strategies such as invoking prior knowledge, inferencing, questioning, using context, and monitoring are important for ELLs to be successful readers.

Adding to the evidence that successful Latina/o readers possess an enhanced awareness of the relationship between Spanish and English, and that this awareness leads them to use successfully the bilingual strategies of searching for cognates, transferring, and translating is a study by Olson and Land (2007). Using a nonequivalent control group design, they examined the impact of the California Writing Project's (UCIWP) cognitive strategies approach (Pathway) on the reading and writing abilities of 2000 limited English proficient students in a large, urban low-SES school, finding that students receiving cognitive strategies instruction made significantly greater gains on assessments of academic writing.

The subjects were approximately 2000 students per year in 13 secondary schools in the same school district, found through a partnership with the district, where 93% of the students spoke English as a second language and 68% were designated as limited English proficient. The study was conducted in nine middle schools and four high schools over an eight-year period (1996-2004), during which 55 secondary teachers engaged in ongoing professional development implemented a cognitive strategies approach to reading and writing instruction. The researchers used a quasi-experimental research design to examine the extent to which providing ELLs in secondary school with declarative, procedural,

and conditional knowledge of, and practice with cognitive strategies would improve their reading and writing ability as based on commonly used measures. The cognitive strategies intervention was developed by the UCI (University of California-Irvine) writing project, which holds that reading and writing are fundamentally similar processes of meaning construction. The Pathway program trained teachers to help students develop the following strategies: planning and goal setting, tapping prior knowledge, asking questions and making predictions, constructing the gist, monitoring, revising meaning, reflecting and relating, and evaluating. Quantitative data included a pre and post assessment of analytical writing, as well as reading and writing scores on writing assignments. Qualitative data included participating teachers' and students' written discussions about their experience in Pathway, as well as assessments of students' metacognitive logs, which addressed how they had growth as readers and writers. Trained teachers not associated with the project scored papers and an outside evaluator (Land) analyzed all data using a repeated measures ANOVA.

Pre and post differences in gain scores between Pathway and control students were statistically significant for the seven consecutive years. The average standardized mean differences in gain scores between treatment and control groups was 40 standard deviations. The Pathway students averaged over 32% greater success in gain scores on writing assessments over the seven years. In the best year, Pathway students had an 86% greater success rate than control group students ( $p < .0001$ ,  $\Delta = .47$ ). Pathway students also passed the CAHSEE (California High School Exit Exam) at notably higher rates than the

state, district, and control group averages: a 91% pass rate for Pathway students (N = 181) versus 75% pass rate for control group students (N = 119) in 2003, for instance. Analysis of qualitative data (including teacher and student reflections) showed that students recognized their own growing command of reading and writing strategies, which appeared to build their confidence and ambition in academic pursuits.

Several factors contribute to the credibility of the study: the researchers explained their theoretical position as being grounded in a wide body of research on what experienced readers and writers do when they construct meaning from and with texts, citing studies by Paris, Wasik, & Turner (1991), Tierney & Pearson (1983), Flower & Hayes (1981a), Paris et al. (1991) Pressley (1991). The results are reasonably dependable because they are consistent with Taylor, Pearson, Peterson, and Rodriguez's (2003) findings on the influence of teachers' practices that encourage cognitive engagement in literacy learning at the elementary level and confirm Langer's (2000) findings at the secondary level. There is a reasonable amount of triangulation--data came from pre- and post-tests and from analysis of students' writing. To control for bias towards experimental and control groups, all selected papers were coded to disguise all information identifying the writer, age, school, grade, level, and time of testing, and all papers were scored by two scorers (one of them not from the UCIWP). The nonequivalent control group design strengthened its control of factors such as history and maturation (as there were 2000 new subjects each year). There was inter-rater reliability--typically, the correlation between first and second

raters' scores exceeded .7. Exact agreement typically approached 50%, and agreement within one point typically exceeded 90%. Though this study has its strengths, there are numerous problems, a key one being that regression is not controlled for (or the authors did not describe how it was controlled for). As a qualitative study, credibility is threatened because there was no member-checking. Also, the results of the study are not transferable, as the study took place in a school districts with one of the highest proportions of Latino/a students, and all of the subjects were Latino/a. While the results are helpful for districts with high Latino/a populations, they are unhelpful with other populations of ELLs. A major flaw of the study was that the authors did not discuss any weaknesses or limitations of their study.

The two studies in this section provide good evidence that bilingualism is a strong asset which can equate to increase metacognition and transfer of literacy skills between languages, and that the direct teaching of skills in metacognition is beneficial for ELLs. Jimenez et al. (1997) studied the metacognitive processes used in reading for fourteen 7<sup>th</sup> and 8<sup>th</sup> grade ELLs and found that they transferred information across languages, translated from one language to another, and openly accessed cognate vocabulary when they read. Olson & Land (2007) used a nonequivalent control group design to examine the impact of the California Writing Project's (UCIWP) cognitive strategies approach (Pathway) on the reading and writing abilities of 2000 limited English proficient students in a large, urban low-SES school, finding that students receiving cognitive strategies instruction made significantly greater gains on assessments of academic writing.

To conclude, the results of the studies in this section provide evidence that good teaching practices for increasing the literacy skills of ELLs include finding ways for students to use these metacognitive skills and encouraging them to continue to strengthen their skills in their home languages. Encouraging students to strengthen their skills in both English and their home language and finding ways for them to use metacognitive skills such as cognate recognition will likely increase their literacy skills, in turn improving their comprehension of texts in all content areas.

### **Use of Whole Language Approaches to Improve The Literacy Skills of English Language Learners**

For years, bilingual educators have advocated the use of a literature-based approach to English language reading instruction for language-minority students as opposed to methods that center around the use of basal readers (Barrera, 1984; Flores & Hernández, 1988). Other studies have shown the benefits of natural language use and genuine dialogue in classroom instruction (Cummins, 1989; Fradd, 1987, Goldenberg, 1992/1993; Tharp & Gallimore, 1988). According to Stice & Bertrand (1990), the two traditional approaches to literacy instruction, phonic skills (or the traditional/basal) approach, and the decoding, sub-skills (or behavioral/mastery learning) approach, have not proven successful for poor and minority children (Kozol, 1985; Neisser, 1986). Whole language advocates an alternative to skill and drill—an integrated, holistic instructional program for teaching and learning that emphasizes a literature-based, content-enriched environment for children that focuses on using language

as a tool for learning—not a set of rules to be learned. The studies in this section provide evidence of the benefits of whole language approaches for ELLs. They are divided into four subsections of studies which illustrate the benefits of whole language on: reading comprehension, vocabulary development, development of self-concept as a reader, and listening comprehension.

### **Whole Language Approaches to Increase Reading Comprehension and Meaning Construction**

From a whole language standpoint, the construction of meaning is the main point of reading and interacting with text. Readers cannot make sense of a text solely by having strong vocabulary or listening skills—or any of the skills explored in the subsections of this section. As described in the introduction, whole language does not separate reading processes into skills that can be taught. Whole language approaches to teaching ELLs that language is not learned, but acquired. Gee (1992) said: "Acquisition is a process of acquiring something subconsciously by exposure to models, a process of trial and error, and practice within social groups, without formal teaching. It happens in natural settings that are meaningful and functional" (113).

The studies in this section show the positive effects of whole language programs on ELLs' abilities in comprehending and constructing meaning from text (Gersten, 1996; Stice & Bertrand, 1990; Saunders & Goldenberg, 1999; Guccione, 2011; Kucer & Silva, 1999). In the classrooms described in the following studies, teachers focus on meaning over form, encourage inquiry, provide authentic settings for language and literacy use, and actively encourage

interaction with texts that are meaningful to students.

Gersten (1996) conducted an ethnography of language arts and literacy instruction for language-minority students in 18 urban classrooms in a large school district in Southern California for 2 years, finding that effective instruction for language minority student includes selecting key vocabulary concepts, providing feedback on meaning rather than syntax or grammar, and actively encouraging students who express ideas and concepts.

Subjects of the study were students in three schools in a large Southern California school district which all had minority student populations of between 60% and 80%. The percentage of students eligible for free lunch ranged from 91.4% to 96%. In two of the schools, the predominant native language was Spanish. In one, there was a wide range of Southeast Asian languages and cultures represented, including Lao, Cambodian, and Vietnamese. Twenty-four classrooms in the three schools were involved in the study. Virtually all of the students were in the first or second year of making the transition from primarily Spanish-language or "sheltered English instruction" to instruction in English for virtually the entire school day. Most students were still not fluent English speakers but had graduated from their bilingual education or sheltered English programs into what the district called "transition" programs. Transition is when students move to an instructional day when all but one hour or so of instruction is in English. It typically happens between grades 3-5 and sharp declines in academic performance are typical as students face the simultaneous challenges of mastering academic content and acquiring a second language (de La Rosa &

Maw, 1990; Gersten & Woodward, 1995; Natriello, McDill & Pallas, 1990).

The researchers observed over 200 hours of reading/language arts instruction to language minority students in grades 3-6. A series of interviews with teachers, administrators, para-educators, bilingual specialists, and special educators was conducted to provide a richer context for understanding the sources of concern for teachers. Only one teacher used a conventional basal reading series for instruction--the others used children's literature such as *James and the Giant Peach* or *Where the Red Fern Grows* as the core of the curriculum. A qualitative observational method was the primary means of describing and analyzing the teaching of language minority students, documenting not only strategies that were unproductive but those that had positive effects on students' reading comprehension and language development. No standardized test results were available in either English or Spanish. The author described the researchers methods of observing teacher strategies, questioning strategies, use of scaffolding, feedback, and balance in literacy activities.

The researchers found that students can understand a story without understanding every word in the story. Selecting key vocabulary concepts, providing feedback on meaning rather than syntax or grammar, and actively encouraging students who express ideas and concepts in English were found to be key components of effective instruction for these language minority students. Findings suggest that correcting all grammatical errors rather than providing content-based feedback will lower motivation and comprehension. They also pointed out that knowledge of Spanish is not a substitute for knowledge of how to

teach ELLs, especially during the transition years.

The authors described their theoretical positioning--a sociocultural perspective of learning which says students make meaning through transactional exchanges with a number of social and contextual factors. A key strength of the study was transparency--the author described the conflicts the researchers had, detailing that some researchers were bilingual educators with a strong belief in the benefits of language instruction, which sometimes clashed with researchers who saw benefits to rapid immersion into English language instruction. The credibility was strengthened by the detailed description of data-gathering and coding procedures and the collection of data from multiple sources. The results are transferable to populations of language minority students who are native speakers of Spanish and of Southeast Asian languages (Lao, Cambodian, Vietnamese) and who attend schools serving students of low SES backgrounds. This population is particularly transferable to Washington state, which has large population of language minority students who speak Spanish (U.S. Bureau of Census, 1992-a). The results are dependable as they support the work of Gersten et al. (1986), Leinhardt (1988), and Goldenberg (1992/1993).

Using a pre-test/post-test control group design and qualitative methods, Stice and Bertrand (1990) found that 50 low-income first and second graders in middle Tennessee in whole language classrooms performed as well as or better than their counterparts from traditional classrooms on standardized achievement tests in reading, retold more fully the stories they read, and did as well or better in spelling, appeared more confident in their reading, and appeared to possess a

wider variety of reading strategies.

The subjects were 50 children in pre-first, first, and second grades in two sets of different classrooms: five whole language and five traditional classrooms, all located in middle Tennessee. Each classroom contained at least five identified at-risk students as subjects. These students were defined as "at risk" by the following factors: they scored lower than the mean on the reading comprehension section of the locally administered standardized achievement test; they were identified as at-risk by the classroom teacher; they were members of a non-intact nuclear family and lived in publicly subsidized housing. These conditions appear to be highly correlated with school failure (Schorr, 1988). Six classrooms were in rural settings and four were in an inner-city setting. The whole language classrooms were holistic (meaning skills were integrated throughout all activities) and literature-based, and the traditional classroom emphasized mastery of isolated skills and employed direct teaching of basal reading series and other textbooks. The traditional classrooms were recommended by building principals. Key differences between the subjects were that the children in traditional classrooms produced fewer miscues in the first reading assessment, whereas those in whole language classrooms were writing a great deal more. With two exceptions, the study was repeated in the same classrooms with different subjects for two consecutive years and the data was combined.

This investigation was a 2-year pilot study that collected data about reading and writing tasks. Data also included scores on reading portions of the

Stanford Achievement Test, Concepts About Print program materials, writing samples, reading retelling scores for comprehension, spelling, and interviews with the children. Each 2nd grade child's oral reading patterns and comprehension were examined using guidelines from the Goodman, Watson and Burke (1987) Reading Miscue Inventory (RMI). Each child produced a rough-draft of a piece of writing for the researchers in August/September, January/February, and April/May. Using ANOVAs and F-tests, the researchers evaluated between group, gain score differences on achievement test results, oral reading miscue data and reading scores, and holistic writing scores. The findings for SAT reading scores showed that students in both whole language and traditional classrooms performed quantitatively equivalent. The Concepts About Print pre- and post-tests illustrated that a statistically significant difference in favor of the whole language classroom ( $F = 11.7$ ,  $p < .05$  for the urban setting,  $F = 10.5$ ,  $p < .05$  for the rural setting). On reading retellings, students in the whole language classroom scored significantly higher than those in traditional classrooms ( $F = 13.1$ ,  $p < .05$ ), retelling longer, more complete version of the stories they read. At-risk children in the traditional classrooms showed no growth in constructing semantically acceptable significance while their counterparts in whole language classrooms made considerable progress over the year, though the scores did not quite reach statistical significance. Children in whole language classroom corrected their own oral reading miscues more than the children in the traditional classrooms ( $F = 20.2$ ,  $p < .05$ ). Spelling scores showed no statistically significant differences in growth in spelling but students in whole language group

attempted to spell more different words, indicating they were learning more words and/or are becoming greater risk takers. Measures of writing included number of words, number of sentences, and numbers of independent clauses plus modifiers. The traditional group produced an average of 25 words per sample in the fall and an average of 54 words per sample in the spring. The whole language group produced 33 words per sample in the fall and an average of 70 words per sample in the spring. Interviews (an adaptation of the Burke Reading and Writing Interview) with students revealed that students in whole language classrooms had a greater awareness of strategies for dealing with unknowns in reading and felt better about themselves as readers and writers-- more than 80% answered "me" when asked "Who do you know who is a good reader?" whereas only 5% of children in the traditional group answered "me" to the same question. Interviews also revealed that children in the whole language group focused more on meaning and the communicative nature of language than the traditional group. When asked "What makes a good reader?" whole language students answered "reads a great deal" and can "read any book in the room", whereas traditional students focused on words and the correctness of surface features, answering: "knows all the words" and "reads big words."

A strength of the study is its transparency: the researchers explained the lack of randomization and subsequent matching of subjects, which was used to attain subject similarities but did not fully control for group differences. They also pointed out that the differences in achievement on post-test scores were higher for whole language students but were not statistically significant, and that both

groups attained grade level achievement by the end of the year. Credibility is strengthened because the researchers clearly explained their theoretical positioning, data gathering procedures, and included data from multiple sources. The dependability of the results is dubious because they are not consistent with other studies. However, there is little research with which to compare this study. The results are transferable to urban and rural settings, and to populations of at risk students as defined in this paper. Small sample size was an obvious weakness of the study, as well as short implementation time: one year of whole language may not be sufficient for full differences between whole language and traditional students to emerge. However, an experiment time of 2 years is significantly larger than most of the studies addressed in this paper. External validity is strong because the researcher did not claim that one method of teaching or the other caused effects. Validity is also threatened by a lack of p values on several areas of assessment. The conclusions they made were reasonable based on the procedures used. The researchers explained that by the time the subjects in the whole language classrooms were selected, parental permission was obtained, and the process was repeated in the traditional classrooms, it was well into the second full week of school and that writing samples were collected during the third and fourth weeks of school. Therefore, the children might have already changed due to differing experiences and expectations. The children in the whole language classrooms were already writing a great deal--this, not the intervention, may have explained their success at post-test. The authors' skepticism of the whole language condition is a clear

strength in light of the fact that the researchers favor the whole language orientation. A limiting condition was the small numbers of at-risk children--had there been more whole language classrooms from which to select at-risk children, the findings would have more reliably represented this population.

Saunders and Goldenberg (1999) conducted a study with a 2x4 pre-test/post-test design to determine the effects of two instructional components (literature logs and instructional conversations) on the reading comprehension of 116 fourth and fifth graders who were limited English proficient and English proficient students, finding that students in the treatment group scored significantly higher on measures of story comprehension than did the control group.

The subjects were 116 fourth and fifth graders in Southern California, half of whom were English language learners completing their first or second year of English language arts. 69% of the students were Hispanic and 62% were eligible for free and reduced price lunch. At the time of the study, more than 75% of the fourth graders were performing below grade level on reading, language, and math.

The five teachers who participated in the study were members of a research and development team who is implementing the language arts model in Spanish, transition, and English mainstream language arts classrooms. The experiment was conducted during the last quarter of the school year with mostly the same classroom conditions students had been immersed in throughout the school year (teachers had been conducting literature units, leading instructional

conversations, and assigning and sharing literature logs all year long. The design included two categories of students--limited English proficient and fluent English proficient and used four treatment conditions--read and study (control group), literature logs only, instructional conversation only, and literature logs + instructional conversation. To control for teacher variance, all four treatment conditions were carried out in each classroom.

There were no significant pretest differences among treatment groups on the theme-explication measure ( $F = 8.86, p = .0036$ ). A two-way ANOVA on post-treatment factual comprehension scores produced a significant main effect for language proficiency ( $F = 20.03, p = .0001$ )--this was not surprising because the fluent English proficient students had an obvious advantage in their command of language. Post-test results showed that the literature logs + instructional conversation group scored significantly higher than both the read and study (control) and literature logs only group ( $p < .05$ ), but not significantly higher than the instructional conversation only group. The effect of instructional conversation and its combined effect with literature logs was stronger on interpretive comprehension than on factual comprehension. Both the instructional conversation only group and literature logs + instructional conversation group scored significantly higher ( $p < .05$ ) than the read and study group. For all students, regardless of English proficiency, those in the literature logs + instructional conversation group were significantly more likely to receive a score of 4 than students in the other treatment groups ( $F = 12.14, p < .05$  for post-hoc comparisons). For limited English proficient students, there was little difference in

scoring among the read and study (control) group, the literature logs group, and the instructional conversation group. However, a significantly higher percentage of limited English proficient students in the lit logs + instructional conversation group score 4s (69%;  $p < .05$  for post-hoc comparisons with other groups).

The true experimental design of this study strengthens it by controlling for factors such as history, instrumentation, and maturation. The researchers were transparent about the differences in testing among the groups--they had qualitatively different instructional experiences and received different amounts of instructional time. The subjects were evenly matched in all groups and testing methods were similar in all groups. The study was objective as it was under public study by other researchers. The biggest flaw in the design is the small sample--thirteen English proficient students per group make it difficult for observed differences to be statistically reliable. A significant limitation is that students in the various experimental conditions (lit logs only, instructional conversations only, and lit logs + instructional conversations) had different instructional experiences and amounts of instructional time. This makes it hard to determine whether the superior effects produced by the different experimental conditions are due to the method or from the students receiving more instruction from the teacher. The researchers concluded that for ELLs, both instructional conversations and literature logs has a more profound effect on understanding a story's theme than either one individually. This supports the other studies in this section which show that ELLs benefit from literacy-rich environments where learning to read is focused on meaning, not the method of understanding

individual words (Gersten, 1996; Stice & Bertrand, 1990, Guccione, 2011; Kucer et al., 1999).

Guccione (2011) conducted a year-long ethnographic study to examine the effects of integration of literacy and inquiry on reading comprehension on three first grade English language learners, finding that they used 11 literacy practices to construct meaning and benefited from being seen and seeing themselves as valuable members of the learning community.

The three subjects were all English language learners were all labeled non-English proficient according to their performance on the Colorado English language assessment who represented the widest range of scores. All three of the subjects' home language was Spanish. Two were male, ages 6 and 7, and one was female, age 6.

The author used ethnography, an approach in which the researcher becomes immersed in the cultural setting (in this case, a classroom) for an extended period and uses thick, rich description to report findings. In this study, inquiry-based instruction was defined as "a student-centered approach to teaching and learning through the use of teacher scaffolding to guide independent and group investigations that interested the students." Once a week for an academic year, the researcher captured data through video and audio recordings and still photography during the language arts period. She also interviewed the students and teacher at the beginning, middle, and end of the year; kept detailed field notes and researcher journals; and collected student artifacts and assessment data. After conducting a count to find the five literacy

practices used most frequently by students to construct meaning from expository text, the researcher undertook an in-depth examination of participants' discourse (beyond the literal transcription) to examine the use of literacy practices by the three subjects.

Guccione observed 11 literacy practices used by the students to construct meaning. In the coding, most were labeled with terms used by the students and teacher, and other labels were created (for example, interactive components, decoding, and code-switching). "Viewing" was the most commonly observed literacy practice; this involved viewing text and illustrations to gain more information about books in order to select them based on the reader's interests. "I learned" statements were another practice observed--students shared what they had learned from a text in the form of sticky notes, posters, presentations, and other formats. Interactive components occurred frequently; this involved students sharing their thoughts and feelings on writing and reading with the class.

An obvious weakness of the study was small sample size, making it less transferable than other studies. To strengthen the study, Guccione described her theoretical positioning and clearly explained how she gathered and categorized data (using the broad code "literacy practices" to document various uses of literacy in meaning construction). The process of data collection was observed by outside parties, thus strengthening its confirmability. The findings are dependable because there is research to validate the efficacy of these reading comprehension strategies (Palincsar & Brown, 1984; Pressley et al., 1992).

Kucer and Silva (1999) conducted a case study using qualitative and quantitative methods to examine the English literacy development of 26 Mexican-American third graders beginning a transition into a whole language classroom, finding improvements in literacy growth in several areas.

The subjects were twenty-six students in a third grade classroom in a large metropolitan area. They were Mexican-American, bilingual, and from working class homes. Most of them entered kindergarten speaking predominantly Spanish. They were selected for transition into English literacy in third grade based on their oral English and Spanish literacy abilities. In addition, the third-grade teacher administered the Bilingual Syntax Measure II Test, an assessment approved by the state of California to identify and place second-language learners in appropriate classroom settings. The teacher was a co-author in this study.

The purpose of the study was to investigate the impact of a whole language curriculum on the English reading and comprehension development, and the English writing development of transitional students. The author echoed the views of Delpit--explicit instruction in reading, writing, and speaking skills must be provided to disadvantaged students (in this case, socioeconomically disadvantaged and disadvantaged by the opportunities having English as a first language provides. This can be done without eradicating or replacing students' home language and discourse style. The curriculum of the program included theme-based literacy activities, teacher reading, free reading, and free writing. Lessons included paired reading, reader response groups, compare/contrast

activities, learning logs, writing conferences, and modified cloze procedures. Data was collected throughout the year—field notes, curricular and instructional lesson plans, teacher interviews and reflections, oral readings and retellings, story writing, and spelling. Researchers assessed student literacy growth by having students read and retell a short story, write a short story about an exciting experience, and spell 57 words from the third grade speller. This was done as a pre- and post-test. Researchers did not explicitly teach spelling. Pre and post data was compared and contrasted and formally analyzed through use of miscue and retelling analysis, holistic and analytic writing measures, and scoring of words spelled correctly. The Friedman Two-Way ANOVA Analysis by Ranks was used to evaluate the significance of change in these tests and in holistic and analytic writing measures. Analysis showed that students improved their ability to coordinate the use of contextual cues and graphophonics to produce meaningful sentences. Students' growth in holistic writing was .45 on a four-point holistic scale; this was not significant. Also, students did not grow in story sentence length or use of punctuation. The researcher concluded that neither direct instruction nor being "immersed in a garden of print" will improved the literacy abilities of ELLs

A key strength of the study was its transparency. The researchers admitted a lack of differential mediation and suggested further research is necessary. The results are dependable because they support the research of Perez (1994). They are also credible because they include data from multiple sources and explain data analysis procedures. A clear weakness is a lack of

transferability—the sample size of the group studied was 26 students in a single classroom.

All of the studies in this section pointed to the positive effects of whole language practices on the literacy development of ELLs, noting that free reading and writing, inquiry, student choice, encouragement of interaction with text, and use of authentic texts leads to increases literacy skills for ELLs. Gersten (2006) conducted an ethnography of language minority students in Southern California over 2 years and found that selecting key vocabulary concepts, providing feedback on meaning rather than syntax or grammar, and actively encouraging students who express ideas and concepts were all effective teaching practices to support the literacy skills of ELLs. Using a pre-test/post-test control group design and qualitative methods, Stice and Bertrand (1990) found that 50 low-income first and second graders in middle Tennessee in whole language classrooms performed as well as or better than their counterparts from traditional classrooms on standardized achievement tests in reading, retold more fully the stories they read, and did as well or better in spelling, appeared more confident in their reading, and appeared to possess a wider variety of reading strategies.

Saunders and Goldenberg (1999) conducted a study with a 2x4 pre-test/post-test design to determine the effects of two instructional components (literature logs and instructional conversations) on the reading comprehension of 116 fourth and fifth graders who were limited English proficient and English proficient students, finding that students in the treatment group scored significantly higher on measures of story comprehension than did the control group. Put another way,

the use of literature logs and instructional conversations was shown to be effective for increasing the reading comprehension of ELLs, suggesting that this is a good teaching practice. Other good teaching practices are the instruction and use of literacy practices as studied by Guccione (2011). Guccione conducted a year-long ethnographic study to examine the effects of integration of literacy and inquiry on reading comprehension on three first grade English language learners, finding that they used 11 literacy practices to construct meaning and benefited from being seen and seeing themselves as valuable members of the learning community, also suggesting that teachers working with ELLs will likely improve the skills of their students by helping them feel like valuable community members. Kucer and Silva (1999) conducted a case study using qualitative and quantitative methods to examine the English literacy development of 26 Mexican-American third graders beginning a transition into a whole language classroom and found the whole language curriculum to have a positive impact on their literacy development. The lessons Kucer studied included paired reading, reader response groups, compare/contrast activities, learning logs, writing conferences, and modified cloze procedures. The findings of the studies in this section suggest that explicit instruction in reading, writing, and speaking skills must be provided to ELLs without eradicating or replacing students' home language and discourse style. Also, using curriculum that includes theme-based literacy activities, teacher reading, free reading, and free writing is likely to make a positive impact on ELLs. Research by Geva & Zadeh (2006) and Lesaux & Siegel (2003) showed that while young ELLS need explicit instruction in phonemic awareness and word

recognition (like their English-speaking peers), they also benefit from meaning-rich activities that embrace their cultural and linguistic resources, enhance oral language development, and facilitate opportunities to interact with print in meaningful ways (as cited in Guccione, 2011).

### **Whole Language Approaches Increase English Vocabulary for ELLs**

Research by Elley (1989) and Robbins & Ehri (1994) supports the view that stories facilitate literacy growth (as discussed in Ulanoff & Pucci, 1999). Vocabulary development through reading exposure is thought to be a primary vehicle for which reading comprehension, writing style, and more complex vocabulary and grammar are developed (Krashen, 1985). Lambert (1991) replicated Elley's (1989) study and found that ELLs who listened to stories in English showed similar gains in second language vocabulary acquisition, specifically when the reading was scaffolded for the child to facilitate learning. The study in this section shows the positive effects of whole language methods on the vocabulary development of ELLs (Ulanoff & Pucci, 1999).

Guided by the theory that students acquire vocabulary from listening to stories (incidental language learning) as proposed by Krashen (1985), Ulanoff and Pucci (1999) used a non-equivalent control group design to determine the effects of two treatments—concurrent translation and preview-review—on the vocabulary acquisition of 60 third-grade English Language Learners at an elementary school in the greater Los Angeles area, finding that all groups demonstrated growth on the posttest, with the control group showing larger gains.

The participants of the study were students from three third grade classes in a bilingual school in the greater Los Angeles area that has approximately 1200 students, 85% of whom participate in the government subsidized school lunch program. They were randomly separated in to three groups: a control group (no treatment),  $n = 16$ ; concurrent translation,  $n = 21$ , and preview-review,  $n = 23$ . All students had Spanish as their primary language. Only students with Spanish as their primary language were included in the sample that was analyzed for this study.

All students were given a pretest to assess knowledge of selected vocabulary words from the book *The Napping House* by Don and Audrey Wood (1989). With group 1 (the control group), no treatment (intervention or explanation of the story) was administered after a listening of *The Napping House*. Students in group 2 listened to the same story in English using the concurrent translation method (translating the story from one language to another), and group 3 listened to the same story after having the teacher build background knowledge by previewing important points and difficult vocabulary in Spanish (preview). All students were given a post-test of the same vocabulary items that were tested in the pretest.

ANOVAs were conducted to determine significant differences, finding none between groups on the pre test. All groups demonstrated growth on the posttest ( $F = 9.1323$ ,  $p = 0.0004$ ) and the delayed post test ( $F = 6.2086$ ,  $p = 0.0036$ ). The control group showed larger gains than the concurrent translation group but the concurrent translation group scored higher on the delayed post test

one week later. The preview-review group made the most gains. There was no statistically significant difference between the control group and the preview-review group on either of the posttests. This study supports the hypothesis that children learn and retain more vocabulary from listening to stories and when teachers employ their primary language to build background knowledge.

Major strengths of the study lie in its design, which control for factors such as history, instrumentation, and testing. The use of a control group to compare two strategies strengthens the findings. However, regression towards the mean score is a possible cause of success with preview-review treatment, not the treatment itself. Internal validity is threatened by the possibility that post test c scores might have been due to chance factors and not the treatment, and further threatened because the authors did not discuss this. Internal validity is also threatened by possible experimenter effects and by the fact that the authors did not discuss how they controlled for these.

The study in this section showed the benefits of helping ELLs develop background knowledge in their home language, teaching vocabulary in their home language, and reviewing important points. Ulanoff and Pucci (1999) used a non-equivalent control group design to determine the effects of two treatments—concurrent translation and preview-review—on the vocabulary acquisition of 60 third-grade English Language Learners at an elementary school in the greater Los Angeles area, and found that all groups demonstrated growth on the posttest. The Preview-Review treatment was more effective with the subjects, therefore previewing important points, teaching background knowledge and

difficult vocabulary in Spanish is likely a good teaching practice for supporting and enriching the literacy development of Spanish-speaking ELLs. In general, the study showed that incidental learning of vocabulary is more effective for ELLs than translation of texts from home language to English. This supports whole language theories that advocate vocabulary acquisition through the reading of authentic texts instead of direct vocabulary teaching.

### **Whole Language Increases Readers' Self-Efficacy**

The ways in which children interpret their literacy learning experiences have major implications for their achievement (Dahl & Freppon, 1995). While patterns of literacy failure among inner-city children have been well-documented (Dahl & Freppon, 1994), there is little research on children's interpretations of their school experiences in reading and writing. The studies in this subsection show the impacts of children's interpretations of their literacy experiences at school on their literacy development (Dahl & Freppon, 1994; Lim & Watson, 1996; Kuball & Peck, 1997).

Arguing that educators must know how these children experience skills-based and whole language program and their consequences in order to provide productive instructional contexts, Dahl and Freppon (1994) examined how 96 inner city children interpreted their beginning reading and writing instruction and compared how these interpretations differ when they experienced skills-based or whole language classroom programs. They found that enjoyment of literature was crucial to both studies, that subjects in the whole language group had more self-efficacy as readers and writers, and that subjects in both studies regarded

reading and writing as something "for school."

Ninety-six students from two schools were involved in the skills-based study and 2 involved in the whole language study. All were elementary schools in urban Midwestern settings that contained a majority of children from urban families with low income levels. All students were kindergarten or first grade and contained a mixture of African American and white Appalachian students. Each group included a proficient reader, an average reader, and a less-experienced reader from skills-based and whole language classrooms. Criteria for learner selection were based on triangulated data from field notes, miscue analysis of actual reading samples, and teacher judgment.

The study documented learner activity and interpretations of reading and writing across 2 years of schooling in classes with the same curriculum (skills-based or whole language). It provides a comprehensive account of the learner's perspective, documents and compares learner hypotheses across skills-based and whole language curricula, and draws conclusions about inner-city children's success and failure in learning to read and write in these contrasting settings. First each study was executed separately, then a cross-curricular comparison was made. In each study, one researcher was assigned to each school and collected data over the two year period. The researchers generated field notes in twice-weekly classroom visits over the span of two years. One focal learner was followed closely in each observation who wore a remote microphone interfaced with an audiotape recorder. The researchers shadowed focal learners and asked, where appropriate, probing questions such as "What are you doing now?" or "Tell

me about that.” The researcher kept a record of instruction, learner behavior, and context in which each event occurred. Thus, the outcome of each observation was an extended set of filed notes in which transcripts of learner talk, oral reading samples, and learner actions were integrated.

The findings from this cross-curricular comparison spanned three general areas: patterns of learner sense-making, written language knowledge measures, and contrasts between reading processes and writing events. Qualitative findings in the skills-based and whole language investigations compared across the two studies revealed five areas in which there were prominent patterns. Firstly was learner interest in accuracy: children were concerned about “getting it right.” One of the main tenets of the whole language philosophy is the acceptance of errors as potentially productive in the learning process, whereas skills-based curriculum is aimed at mastery of specific skills or subskills through practice, and correct responses were highly valued. The next pattern was phonics growth: in both the skills-based and whole language classrooms, learners used strategies that showed they were gaining awareness of phonics and experimenting with letter/sound relations. Pattern 3 was response to literature: learners in both studies demonstrated enjoyment of literature. The study found that even when trade books were available, focal learners tended to stay with their basal materials. It also found that in whole language classrooms, children criticized story endings and talked about what would improve the illustrations. In skills-based classrooms children talked about story events and answered comprehension questions; there were few critical comments about stories.

Pattern 4 was that the least proficient readers in both skills-based and whole language classrooms developed various ways of dealing with teacher expectations and instructional demands. Passivity was the most pervasive coping strategy for learners experiencing difficulty in skills-based classrooms. Learners sat and stared for periods of time, marked randomly on worksheets just to finish them, and waited for or asked for help, all behaviors that indicated they weren't making sense of what they were doing. Pattern 5 was sense of self as a reader/writer and persistence. Prominent trends in the whole language classroom were that learners perceived themselves as readers and writers, sustained their attention in literacy episodes and persisted when engaged in reading/writing tasks. Learners frequently made comments about their own progress and impromptu statements about themselves as readers ("I can read the whole thing," "I can read, just not aloud," and "I read that book at home" for instance). In contrast, in the skills-based classroom, these patterns of persistence and sense of self as a reader was restricted to the most proficient readers and writers.

Quantitative findings of written language knowledge showed that learners in both studies tended to view written language as something "for school" and were generally unfamiliar with print as a way to convey meaning. The whole language group scored higher on the posttest than the skills-based group on all six measures of written language ( $F = 27.95, p < .05$ ). They generally used picture clues, skipped unknown words, reread and self-corrected, used letter/sound relations, asked for help, and commented about the story. The whole language group was more engaged as they read independently.

Strengths of the study include its credibility; the transparency in the way data was collected strengthens its credibility. Researchers clearly described their theoretical positioning and analyzed data from multiple sources. A weakness of the study was its lack of transferability--it was conducted with a specific population of students (urban, low-SES children learning to read and write in skills-based and whole language kindergarten and first grade classrooms. Given the lack of research of this kind, the results lack dependability. There was no measure of phonemic awareness in the quantitative measures of pre- and post-test comparison; therefore, claims about phonics growth are limited to patterns documented in field notes of classroom observations.

Citing the work of Freeman & Freeman (1989), Hudelson (1989), Rigg & Allen (1989), and Early (1990a, 1990b), Lim and Watson (1993) argued that second language learners will learn language and concepts of content while developing literacy and oracy skills when they are involved in natural, authentic, and content-rich settings. They conducted a case study to examine the effects of a summer ESL class using a content-rich whole language curriculum on 10 second and third grade children, finding that children were involved in language to make sense of written and spoken text, maintained interpersonal relationships with the teacher and other learners, and willingly engaged in purposeful reading and writing experiences with multiple texts.

The subjects were ten students in a summer school ESL class in Columbia, Missouri made up of 10 second and third grade children who had been in the U.S. from 1 month to 2 years and whose English language

proficiencies varied greatly. Five children's native language was Cambodian, one was Korean, two were Chinese, one was Taiwanese, and one was Arabic.

The classroom teacher was familiar with whole language philosophical premises and experiences and was able to generate learning engagements that reflected whole language principles. She framed the class as an invitation to become more proficient in their reading and writing by using content materials, and to learn content by reading and writing about their content. The class had various writing experiences including journals and creative writing, and read articles from magazines and newspapers, letters from cave offices, and a variety of brochures on the topics of caves and bats. Reading materials were selected on the basis of relevance and interest rather than readability formulas. The researchers examined student work, observed classes and teaching methods.

The researchers found that combining authentic and natural language experiences with content-rich classroom practices led to optimal language learning and optimal subject matter learning. They concluded that language was not used as an object and content was not regarded as facts--with the content-rich, usable language, second-language learners gained confidence in themselves, and their knowledge of both language and content flourished. The authors clearly explained their theoretical positioning and belief in whole language philosophies, but did not describe how they obtained entry to the subjects, noting a possible source of bias. Nor did they describe category coding or data analysis procedures. In fact, they performed no analysis other than observation. This threatens the credibility of the studies, as does the lack of

member checking and lack of description of decision-making. A major flaw is transferability—at 10 subjects, the sample size was too small to generalize to other populations. Another flaw was the lack of confirmability—the process and the product of the data collection is not auditable by an outside party, as the teacher had intimate knowledge of the students, their work, and the researchers only witnessed firsthand (without recording), the effects of the curriculum on the students. The transparency in documentation of activities made the study more credible.

Kuball and Peck (1997) conducted a year long case study to determine whether the use of Whole Language-based instruction would have the same effects upon the writing development of eight Spanish-speaking kindergarten children, whether the writing development for the Spanish-speaking group would differ from that of the English-speaking group (and to what extent), and in what areas of writing development the differences were most evident. They found that the writing skills of Spanish-speaking children in a Whole Language based program developed as well as the writing skills of the English-speaking children.

The subjects were eight Spanish-speaking kindergarten children and of eight English-speaking kindergarten children. The study took place in one school, where kindergarten students were randomly assigned to five different classrooms as they enrolled. The 16 children who participated in the study were kindergarten students from two bilingual classes sharing the same classroom. The eight Spanish-speaking students were classified as Limited English Proficient; four were male and four were female, all with a mean age of 5.4 years. The other

eight subjects (native English speakers) consisted of four males and four females with a mean age of 5.2. One subject from the English-speaking group relocated mid-year, therefore the remaining seven subjects were investigated.

The researchers assessed three subsets of writing development: self-concept of students as writers, compositional literacy, and grapho-phonemic literacy. For the English group, the regular morning classroom teacher provided Whole Language instruction in English. The first author, Yazmin Kuball, participated as instructor for the morning Spanish speakers, for 1.5 hours, and as an observer for one hour. Kuball also gave the Whole Language instruction to the Spanish-speaking group. The classroom environment was print-rich, relaxed, and set up to resemble the natural learning environment of a home. Three instruments were used to assess the subjects' writing development: first, a student questionnaire consisting of three closed questions (Can you write your name? Can you write a story? Can you write a book?). All "yes" answers were rated with a "1" and "no" answers were rated with a "0." Children receiving a 0-1 were considered of having a self-concept of non-writer, while those receiving a rating of 2-3 were considered as having a self-concept of a writer. In order to identify changes in self-concept, this questionnaire was administered both at the beginning and the end of the year. The second instrumental used to assess the subjects' compositional literacy was a modified version of the Lamme/Green Scale of Children's Development in Composition (Green, 1990) This defined four compositional stages through which children progress (1-4). The compositional skills of the Spanish speakers were compared to those of the English speakers

by calculating the percentage of subjects of each group receiving a rating of 1-2 or 3-4. The third instrument was a scale for measuring grapho-phonemic literacy skills (Kuball, 1993), which was used throughout the school year to assess children's progress through the 8 stages of writing development (Clay, 1975; Green, 1990). These stages are: Scribble stage, linear mock writing, mock letter writing, pre-phonemic stage, phonemic 1 stage, phonemic 2 stage, phonemic 3 stage, and phonemic 4 stage. Writing samples were collected from each group in the beginning of the school, were analyzed and compared to those collected and analyzed at the end of the year.

The researchers found that the progress made by both groups in the development of writing skills was similar, and that instruction based on a whole language philosophy had positive effects on the writing development of both language groups. At the beginning of the year, the English and Spanish-speaking groups differed in their compositional skills, with 100% of the English speaking group receiving a rating of 3 (advanced compositional skills), whereas only 25% of the Spanish speaking students received a rating of 3. On the posttest, 100% of the children, in both groups, received ratings of 3-4. Both groups were similar in their pre-test grapho-phonemic skills and both groups made progress, with 25% of the Spanish speaking group progressing through three to four stages as compared to 0% of the English speaking group. In sum, both the Spanish-speaking and English-speaking groups progressed in their self-concept as writers, compositional skills, and grapho-phonemic skills after a year of whole language instruction.

The researchers clearly described their data-gathering and analysis procedures and admitted that English-only students may have performed better because the Mexican-American children are unaccustomed to partaking in label quests, meaning quests, recounts/accounts, and eventcasts because language is rarely used in these ways in their families or communities (Heath, 1990). The conclusions made are dependable as they support the work of Cummins (1989), Edelsky (1986), Gursky (1991), and Perez & Torres-Guzman (1992) which refute the myths about linguistic deficiency of Mexican-American children and show that these learners succeed in school-valued literacy contexts when given whole language instruction and are exposed to an abundance of environmental texts (Eaton, 1987; Hall, 1987).

The studies in this subsection point to interpretations of learning and self-efficacy as being strong factors in the literacy development of ELLs. Dahl and Freppon (1994) examined how 96 inner city children interpreted their beginning reading and writing instruction and compared how these interpretations differ when they experienced skills-based or whole language classroom programs. They found that enjoyment of literature was crucial to both studies, that subjects in the whole language group had more self-efficacy as readers and writers, and that subjects in both studies regarded reading and writing as something "for school." Lim and Watson (1996) conducted a case study to examine the effects of a summer ESL class using a content-rich whole language curriculum on 10 second and third grade children, finding that children were involved in language to make sense of written and spoken text, maintained interpersonal relationships

with the teacher and other learners, and willingly engaged in purposeful reading and writing experiences with multiple texts. Kuball and Peck (2007) conducted a case study on 8 Spanish-speaking ELLs and found that their writing skills developed greatly when they were instructed in a whole language program.

Though the studies in this section are flawed, mainly due to small sample size, they suggest that good teaching practices for increasing the literacy skills of ELLs would be creating reading and writing opportunities that aren't only related to school, increasing students' sense of self-efficacy, using purposeful, content-rich texts, and finding ways to increase students' enjoyment of texts.

### **Effects of Whole Language Approaches on the Listening Comprehension in English for ELLs**

There is scant research that examines the effects of whole language on the listening comprehension of ELLs. The studies in this section show the effects of different instructional approaches on the listening comprehension skills of ELLs (El-Koumy, 2000; Davis, 2010).

Using a nonequivalent control group design, El-Koumy (2000) examined what effect the skills-based approach, as compared to the whole language approach, would have on the listening comprehension of EFL students with low and high listening ability levels for 96 Egyptian university students enrolled in an English language course, finding that high ability listeners in the whole language group scored higher than those in the skills-based group.

The subjects were 96 pretested EFL students, divided up into treatment groups for 15 weeks. The students were enrolled in an English language course

at the school of education in Suez, Suez Canal University, Egypt. The subjects were identified by listening ability as either low or high ability listeners, based on scores from a placement test. They were then randomly assigned to the two treatment conditions with the same number of low and high ability listeners in each condition. All subjects had spent 9 to 12 years learning English as a foreign language and ranged between 19 and 22 years of age.

First, a placement test was given to separate students into listening ability levels. It consisted of 50 multiple-choice items which were designed to test discrete listening sub-skills such as recognition of individual sounds, reduced forms, stress and intonation patterns, based on short spoken texts. A panel of 5 university teachers validated the content of the test. Second, a listening comprehension test of the TOEFL was administered to all subjects at the end of the study. Participating teachers taught subjects in both treatment conditions at the rate of one session per week. In the whole language group, students spoke, listened, and wrote to one another about a topic of their own choice during the weekly four-hour session. They also read about a topic of interest to them and shared what they read with other members of the group. In the skills-based group, students received explicit instruction in the sub-skills of the four language skills at the rate of one session per week. Teachers used direct explanation, modeling, and had students do objective type exercises. The subjects were post tested on a listening comprehension test of the TOEFL. The scores were compared for each listening ability level under the skills-based and whole language conditions.

Researchers analyzed listening comprehension scores using the Statistical Package for the Social Sciences (SPSS) (Norusis, 1993). The t tests showed no significant difference between the listening ability levels under the skills-based and whole language conditions ( $t = 1.17, p > .05$ ). The whole language high listening ability group scored significantly higher than the skills-based high listening ability group ( $t = 2.92, p < .01$ ). The results suggest that the whole language approach is effective only for high ability listeners, due to the fact that high ability listeners possess the basic skills that enabled them to monitor their learning, engage themselves in intellectually challenging activities, and take advantage of use of the basic skills they had. In contrast, skills-based instruction did not give students the opportunity to meaningfully use their skills.

The design of the study gives it internal validity, controlling for history, maturation, and testing. The transparency with which the researchers described regression and instrumentation effects strengthened the study: they stated that the lack of prescribed materials under the whole language condition might increase the anxiety of low ability students, which could, in turn act as a block to the improvement of their listening skills. The researchers also did not explain whole language or skills-based instruction as a positive effect on the subjects. Although the results are statistically significant, the differences are not large enough to provide confidence in the findings. There was no description of inter-rater reliability and the results are not transferable as the subjects are Egyptian college students. An important limitation of the study is the age of the students (19-22 years old). Unlike the subjects of most of the studies in this paper

(kindergarten through elementary school age), the subjects of this study have had more practice in various methods of language learning than their younger counterparts. Although there is no research to suggest that adults of this age are not as sensitive to second language acquisition as elementary children, the distinction in age is important to make.

Using a mixed-methods study, Davis (2010) found that instructional practices, student engagement, and interest in reading were interdependent factors in literacy learning for 19 second grade students in a K-5 private elementary school.

The subjects of the study were 19 second graders in a private K-5 school in the western United States. The range of students' academic performance in reading was broad, with three students reading significantly above grade level, four students reading above grade level, seven reading at grade level, and five reading significantly below grade level. Nine subjects were Caucasian, six were African American, three were Asian, and one was Latino. The authors used a comparative analysis to examine the implementation of two reading instructional curricula in the same classroom. The researcher was also the classroom teacher. Two instructional models were implemented sequentially in a second grade classroom over a four-week data collection period.

The student centered instructional model was based on a workshop described in Fountas & Pinnell's (2000) *Guiding Readers and Writers*. This was designed to provide differentiated instruction and included mini-lessons for addressing strategies and skills appropriate to second grade. The skills-based

instructional model was centered around a basal reading curriculum, whereby students received lessons in decoding (including explicit phonics lessons, comprehension, vocabulary development, spelling, and grammar. Data was collected by daily observations over 4 weeks (a research assistant recorded written observations). Interviews (initial, formative, and post-study) were conducted with all students to gauge motivation relative to text, reading habits and interests. Three distinct questionnaires were administered to assess students' attitudes about reading and self-conceptions as readers. Assignments were also collected for analysis.

Findings were that design and implementation of instruction in both student-centered and skills-based curricula impacted students' literacy experiences in measurable ways. Findings were organized across six categories: choice, collaboration, challenge, learner control, goal orientation, and environmental context of learning. The implementation of the skills-based curriculum significantly limited opportunities for student choice, often leading to students being uninterested in material. Student choice was found to positively impact reading. This finding supports the work of Nolan (2007) which found that tasks which promoted choice making centered on personal interests uses students' background knowledge, develops their self-direction, and increases autonomy in reading. Skills-based instruction provided fewer opportunities for collaboration. The data points to collaboration as a meaningful element in children's' literacy experiences, including book sharing, pair work, and discussions that led to collaborative meaning making. Because the skills-based

curriculum consisted primarily of whole-class instruction, learning objectives were the same for all students. Thus, there was not an appropriate level of challenge in the materials. In the whole language setting, students had different and appropriately challenging material, which led to them sharing opinions, collaborating, and greater risk-taking. Finally, the study showed that when students had limited opportunities for choice-making, collaboration, and control, they were more competitive. In contrast, the student-centered curriculum led to higher engagement and enjoyment of reading.

There was triangulation of both qualitative and quantitative methods (surveys, observations, focus groups, and interviews). The intensive coding process was described, strengthening its credibility. The findings are dependable as they support research showing increased literacy learning in student-centered curriculum and greater development as readers (citing Dahl & Freppon, 1995, who found that attitudes about reading contributed to self concept and disposition of learning). A major flaw of the study is bias--the researcher was also the classroom teacher, which perhaps impacted student response to instruction and willingness to provide feedback. The transferability of the findings is weak because of the small sample size and subject type (one second grade classroom). Another limitation is that the subjects are not English language learners, the focus of this paper. However, the study is an important contribution to literacy research for all children, and research shows that practices for native English speakers are also good for ELLs.

The studies in this section describe effective whole language practices--

immersion in real literature, theme-based literacy activities, free reading and writing, student choice in text and activities, and above all, a focus on semantics over syntax and grammar. The findings in this section show that whole language improves the self-concept of students as readers and writers, increases their engagement with text, and improves vocabulary, listening, and reading comprehension. Also, the studies in this section have shown that writing skills are improved when children are given the opportunity to engage in meaningful writing activities that pertain to their interests and grow from real world contexts.

### **Effects of Whole Language Instruction Approaches Combined With Skills-Based Instruction on the Literacy Skills of ELLs**

Many researchers claim that the debate between whole language and skills-based approaches ignores the fact that phonics is an important part of the reading and writing process, and essential cueing system that children use along with other kinds of information (Goodman, 1986, 1993; Moustafa, 1997; Weaver, 1991, 1996). For avid readers, vocabulary acquisition can occur as they encounter unknown words in texts (Sternberg, 1987), but Swanborn and de Glopper (1999) found that the probability of acquiring vocabulary incidentally through reading is only 15%. For English language learners who lack command of linguistic cue that English only student have, this probability is likely lower. Huckin, Haynes, and Coady (1995) found that vocabulary instruction for ELLs ideally combines direct teaching of words with incidental learning fostered by multiple opportunities to encounter novel words in authentic and motivating texts. The whole language vs. phonics debate is outdated; Honig (2000) pointed out

that research by leading experts has shown that the most effective reading instruction combines both explicit, systematic teaching of phonemic awareness and phonic, an abundance of rich and varied literature and meaningful writing practice (2). The studies in this section highlight successful literacy instruction for ELLs, which combines elements of both whole language and skills-based approaches (Dahl & Scharer, 2000; Carlo, August, McLaughlin, Snow, Dressler, Lippman, Lively, & White, 2004).

Searching for convergence between the two learning philosophies, Dahl and Scharer (2000) conducted a case study over the course of a school year (October to May) to examine what phonics skills and concepts are taught in whole-language classrooms, where phonics instruction occurs, how it is conducted, and what children learn for 215 students in diverse school settings, finding that foundational concepts of phonological awareness, phonemic awareness, and phonemic segmentation accounted for over 1/3 of the instructional actions documented.

Classrooms chosen were accepted by the whole language community and represented the widest range in terms of location, economic group, and ethnicity. Some schools served the urban poor, others were magnet schools that attracted children from a variety of economic circumstances, while others served small town or suburban settings. All were public elementary schools except one private Catholic school with an all-Caucasian student population. In total, there were 179 Caucasian students, 34 African-American students, 2 Asian students, and 1 Latino student. Forty percent of the students were on free or reduced lunch.

The researchers documented phonics instruction by asked teachers to wear remote microphones; their teaching was recorded and transcribed. They wrote field notes as they observed instruction each week. To avoid bias, they hired two consultants, a high-profile phonics expert and a well-known whole language advocate to watch over site selection, data collection, and analysis procedures. The researchers used four instruments: two decoding and two encoding. Encoding procedure: children wrote two dictated sentences and were given credit for each of the 37 sounds (phonemes) written correctly, even if the whole word was not spelled correctly. Encoding procedure 2: children wrote words from increasingly difficult spelling tests scored in two ways: number of words spelled correctly and number of word features correctly represented. Decoding procedure 1: children read stories to determine the last level at which they read with 90% or greater accuracy. Decoding 2: children were asked to read words from flashcards as testers documented if they read the word correctly, self-corrected upon inspection, or offered an incorrect response.

The researchers pretested over 200 children in the 8 classrooms; of those, 178 formed the database for the analysis. In the analysis, the researchers studied pretest dictation scores and divided the students into 3 groups--the largest group made up of 123 students who scored between 27 and 37 on the dictation task; another group scored between 15 and 26, and the third scored between 2 and 14. The scores were scaled together to determine a single, composite score for every student. Teachers taught foundational concepts of phonological awareness, phonemic awareness, and phonemic segmentation--

this accounted for over 1/3 of the instructional actions documented. First graders often enjoyed poems, stories, and songs written on large sheets of paper. During both reading and writing, teachers frequently asked children to explain their strategies for figuring out a word and often taught reading strategies to decode the meaning of the text. Instruction addressed consonant and vowel patterns in the context of reading and writing activities. Phonics skills were taught in tandem with phonics strategies. Phonics instruction was not a separate curriculum but was woven into daily whole language activities. Many phonics events occurred within the writing program. Children wrote in sustained periods and received help from the teacher and other writers and phonics instruction addressed what children were working on at the moment. Teachers kept progress on individual children and used ongoing assessments to help plan instruction. Gain scores for groups 1 and 3 were not statistically different, and the gain for group 2 was statistically greater. Since phonics was taught in whole language classroom and not separately, the researchers concluded that there should not be a dichotomy between whole language and phonics instruction.

The credibility of this case study is strengthened by the description of the data gathering procedures used, theoretical background and description of the whole language-skills-based debate, derivation of coding categories, and presence of triangulation. The findings support evidence that whole language teachers do in fact teach phonics (Edelsky, Altwerger, & Flores, 1991; Newman & Church, 1990), suggesting that whole language and phonics are not two sides of a dichotomy. They also join a case study by Mills, O'Keefe, & Stephens (1992)

in documenting not only the presence of phonics teaching in whole language classrooms but also the intensity and pervasiveness of phonics teaching and learning. The findings are transferable to many settings because the subjects came from a wide variety of school settings, with consideration to economic groups, ethnicity, and location.

Compelled by research which shows that gaps in reading performance between Anglo and Latino children are associated with gaps in vocabulary knowledge, Carlo et al. (2004) used a nonequivalent control group design to examine the effects of a vocabulary enrichment intervention that combined direct instruction with real text in word-learning strategies on 254 bilingual and monolingual children from nine 5th grade classrooms in four schools in California, Virginia, and Massachusetts. They found that the treatment improved the performance of both the bilingual and monolingual children.

The participants in the study were 254 bilingual and monolingual students from nine 5th grade classrooms in four schools in California, Virginia, and Massachusetts. The California site included two schools serving largely working class Mexican American children, either bilingual or mainstream programs. The Massachusetts site served working class, mostly Puerto Rican and Dominican students (again within either bilingual or mainstream classrooms) within a school where many of the teachers and administrators were bilingual. The Virginia site was a magnet, English-medium school that served mainly working class Spanish speakers from the Caribbean and from Central America, together with native speakers of many other languages and middle class English only speakers

attracted to its excellent academic programs.

The study used a quasi-experimental design in which classroom at each site were randomly assigned to treatment and comparison conditions, which resulted in the assigned of 10 classes to the treatment (3 in CA, 4 in VA, and 3 in MA). Students in the comparison groups did not receive special instruction other than normally included in the school curriculum thought their teachers did participate as members of school teams to promote depth of word knowledge (e.g., word association tasks, synonym/antonym tasks, semantic features analysis). The curriculum provided included detailed lesson plans and quasi scripted lesson guides, as well as overhead transparencies, worksheets, homework assignments, and all necessary reading materials. The intervention lasted for 15 weeks. Ten to 12 target words were introduced at the beginning of each week. Instruction was delivered 30-455 minutes per day, four days a week. Researcher assessed reading comprehension using multiple choice, cloze passages with content words deleted at random. The mastery test consisted of 36 target word multiple choice items. The word association task, originally developed by Schoonen and Verhallen (1998), measured depth of word knowledge by tapping into children's knowledge of paradigmatic and syntagmatic word relations.

The intervention group showed greater gains in the course of the school year than did the comparison group ( $F = 11.46$ ,  $p < .001$ ). The intervention was found to be effective in improving reading comprehension for both ELLs and English-only students. The researchers concluded that direct vocabulary

instruction is effective, with both ELL and EO learners, if it incorporates the various principles gained from previous work on monolingual speakers and ELLs (Beck et al., 1987, 2002; Graves, 2000; Nagy, 1997; National Institute of Child Health and Human Development, 2000; Stahl & Fairbanks, 1986): new words should be presented in engaging texts that are of interest to the learner, many activities which allow learners to manipulate and analyze word meaning should be used, and children should be given multiple opportunities to use the words in various writing tasks meaningful to them.

The control group design of the study strengthened the findings, but because the study was only implemented over 15 weeks, the results are less credible. The intervention would have to be implemented for a longer period of time to establish that the treatment was not effective. The experimenters designed by, although they claimed that their psychometric properties were found to be satisfactory (another flaw is the fact that they didn't explain how they were found to be satisfactory). The researchers relied on cloze procedures, which are often used to study the interaction between comprehension and word knowledge. Concerns have been raised about the value of cloze tests as measures of comprehension (Shanahan, Kamil & Tobin, 1982).

The studies in this section highlight the effectiveness of balanced reading approaches in literacy instruction for ELLs. The case study by Dahl and Scharer (2000) showed student success in a program that used 1/3 of instructional time teaching foundational concepts of phonological awareness, phonemic awareness, and phonemic segmentation. Carlo et al. (2004) examined the

effects of a vocabulary enrichment intervention that combined direct instruction with real text in word-learning strategies on 254 bilingual and monolingual children from nine 5th grade classrooms in four schools in California, Virginia, and Massachusetts. They found that the treatment improved the performance of both the bilingual and monolingual children. The studies in this section show that explicit instruction in phonics and other literacy skills is an important part of instruction for ELLs, which needs to be combined with rich, authentic literacy experiences.

### **Chapter Two Summary**

Chapter Two was a review of the research about the effectiveness of various interventions for ELLs, language minority students, and struggling readers. The findings of the studies were summarized and analyzed, based on the conclusions the researchers provided. The research was reviewed to examine how the use of whole language practices impacts the literacy skills of ELLs. The research in the first section indicated CBM is not a good measure of English reading proficiency for ELLs and that patterns of literacy development are similar for both ELLs and native English speakers. The second section examined studies showing the effects of phonics/skills-based interventions on ELLs and suggested that explicit instruction in literacy skills must be combined with high student engagement and whole language practices such as the opportunity to use new vocabulary in real world contexts. There was also evidence in the second section that positively supports the explicit instruction of phonological awareness skills. The studies found that vocabulary instruction was

beneficial for ELLs when combined with meaningful text, and that direct spelling instruction is ineffective when students aren't given meaningful contexts in which to practice the words. Studies in the section also provided strong evidence in favor of instruction in phonological awareness for ELLs, pointing to evidence that this instruction can increase phonemic awareness, phonics, fluency, vocabulary, and comprehension and have positive effects on the reading comprehension and oral fluency of ELLs. There was also evidence that RTI and small group interventions can be beneficial for ELLs. The third section of Chapter Two analyzed several studies that provided good evidence that bilingualism is a strong asset which can equate to increase metacognition and transfer of literacy skills between languages, and that the direct teaching of skills in metacognition is beneficial for ELLs. The fourth section of Chapter Two showed the positive effects of whole language-oriented practices such as using real texts and meaningful literacy activities, peer instruction, and varied literacy tasks and purposes. Key findings were that immersion in real literature, theme-based literacy activities, free reading and writing, student choice in text and activities, and above all, a focus on semantics over syntax and grammar are the elements of good literacy instruction for ELLs. Also, raising the self-efficacy and interest of students was found to be important in literacy instruction for ELLs. The fifth and final section of chapter focused on balanced literacy approaches to teaching ELLs and detailed studies which clearly demonstrate that whole language teachers do not necessarily leave out basic processing skills, and that rich whole language philosophies of teaching and skills-based instruction are not mutually

exclusive. In conclusion, the studies in this paper demonstrated that ELLs make progress in English spelling and vocabulary acquisition, reading comprehension, listening comprehension, fluency, and writing when they are given good models, real texts which are meaningful to them, the opportunity to work with peers on activities that matter to them, and a supportive classroom environment that values their many funds of knowledge in language and literacy.

## CHAPTER THREE: CONCLUSION

### **Introduction**

Chapter One presented an overview of the divide on teaching reading skills to children that ruled educational debates of the 1980s and 1990s. Many studies showed that teaching phonics increased reading comprehension as evidenced by test scores. Compelled by high-stakes testing after education mandates such as No Child Left Behind, schools began to use more and more phonics instruction in the teaching of reading skills. Proponents of whole language held firmly that in order to become fluent readers, they must use all four of the cueing systems--not just graphophonics--to make meaning from text. Many scholars in the arena of reading have argued that the dichotomy between whole language and phonics was false to begin with and should be overshadowed by focusing on achieving the right balance of both methods. The combination of the two approaches, known as Balanced Literacy, has continued to evolve over the last few years as new research has revealed the benefits of both phonics and authentic reading (Pearson, 2004).

The guiding research question of this paper was: what are promising practices for increasing the literacy skills of English language learners? Chapter Two described 30 studies that examined the effects of various practices on English Language Learners and struggling readers, including reading interventions that taught explicit skills in phonics, vocabulary, spelling, phonological awareness, phoneme segmentation, and metacognitive analysis. The studies showed that stages of literacy development are similar for both ELLs

and native English. The results also showed the positive effects of explicit teaching of phonological awareness skills. Vocabulary instruction was found to be beneficial for ELLs when combined with meaningful text. Also, direct spelling instruction was found to be ineffective when students weren't given meaningful contexts in which to practice the words. Further, strong evidence was provided in favor of instruction in phonological awareness for ELLs, pointing to evidence that this instruction can increase phonemic awareness, phonics, fluency, vocabulary, and comprehension and have positive effects on the reading comprehension and oral fluency of ELLs. There was also evidence that RTI and small group interventions can be beneficial for ELLs. Bilingualism was shown to be a strong asset which can equate to increase metacognition and transfer of literacy skills between languages, and direct teaching of skills in metacognition is beneficial for ELLs. Studies provided positive support for whole language practices such as using real texts and meaningful literacy activities, peer instruction, and varied literacy tasks and purposes. Key findings were that immersion in real literature, theme-based literacy activities, free reading and writing, student choice in text and activities, and above all, a focus on semantics over syntax and grammar are the elements of good literacy instruction for ELLs. Also, raising the self-efficacy and interest of students was found to be important in literacy instruction for ELLs. Finally, studies provided strong evidence for balanced literacy approaches to teaching ELLs, showing that rich whole language philosophies of teaching and skills-based instruction are not mutually exclusive. In conclusion, the studies in this paper demonstrated that ELLs make progress in English spelling and

vocabulary acquisition, reading comprehension, listening comprehension, fluency, and writing when they are given systematic, explicit instruction, good models, real texts which are meaningful to them, the opportunity to work with peers on activities that matter to them, and a supportive classroom environment that values their many funds of knowledge in language and literacy. Chapter three includes a summary of findings from Chapter two, implications for classroom practice, and suggestions for further research.

### **Summary of the Findings**

The major findings from Chapter Two were that the literacy development of native English speakers is similar to that of ELLs, explicit spelling interventions are not effective for ELLs unless they provide an opportunity for students to use their new vocabulary in various real world contexts, peer-assisted learning strategies are effective for ELLs. Further, the studies provided strong evidence that explicit instruction in phonological awareness is key for helping ELLs improve their literacy skills, that biliteracy increases literacy skills in English, and that metacognition skills transfer from home language to English. Chapter Two also described several studies that show the positive effects of whole language practices on vocabulary, spelling, reading comprehension, self-efficacy, and writing for ELLs. All of the studies in the section on skills-based reading interventions suggested that free reading and writing, inquiry, student choice, encouragement of interaction with text, and use of authentic texts leads to increased literacy skills for ELLs. Finally, studies showed that there is a false dichotomy between whole language and skills-based instruction and that the

literacy skills of ELLS are increased when phonological processing, metacognition, and reading and writing strategies are explicitly taught, but not divorced from the opportunity to use these skills in real and meaningful contexts.

### **Literacy Teaching Methods For Native English Speakers Compared to Those for ELLs**

Baker and Good (1995) found Curriculum-Based Measurement to be a reliable indicator of the reading skills of ELLs. The results of the study are strengthened by its design which controls for maturation, history, and testing. Fitzgerald, Amendum, and Guthrie (2008) found that the pattern of Latino English-language learners' reading growth across two years was the same as their native English speaking peers' growth, with ELLs witnessing a steep learning curve in reading subprocesses. The results are strong due to the time series design and interrater reliability.

### **Skills-Based Interventions for English Language Learners**

Cañado (2006) found that an explicit, systematic intervention program in English spelling on 43 third cycle primary education students (aged 10 to 12) made greater gains than non-treated students in five dimensions of spelling: visual/auditory, morphological, orthographic, semantic, and capitalization and punctuation, but the study was weak due to an absence of p values, lack of discussion of any variation within or between the groups, and the lack of transferability in the results of study. Mancilla-Martinez (2010) found significant gains in vocabulary and increased writing skills for 5th grade language minority students after implementation an explicit vocabulary intervention which combined

vocabulary learning with opportunities for using the words in new writing and discussion contexts. The results were strengthened by internal validity: there was no subject attrition and the groups were evenly matched.

Calhoun, Al Otaiba, Cihak, King, and Avalos (2007) found that a supplemental peer-mediated reading program improved the reading achievement of 76 first grade English language learners in a Title 1 elementary school in the southwestern United States. This was a strong study due to external and internal validity, supporting the results of other research and accounting for factors such as history, testing, and instrumentation. Denton, Anthony, Parker, and Hasbrouck (2004) found that the Read Naturally intervention led to improved ability of ELLs to read bilingual words, however the study was weak because the authors failed to provide p values for all measures, and because the sample size was a flaw (which the authors did not discuss). Although the tutored students made progress in word identification, the intervention was too short to witness effects in raising the comprehension, vocabulary, and decoding skills of the ELLs. This suggests that explicit vocabulary and comprehension instruction alone is ineffective in raising the literacy skills of ELLs. De la Colina, Parker, Hasbrouk, and Lara-Alecio (2001) found that an intensive reading intervention was valuable for low-achieving at risk students in the first and second grade Spanish/English bilingual classrooms if students were highly engaged, but the study's design not control for several factors including history, maturation, testing, and instrumentation. Because there was no control group, it was unclear whether the Read Naturally intervention had a positive effect on the subjects. Positive effects of the program

were shown to occur only when student levels of engagement were high, suggesting that teachers who focus on student engagement will likely improve the reading success of ELLs. The findings contribute to existing empirical studies that show the success of reading intervention in Spanish in the U.S. (Bernal, 1994), but it is clear that the Read Naturally intervention does not support vocabulary development or reading comprehension for ELLs, a finding supported by the research of Denton et al. (2004). Gunn, Biglan, Smolkowski, and Ary (2000) found that supplemental instruction in reading for Hispanic and Non-Hispanic students in kindergarten through Grade 3 increased their skills on measures of word attack, word identification, oral reading fluency, vocabulary, and reading comprehension. The study was strengthened by its external validity, supporting a growing body of research that suggests instruction and practice in alphabetic reading skills increases ELLs' ability to decode words and become fluent in word recognition. Ross and Begeny (2011) found that five 2<sup>nd</sup> grade ELLs improved on at least one of two standardized reading measures after administering an 8 week intervention. They found that one on one and small group interventions are likely to be more effective than no treatment. Procedural integrity, transparency, and external validity strengthened the results.

Leafstedt, Richards, and Gerber (2004) found that an intensive 10-week intervention in phonological awareness improved the word reading of 64 kindergarten ELLs. The external validity of the study is strengthened by the fact that results have been replicated in other studies (Gunn et al., 2002), but the weaknesses of the study overshadow its strengths: it contained a small sample

size and the fact that the control group contained 46 students while the intervention group contained only 16 suggested that the results might not be representative or stable. Internal validity is also threatened by regression effects and the rapid maturation of the kindergarten students—these factors, not the intervention, may have accounted for increased performance over time. The researchers did not discuss possible regression towards the mean. Ehri, Dreyer, Flugman, and Gross (2007) found that the Reading Rescue intervention improved the reading fluency, phonological awareness, comprehension, and vocabulary of 64 struggling first-grade language-minority readers, but regression threatened the validity of the results, as did maturation effects. Also, because subjects already possessed letter-naming skills, they may have been easier to tutor in the RES intervention. Vaughn, Mathes, Linan-Thompson, Cirino, Carlson, Pollard-Durodola, and Francis (2006) found that a 7 month English intervention improved English letter naming skills, phonological awareness, and reading skills for 22 students in a transitional bilingual program, findings that are supported by the study of the design, which controlled for history, testing, instrumentation, and mortality. Faust and Kandelshine-Waldman (2011) found that whole language approaches to reading instruction (ARI) did not compensate for difficulties in bottom-up processes of low-achieving readers and that any improvement in basic processes involved in reading proficiency produced by whole language ARI for both low achieving and normal achieving readers dissipated by grade three. This conclusion is nullified by the weak design of the study: the authors did not conduct a pretest, performed no interventions, and conducted tests only once.

Kamps, Abbott, Greenwood, Arreaga-Mayer, Wills, Longstaff, Culpepper, and Watson (2007) gave positive support for secondary tier interventions using direct instruction and showed the benefits of secondary-level small group reading instruction as an early intervention for ELL students; this finding concurs with other studies showing the benefits of tiered instruction as an early intervention. Vadasy and Sanders (2010) found that supplemental phonics instruction significantly improved the alphabets, spelling, passage reading fluency, and comprehension of 84 language minority kindergarten students.

### **Bilingualism, Biliteracy, and Metacognition**

Jimenez et al. (1996) found that 8 bilingual Latino/a children who were considered successful readers used three metacognitive strategies for reading (transfer of information across languages, translation from one language to another, and access of cognate vocabulary). Though the sample size of the study was small (11 bilingual students and three monolingual students), the case study was strong due to its triangulation, transparency, and dependability. Olson and Land (2007) found that the California Writing Project's (UCIWP) cognitive strategies approach (Pathway) had a positive effect on the reading and writing abilities of 2000 limited English proficient students in a large, urban low-SES school, a finding strengthened by a strong design that controlled for history and maturation, external validity, member-checking, and triangulation.

### **Use of Whole Language Approaches to Improve The Literacy Skills of English Language Learners**

An ethnography conducted by Gersten (1996) found effective instruction for

language minority student to include: selecting key vocabulary concepts, providing feedback on meaning rather than syntax or grammar, and actively encouraging students to express ideas and concepts. These results were strengthened by the study's design which was transparent, credible, and transferable. Stice and Bertrand (1990) found that 50 low-income first and second graders in middle Tennessee in whole language classrooms performed as well as or better than their counterparts from traditional classrooms on standardized achievement tests in reading, retold more fully the stories they read, did as well or better in spelling, appeared more confident in their reading, and appeared to possess a wider variety of reading strategies. These results corroborate others in this section, and contain external and internal validity. Saunders and Goldenberg (1999) found that use of literature logs and instructional conversation improved the reading comprehension of 116 fourth and fifth graders who were limited English proficient and English proficient students, a finding strengthened by the true experimental design of this study which controlled for factors such as history, instrumentation, and maturation. Also, the researchers were transparent about the differences in testing among the groups-- they had qualitatively different instructional experiences and received different amounts of instructional time. The subjects were evenly matched in all groups and testing methods were similar in all groups. Finally, the study was objective as it was under public study by other researchers. By conducting a year-long ethnography, Guccione (2011) found that ELLs used 11 literacy practices to construct meaning and benefited from being seen and seeing themselves as

valuable members of the learning community. Although the sample size of the study was a huge flaw, the findings are dependable because there is research to validate the efficacy of these reading comprehension strategies (Palincsar & Brown, 1984; Pressley et al., 1992). Kucer and Silva (1999) found that a whole language curriculum which included paired reading, reader response groups, compare/contrast activities, learning logs, writing conferences, and modified cloze procedures had a positive impact on the literacy development of 26 Mexican-American third graders beginning a transition into a whole language classroom. These results support the research of Perez (1994) and are credible because they include data from multiple sources and explain data analysis procedures.

Ulanoff and Pucci (1999) found that 60 third grade ELLs scored higher in reading comprehension when they used preview-review as opposed to concurrent translation. Put another way, they made greater gains when the teacher built background knowledge by previewing important points and reviewing difficult vocabulary than when they translated the story from English to their home language (Spanish).

Dahl and Freppon (1994) studied children's interpretations of their reading programs and found that enjoyment of literature was crucial to both studies. They also found that subjects in the whole language group had more self-efficacy as readers and writers. Given the lack of research of this kind, the results lack dependability. There was no measure of phonemic awareness in the quantitative measures of pre- and post-test comparison; therefore, claims about phonics

growth are limited to patterns documented in field notes of classroom observations. After conducting a case study, Lim and Watson (1993) found that a content-rich whole language curriculum delivered over a summer course increased involvement and reading comprehension for on 10 second and third grade children, however the study had many flaws such as possible bias, lack of description of category coding or data analysis procedures, lack of member checking, and lack of description of decision-making. After conducting a year-long case study, Kuball and Peck (1997) found that whole language based instruction had a positive impact on the writing skills of Spanish-speaking ELLs; their study was dependable and supported the work of Cummins (1989), Edelsky (1986), Gursky (1991), and Perez & Torres-Guzman (1992).

El-Koumy (2000) found that high ability EFL students who learned with whole language scored higher on listening comprehension than students who learned with a phonics-based approach, but the results of the study are dubious given the fact that the differences in scores between groups were not large enough to provide confidence in the findings. Also, there was no description of inter-rater reliability and the results lack transferability to other studies in this paper, as the subjects were college-age students. Davis (2010) found that instructional practices, student engagement, and interest in reading were interdependent factors in literacy learning for 19 second grade students in a K-5 private elementary school. They found that both the student-centered and skills-based curricula impacted students' literacy experiences in measurable ways, but that student choice and collaboration led to increased engagement in and

enjoyment of reading. These findings are dependable as they support research showing increased literacy learning in student-centered curriculum and greater development as readers (citing Dahl & Freppon, 1995).

### **Effects of Whole Language Instruction Approaches Combined With Skills-Based Instruction on the Literacy Skills of ELLs**

Dahl and Scharer (2000) found that phonics skills and concepts accounted for over 1/3 of instruction in whole-language classrooms in diverse school settings. This was a strong case study because of its transparency, derivation of coding categories, triangulation. The findings support evidence that whole language teachers do in fact teach phonics (Edelsky, Altwerger, & Flores, 1991; Newman & Church, 1990), supporting the widely held position that whole language and phonics are not two sides of a dichotomy. Carlo et al. (2004) found that a vocabulary intervention combining direct instruction and real text improved the performance of both bilingual and monolingual children. The control group design of the study strengthened the findings.

### **Classroom Implications**

The findings from the studies in section one of Chapter Two suggest that teachers working with ELLs should understand how language develops and how to assess reading skills. Teachers who have an awareness of the English reading development of ELLs can provide better instruction by knowing what is developmentally appropriate reading instruction. The studies in this paper showed that explicit, systematic vocabulary and spelling interventions should always give students opportunities to use their new vocabulary in various real

world contexts. Strong studies in Chapter Two showed that vocabulary interventions were more effective with high levels of engagement, the opportunity to use literacy skills, ample reading time, and structured literate discourse about stories, which are all instructional strategies that have been associated with long-term positive effects for ELL students (Graves et al., 2004). Based on this statement, it is likely that student engagement, practice, and literacy-rich environments are important factors in any program for ELLs. Studies in the second section of Chapter Two support the use of peer-assisted learning strategies, practice in decoding skills, using text relevant and meaningful to students, and explicit vocabulary instruction connected with meaningful contexts for practice. The findings from the studies of the third section suggest that good teaching practices for increasing the literacy skills of ELLs include finding ways for students to use these metacognitive skills and encouraging them to continue to strengthen their skills in their home languages. Encouraging students to strengthen their skills in both English and their home language and finding ways for them to use metacognitive skills such as cognate recognition will likely increase their literacy skills, in turn improving their comprehension of texts in all content areas. Findings from the fourth section suggest that teachers should always activate prior knowledge and review words and concepts before teaching them, create reading and writing opportunities that aren't only related to school, find ways to increase students' sense of self-efficacy, use purposeful, content-rich texts, and find ways to increase students' enjoyment of texts. Findings from final section show that vocabulary interventions are effective when new words

are presented in engaging texts that are of interest to the learner, include many activities which allow learners to manipulate and analyze word meaning, and when children are given multiple opportunities to use the words in various writing tasks that are meaningful to them.

In conclusion, the findings of the studies in this paper show that classroom teachers can support literacy skills of ELLs (and support ELLs academically in all content areas) by promoting students' literacy in their home language, because their literacy skills will transfer from language to language. Teachers should also provide systematic and explicit instruction in decoding skills, phonological awareness, reading strategies and writing strategies along with real and meaningful opportunities to practice these skills. Teachers can avoid basal readers, spellers, and worksheets, and use pull out instruction only when they've deemed other options are not viable. Using small group interventions, giving students the opportunity to work with peers, and offering choice in text and writing topics are also powerful teaching practices for ELLs. Teachers in all content areas can increase ELLs' positive self concept as readers, writers, and students by combining inquiry with literacy. For example, science teachers can collect expository texts related to scientific concepts for their students, model their own questions and curiosities about specific topics, and model using literacy practices to engage in meaningful projects such as posters, presentations, models, etc. Teachers should always allow students to browse texts of interest to them, ask questions, and be provided meaningful feedback on their thoughts and work.

## **Suggestions for Further Research**

The majority of the studies in this paper addressed the effects of instruction on students in the elementary grades. There is a clear need for research on the effectiveness of different methods of instruction in the upper grades and on ways to increase content area literacy skills that will increase ELLs' chances of succeeding in high school. One shortcoming of the studies that examined the effects of skills-based instruction on vocabulary acquisition was the omission of word description. Research shows that low frequency academic words encountered in middle and secondary school texts is a huge obstacle for reading comprehension for ELLs (García, 1991; Nagy, 1997; Verhoeven, 1990). There is a need for research addressing vocabulary development of specific types of academic words.

## **Conclusion**

Best practices for improving the literacy skills of English language learners are constantly debated as the ELL population of U.S. public schools balloons. This paper examined research that studied a variety of teaching methods on the literacy development of ELLs. It examined research showing that practices for native speakers of English are also good for ELLs, skills-based interventions can be useful for ELLs if combined with good instruction, whole language approaches are good for ELLs as long as necessary skills are explicitly taught, and whole language and skills-based instruction need not be in competition.

The findings of the studies were summarized and analyzed, based on the conclusions the researchers provided. The research was reviewed to examine

how the use of whole language practices impacts the literacy skills of ELLs. The research in the first section indicated that patterns of literacy development are similar for both ELLs and native English speakers. The second section examined studies showing the effects of phonics/skills-based interventions on ELLs and suggested that explicit instruction in literacy skills must be combined with high student engagement and whole language practices such as the opportunity to use new vocabulary in real world contexts. There was also evidence in the second section that positively supports the explicit instruction of phonological awareness skills. The third section analyzed several studies that showed the positive effects of whole language. Key findings were that immersion in real literature, theme-based literacy activities, free reading and writing, student choice in text and activities, and above all, a focus on semantics over syntax and grammar are the elements of good literacy instruction for ELLs. The fourth and final section of chapter focused on studies which clearly demonstrate that whole language teachers do not necessarily leave out basic processing skills, and that rich whole language philosophies of teaching and skills-based instruction are not mutually exclusive. In general, the studies in this paper demonstrate that ELLs make progress in English spelling and vocabulary acquisition, reading comprehension, listening comprehension, fluency, and writing when they are given good models, real texts which are meaningful to them, the opportunity to work with peers on activities that matter to them, and a supportive classroom environment that values their many funds of knowledge.

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