

TEACHER'S USE OF LITERACY CENTERS TO PROMOTE LITERACY ACQUISITION IN
FIRST GRADE BILINGUAL STUDENTS IN A SOUTH TEXAS SCHOOL:
A QUASI-EXPERIMENTAL STUDY

A Dissertation

by

Fernando Hernandez

BS, Southwest Texas State University, 1997
MS, University of Texas Pan American, 2003

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This dissertation meets the standards for scope and quality of
Texas A&M University-Corpus Christi and is hereby approved.

Corinne Valadez, PhD
Chair

Bethanie Pletcher, PhD
Committee Member

Kamiar Kouzekanani, PhD
Committee Member

Charles Etheridge, PhD
Graduate Faculty Representative

August 2016

ABSTRACT

Improving reading performance among Hispanic students continues to be a national and state priority. According to the National Assessment of Educational Progress (NAEP) 2015 reading results, Hispanic students performed lower than other students in 4th grade. Furthermore, poor reading skills are connected to unfavorable life outcomes including incarceration (Sum, Khatiwada, McLaughlin & Palma, 2009). The purpose of this study was to investigate the effectiveness of literacy centers in first grade bilingual classrooms and its relation to students' Tejas LEE scores.

This quasi-experimental study took place in two elementary schools in a South Texas district during an 11 week period. Data were collected through BOY (Beginning of the year) and MOY (Middle of the year) Tejas LEE scores and classroom observations using the Contextual Elements Checklist for Literacy Centers, an a priori checklist containing the five Bates (2003) contextual elements. A nonprobability sample consisted of 104 first grade bilingual students (59 and 45 in the experimental and comparison groups, respectively).

Based on the quantitative results from the study, it was concluded that there was no statistically significant difference between those students who participated in literacy centers and those who did not based on the Tejas LEE scores. Therefore, the null hypothesis was not rejected. For the qualitative component, frequency coding was determined for each of the contextual elements. The characteristics with the highest frequency for each of the elements are as follows: small group instruction ($F = 51$); student's familiarity with routines and procedures ($F = 59$); resources related to literacy task ($F = 42$); scaffolding among children ($F = 38$); and literacy centers placed around the perimeter of the classroom ($F = 62$).

Given the growing number of Hispanics and recognizing the reading gap, it is important to find a solution to this problem. This study is a start in reducing the number of first grade students being retained due to their literacy ability. Further exploration and documentation of literacy centers especially quantitative research may assist in formulating effective instructional change in the future with bilingual students living in “colonias”.

DEDICATION

This dissertation is dedicated to the loving memory of my father Juan Hernandez, whom I hold eternally in my heart. I know that you are always looking over me and my mom from above. “Te amo, papi”.

This dissertation journey is also dedicated to my wife, Alicia Gutierrez and my two sons, Daniel and Enrique. Thank you for taking care of the boys while commuting to TAMUCC and coming back at 1:00 AM. I thank God for being with me throughout this journey. Thank you, mom for your consistent encouragement to continue with my education. These conversation that we both had while working in the fields has always been a catalyst to further my education:

“Ama, ya no quiero trabajar en la labor”(Fernando)

“ bueno ya sabes que tienes que seguir estudiando”(my Mom)

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To the teachers in the study, thank you for implementing literacy centers in your classroom to improve student’s literacy acquisition and taking time to prepare all the activities that were on the literacy center plans. My deep appreciation to the district’s superintendent and the two principals that allowed me to conduct my study in their schools.

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Chapter I: Introduction

Background & Setting

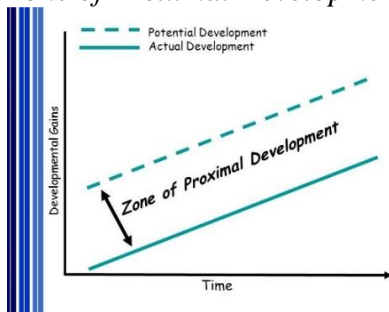
In primary education, there is an emphasis on No Child Left Behind and closing the academic gap in student's performance. The answer to these issues lie in establishing a strong literacy foundation through the use of literacy centers. Researchers and early childhood educators have recognized the importance of play in children's learning and development (Fromberg, 2002; Singer, Golinkuff, & Hirsh-Pasek, 2006). It has been found that children acquire literacy skills when they are involved in literacy interactions in play environments. Play allows children to participate in reading and writing experiences that develop the literacy skills necessary for formal reading instruction (Saracho & Spodek, 2006). However, most of the research published has focused only on the early grades (PK & K) and not on grades higher than 1st grade.

The transition that students experience in kindergarten is different from first grade. In kindergarten, students are engaged in different literacy centers to promote literacy development and socialization skills. They work with blocks, experiment with the sand and water table, play in the dramatic area and participate in games and songs. When students advance to first grade, they are bombarded with skills in preparation for assessments administered daily or weekly, leaving little time for play. In fact, play is viewed as a waste of time and is rapidly disappearing (Miller & Almon, 2009). First grade students need the opportunity to be engaged in different types of play to acquire the necessary knowledge to be successful readers and writers (Tyre, 2006).

Theoretical Framework

The theoretical framework for the implementation of literacy centers in four bilingual first grade classrooms is based on the sociocultural and constructivist theories of Lev Vygotsky and Jean Piaget. Vygotsky posited that children learn more from one another than from manipulating objects. By interacting with others, children will be able to complete tasks that they are unable to complete individually (Noddings, 2007). Vygotsky introduced the concept of the Zone of Proximal Development (ZPD), as shown in Figure 1. According Vygotsky (1978), “it is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). McLeod (2014) added that interaction with peers is an effective way of developing skills and strategies. Riddle (2009) described the instructional design based on Vygotsky’s theory. This theory requires the teacher and students to adopt untraditional roles as they collaborate with each other. The physical classroom should contain clustered desks or tables for peer instruction, collaboration, and small group instruction. The instructional design should promote and encourage student interaction and collaboration. Vygotsky supports play as a learning experience that allows for pretend play situations (Pass, 2004; Smidt, 2009).

Figure 1
Zone of Proximal Development (ZPD)



Source: *slideplayer.com*

Related to Vygotsky's theory is Piaget's theory (Piaget, 1962), which emphasized that a child acquires new knowledge by interacting individually with objects in order to construct meaning from them. Piaget believed that a child acquires knowledge by interacting with the world through assimilation and accommodation. Assimilation occurs when the child incorporates new information with prior knowledge. Accommodation occurs when children change their existing schemes to incorporate new information (Morrow, 2005). Equilibrium occurs when the student's cognitive structure contains knowledge about the embedded concepts in a lesson. If the student is in disequilibrium, the teacher needs to establish a state of equilibrium in order to construct new discoveries (Renner et al., 1976). In addition, Piaget identified four stages in cognitive development that children undergo: sensori-motor, pre-operational, concrete, and formal (Blake & Pope, 2008; Morrow, 2005). Play, for Piaget, was appropriate only in early life experience and was considered a waste of time once the child surpassed the early stage of development. According to McLeod (2014), the classroom environment should be centered on active discovery learning, where the role of the teacher is to facilitate learning. The following should be encouraged in the classroom: focus on the process rather than the end product; implement active methods that require rediscovering; plan and integrate collaborative and individual activities; devise situations that present useful problems and create disequilibrium; and set suitable tasks based on the level of the child's development (McLeod, 2015). Morrow (2005) added that a curriculum using Piaget's work should stress the use of centers that involve children in the following cognitive activities:

1. Language development: talking, listening to stories, describing;
2. Classifying: describing attributes of objects, notice sameness and differences, sort, match;
3. Seriating: arranging objects by color, size, shape;

4. Representing in different modalities: learning about something in many different ways, and;
5. Spatial relations: putting things together, taking things apart, rearranging things, reshaping things, seeing things from a different point of view, describing direction, distance.

Statement of the Problem

Improving the reading performance of Hispanic students continues to be a national and state priority. The Nation's Report Card is an ongoing assessment of what U.S. students know and can do in different subjects. According to the National Assessment of Educational Progress (NAEP) 2015 reading results, Hispanic students performed lower than other students in 4th grade. Hispanics obtained an average score of 208 (21%), while Whites scored a 232 (46%), resulting in a 25 point gap in average score. Students eligible for National School Lunch Program (NSLP) obtained an average score of 209, while English Language Learners received an average score of 189. Furthermore, in the state of Texas, 4th grade Hispanic students obtained an average score of 210 compared to White students who received an average score of 235, scoring 25 points higher than did Hispanic students (NAEP, 2015). In the spring of 2015, results of the 3rd Grade Reading Spanish STAAR (State of Texas Assessments of Academic Readiness) test showed 12,671 (35%) students received a level I score, meaning that reading skills were not mastered (Texas Education Agency, 2016).

The need to improve reading ability in first grade to avoid retention, especially for Hispanic students is of great concern in Texas. In the 2013-2014 school year, first grade students in Texas had a higher retention rate of 4.6% (18,378 students) than any other elementary grade. Hispanic first grade students had a retention rate of 5.3% (11,547 students). Students identified

as economically disadvantaged had a retention rate of 5.9% (15,596 students), compared to non-economically disadvantaged students, who had a 2.1% retention rate (2,737 students) (Texas Education Agency, 2015). According to Kenneady (2004), retention is strongly associated with dropping out of school in later years. A retained student is 50% more likely to drop out of school than a non-retained student; two retentions increase that probability to 90%. According to the Annie E. Casey Foundation study, 33% of Hispanic students who had poor reading skills and were economically disadvantaged, did not finish school (Hernandez, 2012). Furthermore, poor reading skills are connected to unfavorable life outcomes. Northwestern University study revealed that young male high school dropouts were 47 times more likely to be incarcerated than their similarly aged peers who held a four year college degree (Sum, Khatiwada, McLaughlin, & Palma, 2009).

Purpose of the Study

The purpose of this pretest-posttest, nonequivalent quasi-experimental study was to investigate the use of literacy centers in first grade bilingual classrooms and its relationship to students' Tejas LEE scores. Through pre and post Tejas LEE reading inventory scores and classroom observations, the researcher investigated the impact that literacy centers have on literacy development. The researcher examined whether there was evidence to reject the following null hypothesis: There is no difference in first grade bilingual students' Tejas LEE scores between teachers who implement literacy centers and those who do not. The alternative hypothesis tested by this study was that there is a significant difference in first grade bilingual students' Tejas Lee scores of teachers who implement literacy centers and those who do not.

Research Questions

The study answered the following research questions:

1. How do Tejas LEE scores differ in first grade bilingual classrooms of teachers implementing literacy centers and those who do not?
2. How do first grade bilingual teachers promote literacy acquisition during the implementation of literacy centers?

Significance of the Study

The use of literacy centers with bilingual students has been largely unexplored. Information on literacy centers exists mainly in how-to books and a few dissertations, and even fewer studies done specifically with bilingual prekindergarten students. This study contributed to the literature by attempting to fill this void in research by examining the possibilities of fostering literacy acquisition through the implementation of literacy centers with economically disadvantaged Hispanic students, living in “colonias,” who are considered “at-risk” of dropping out of school. According to the Texas Education Agency (TEA), under the state compensatory education program, a student of limited English proficiency is considered at-risk, based on the following criteria as defined by Section 29.052: (a) is in PK-3rd and did not perform satisfactorily on a readiness test or assessment instrument during the current school year; (b) is in grades 7th – 12th and did not maintain a 70 in two or more subjects; (c) was not advanced from one grade level to the next for one or more school years; (d) did not perform satisfactorily on an assessment instrument under TEC Subchapter B, Chapter 39; (e) is pregnant or is a parent; (f) has been placed in an alternative education program; (g) has been expelled in accordance with TEC §37.007; (h) is currently on parole, probation, deferred prosecution, or other conditional release; (i) was previously reported through the Public Education Information Management System

(PEIMS) to have dropped out of school; (j) is a student of limited English proficiency, as defined by TEC §29.052; (k) is in the custody or care of the Department of Protective and Regulatory Services or has, during the current school year, been referred to the department by a school official, officer of the juvenile court, or law enforcement official; (l) is homeless, as defined NCLB, Title X, Part C, Section 725(2); (m) resided in the preceding school year or resides in the current school year in a residential placement facility in the district, including a detention facility, substance abuse treatment facility, emergency shelter, psychiatric hospital, halfway house, or foster group home. A student only has to meet one of the criteria, in order to be considered at-risk (TEA, 2016).

Definition of Terms

For the purpose of the study, the following definitions were adopted:

At-Risk Student: a student who is at risk of dropping out of school based on the identified indicators

BOY (Beginning-of-Year): the time frame during the school year to administer the Texas LEE, usually two weeks after school starts for first and second grade

Bilingual student: a student who is in the dual language program and receives Spanish Language Arts instruction

“Colonia”: a residential area along the Texas-Mexico border that may lack some of the most basic living necessities, such as potable water and sewer systems, electricity, paved roads, and safe and sanitary housing

Differentiated Instruction: adjusting and varying instruction, materials, activities, requirements, choices, and learning environment in response to individual children’s strengths and needs

Dual Language Program: any program that provides literacy and content instruction to all students through two languages and promotes bilingualism and biliteracy, grade-level academic achievement, and multicultural competence to all students

Economically disadvantaged student: a student who comes from a family with an annual income below a level based on the U. S. Bureau of the Census Thresholds and meets the eligibility for free or reduced-priced school meals

Fluency: reading text with speed, accuracy, and proper expression; not hurried reading. The words correct per minute (WCPM) reading rate is calculated by the following formula: number of words attempted minus number of words read correctly divided by total seconds read times 60

Frustrational Level: Student reads less than 90% of words correctly in a passage

Independent Level: Student reads 95% or more of words correctly in a passage

Instructional Level: Student reads 90% to 94% words correctly in a passage

Literacy Centers: areas in the classroom that allow students to develop cognitively through interaction with various developmentally appropriate activities in place

MOY (Middle-of-Year): Tejas LEE is administered to first grade students in the middle of the year, which is usually at the beginning of January

National School Lunch Program: a federally assisted meal program operating in public and nonprofit private schools and residential child care institutions; provides nutritionally balanced, low-cost or free lunches to children each school day

Texas Essential Knowledge Skills (TEKS): Texas state standards for what students should know and be able to do at each grade level

Summary of the Chapter

This chapter presented an introduction to the study and discussed the following sections: theoretical framework, statement of the problem, purpose of the study, research questions, significance of the study, and definitions of terms. In chapter two, information regarding the implementation of literacy centers and other related concepts is presented.

Chapter II: Literature Review

This chapter reviews literature pertinent to the study on the implementation of literacy centers with first grade bilingual student in south Texas schools. This chapter is divided into the following topics to better inform the reader: (1) Bilingualism, (2) Dual Language, (3) Economically Disadvantaged Students, (4) Differentiated Instruction, and (5) Literacy Centers.

Bilingualism

The U.S. Census Bureau (2000, 2010) has reported a steady increase in the number of people of Hispanic/Latino ethnicity in the United States. In 2000, the population for the Hispanic or Latino race was 35,305,818. Just ten years later, the population increased to 50,477,594; an increase of 15,171,776. Currently, the Hispanic population in the United States is 50 million (U.S. Census Bureau, 2015). This growing population has resulted in another sub-group showing considerable growth every year across the United States, English Language Learners (ELLs). ELLs may also be termed Limited English Proficient (LEP) students. The term LEP replaced the Limited English Speaking (LES) during the Reauthorization of Bilingual Education Act Title VII of the Elementary and Secondary Education Act (ESEA) in 1978 (Baker, 2006).

The number of ELL students enrolled in public schools in the United States was higher in 2013-2014 (estimate of 4.5 million students, equivalent to 9.3 percentage) compared to 2003-2004 (4.2 million students, equivalent to 8.8 percentage) (National Center for Education Statistics, 2015). In 2013-2014, five states in the West had an enrollment of 10% or more of ELLs in public school: Alaska, California, Colorado, Nevada, New Mexico, Oregon, and Texas (Digest of Education, 2015). Texas ELLs enrollment in 2012-2013 consisted of 739,639 compared to 625,946 in 2002-2003, an increase of 113,693 students that participate in programs

for English Language Learners (TEA, 2015). The large numbers of ELLs in the state of Texas affect the type of instruction that is implemented in the classroom.

Historical Perspective

Several types of bilingualism have been used in the history of bilingual education in the United States. In sequential and simultaneous bilingual acquisition, the learner is exposed to the learning of the second language until mastery of native language is evident. If students know how to read in their native language, all they have to do is to transfer the same reading skills to another language. However, in simultaneous acquisition, the student learns both languages at the same time but depends on both the amount and the types of exposure to each language (Field, 2011). In addition, bilingual education programs are placed into one or two subcategories: (a) additive, or (b) subtractive. Additive bilingualism occurs when students' competence in their second language is added to the competence in their native language; in other words, students are said to be either proficient in either languages or are becoming proficient and have positive attitudes to both languages (Baker, 2006; Field, 2011). In contrast, in subtractive bilingualism the student learns the second language at the cost of the first language, thereby devaluing native language (Baker, 2006). Subtractive bilingual education programs in the United States include the following: (a) transitional bilingual education, (b) structured English immersion, (c) new comer centers, (d) ESL programs, and (e) submersion education programs.

Texas offers two types of programs to meet the needs of ELLs, the bilingual education program and the English as a second language program (TEA, 2015). Chapter 89, Subchapter B notes the following policy about educating English Language learners:

It is the policy of the state that every student in the state who has a home language other than English and who is identified as an English language learner be provided

a full opportunity to participate in a bilingual education or English as a second language (ESL) program, as required by the Texas Education Code (TEC), Chapter 29, Subchapter B (Texas Education Code §89.1201 (a), 2012, p. 16).

The goal of a bilingual education program is to enable English language learners to become competent in listening, speaking, reading, and writing in the English language through the development of literacy and academic skills in the primary language and English (Texas Administrative Code § 89.1201 (a), 2012, p. 16). The No Child Left Behind (NCLB), which replaced the Bilingual Education Act, made districts and schools accountable for the performance of LEP students in listening, speaking, reading and writing (Baker, 2006). Students' English proficiency in Texas is measured by the Texas English Language Proficiency Assessment System (TELPAS). The assessment is administered every spring to kindergarten through 12th grade students, and students are rated with either beginning, intermediate, advanced or advanced high in each of the four domains (TEA, 2016).

Texas offers four types of programs at the elementary level: transitional bilingual /early exit, transitional bilingual/late exit, dual language immersion/two-way, and dual language immersion/one-way (TEA, 2016). In the transitional bilingual early exit model, students receive literacy and academic content instruction through the use of their first language and are eligible to exit the program no earlier than first grade. In the transitional bilingual/late exit bilingual program the student is eligible to exit the program after six years but no later than seven years. Students enrolled in the dual language immersion two-way biliteracy program model receive instruction in both languages, English and Spanish. This model integrates students who are proficient in English with English Language Learners in the same classroom (Texas Education Code §89.1210 (d), 2012, p. 20). The dual language immersion one –way biliteracy program

serves students identified as limited English proficient. The goal of the four models is to transfer students to English only instruction after several years of instruction through the student's native language. Students enrolled in the transitional bilingual late exit, dual language immersion two-way or dual language immersion one-way can exit the program no earlier than six years or later than seven years. Upon exiting any of the mentioned programs, students can receive the services; however the school district will not be eligible for the bilingual allotment (Texas Education Code §89.1210 (d), 2012, p. 20).

Studies in Bilingual Education

Baker and De Kanter (1981) conducted a meta-analysis of 28 studies, dated 1968 to 1980, to evaluate the success of transitional bilingual education (TBE). TBE was the program promoted by the Office of Bilingual Education and Minority Language and by the Office of Civil Rights in the Department of Education to meet the needs for language-minority children. Baker and De Kanter (1981) wanted to find out the following: 1) Does TBE lead to better performance in English; and 2) Does TBE lead to better performance in nonlanguage subject areas? Results showed that there was not sufficient evidence for the effectiveness of TBE and instead immersion programs showed promising results. In addition, Baker and De Kanter's (1981) meta-analysis showed that the use of native language was not supported by the studies, and recommended that districts select the program that best met their students' language needs.

Willig's (1985) meta-analysis resynthesized the efficacy of bilingual education by analyzing 23 out of 28 studies included in the Baker and Kanter (1983) evaluation. The meta-analysis included two more selection criteria than Baker and Kanter's (1983) meta-analysis: studies that were conducted in the United States and in regular school programs in kindergarten or primary and secondary grades. On English measures, results showed small to moderate

differences favoring bilingual education for reading, language skills, mathematics and total achievement. In addition, the same results were found when tests were administered in other languages in reading, language, mathematics, writing, social studies, listening comprehension and attitudes toward school and self. Results reported a positive effect for bilingual education in reading (.20) and mathematics (.18), measured in English, and for all outcomes in the native language (.69).

Rossell and Baker's (1996) meta-analysis evaluated 72 studies to determine whether bilingual education was the most effective instructional approach for LEP children. The study included studies that were done outside of the United States, mostly from Canada. Rossell and Baker (1996) evaluated the effectiveness of transitional bilingual education (TBE) compared to submersion, ESL and structured immersion. Submersion is commonly known as the "sink-or-swim" model. In this model, LEP students are placed in regular English classrooms with English-speaking children where no special support is provided for LEP children. Results showed that there was no evidence that TBE was a superior instructional practice for improving the English language achievement of limited English proficient (LEP) students. Rossell and Baker (1996), proved that TBE was not a superior instructional practice for improving the English language achievement of limited English proficient children. TBE was worse or no different than structured immersion.

Greene (1997) conducted a meta-analysis over the review of the literature in Rossell and Baker's (1996) study on the effectiveness of bilingual education. Eleven out of the 75 studies were considered to be "methodologically acceptable." Results show that exposure to at least some native language instruction for LEP students have positive effects on English standardized

test scores. Greene (1998) similarly found a positive effect for bilingual education in reading (.21) and math (.12) and in all outcomes measured in the native language (.74).

Rolstad, Mahoney, and Glass (2005), conducted a meta-analysis of program effectiveness research on ELLs (English Language Learners) dated 1985 to 1996. The selected 17 studies involved K-12 language minority students and included statistical details needed to perform the meta-analysis and a description of the treatment and comparison programs. Rolstad, Mahoney, and Glass found bilingual education more beneficial for ELL students than all English approaches. Bilingual education increased measures of students' academic achievement in English and in the native language. In addition, this meta-analysis showed that students in the developmental bilingual education (DBE) programs performed better than students in the short-term transitional bilingual education (TBE) programs. Studies showed positive effect for bilingual education.

Dual Language

As the number of immigrants coming to the United States continues to increase, more school districts are implementing dual language programs to provide appropriate instruction for English Language Learners (ELLs). The emphasis on standardized testing and the pressure to close the achievement gap of these students has many schools across the country jumping into the popular dual language education (DLE) wave of instruction. In the spring of 2011, the Center for Applied Linguistics (CAL) listed 392 dual language programs in twenty-nine states including Washington D.C. (Center of Applied Linguistics, 2011). Howard, Sugarman, Christian, Lindholm, and Rogers (2007) defined dual language as, "any program that provides literacy and content instruction to all students through two languages and that promotes

bilingualism and biliteracy, grade-level academic achievement, and multicultural competence to all students” (p. 1).

Although dual language programs share the same characteristics, they are labeled differently. Dual language programs popular in North America have been given a variety of names: dual language education (DLE), developmental bilingual education (DBE), two-way bilingual education (TWBE), two-way immersion (TWI), dual immersion (DI), and enriched education (EE) (Freeman, Freeman, & Mercuri, 2005).

The One-way program, which targets speakers of one language, was developed for the English learner to learn the new language while at the same time increasing cognitive development in their native language. However, this program is appropriate only where the demographics consist of few or no native English speakers in the schools (Thomas & Collier, 2003). Another version of the one-way program is One-Way Developmental Bilingual Education, commonly known as DBE. As in the one-way program, the main goal of DBE programs is for students to achieve academically through two languages. Students in this program receive support in their native language when starting to learn English for academic purposes (Freeman, 2007).

The two-way dual-language program was developed to educate English learners and native English speakers together. This program is sometimes referred as bilingual immersion, dual-language immersion, two-way immersion, or two-way bilingual programs (Freeman, 2007). With this program, the English speaker students acquire the second language from the English learners and the English learners learn the curriculum through English.

Gomez and Gomez (2000) developed a dual language model that can be implemented in areas with a high population of English learners. The number of school districts utilizing this

dual language model has increased since 1996 (Gomez, 2006). As of spring 2015, over 700 schools across 11 states that include Texas, Washington, Alaska, New Mexico, California, Kansas, Illinois, Oklahoma, Colorado and Oregon have adopted the Gomez and Gomez Dual Language Model to enhance the academic performance of language minority students (Gomez & Gomez, 2015). Gomez (2000) provided the crucial elements evident in this dual language model:

- Heterogeneous instructional grouping: Students are together for all content area instruction except Language Arts (LA) at the PK-K level where students are separated by language.
- Separation of languages for content area instruction: The content area is taught in the language for the assigned subject. In K-5th grades, mathematics is taught in English, where Science and Social studies are taught in Spanish.
- Learning centers (PK-1st) and resource centers (2nd – 5th): Students work in their learning or resource centers activities with their bilingual pairs. Centers must include activities in both languages.
- Language of the day: All school activities such as physical education, storytelling, and library are conducted in the language of the day, either English or Spanish. The language of the day is alternated daily giving equal importance to both languages.
- L1 & L2 computer support: In grades K and 1st, computer instruction is conducted in the language that reinforces the language of instruction. In grades 2nd through 5th; however, computer time is devoted to exposure to specialized vocabulary in the language not used for instruction. Computer math activities will be done in Spanish since mathematics classroom instruction is done in English.

- Instructional staff: teachers must be either bilingual or ESL certified.
- L1 & L2 conceptual refinement: Students in PK-1st are separated at the end of the day by their native language for L2 reinforcement of content area instruction provided in their second language.
- L1 & L2 specialized content-area vocabulary enrichment: Students have the opportunity for reinforcement of specialized vocabulary during ESL/SSL time.

Studies in Dual Language Programs

Studies conducted in school districts across the country demonstrate the effectiveness of dual language programs. Thomas and Collier (2002) conducted a study in Houston Independent School District, a large urban district, to find out which program was more effective. Houston ISD is considered the 5th largest district in the United States and the largest district in Texas. The student population consists of 54% Hispanic, 33% African-American, 10% Euro American, 2.9% Asian, and 0.1 Native American. Three programs implemented across Houston ISD include Two-way Bilingual Immersion, Developmental Bilingual Programs, and Transitional Bilingual.

Students across the Houston ISD were administered the Aprenda 2 and Stanford 9 assessments to measure the effectiveness of the programs being implemented in the district. The 1999 results for Spanish and English Reading assessment show that the native-Spanish speakers outperformed the native-English speaking students, in grades 1st through 8th. In grade 8, the native-Spanish students scored around 64% on the Spanish Reading test, compared to the other group who scored close to 45% on the English Reading test. The native-English speakers performed better only in grades 5th through 7th on the English Math assessment (Thomas & Collier, 2002).

Thomas and Collier (2002) also made a comparison between the three programs being implemented in this school district to find out which group of students perform better academically on the Aprenda 2 and Stanford 9 in grades one through five in 2009. It was evident that most of the time the students in the Two-way Bilingual Immersion program outperformed students in the other two programs. When the students were administered the Stanford 9 in English for Reading, Math and Language Arts, the Two-way Bilingual Immersion students performed higher in grades one through five. The results from this study coincide with Thomas and Collier's (1997) previous longitudinal studies in five school districts in the country. At the end of the study, Thomas and Collier (1997) concluded that students in the Two-way Developmental Bilingual Education program outperformed students in the other programs.

A study of two South Texas elementary schools and one middle school campus (Gomez, 2006) found that students who were immersed in the Gomez and Gomez Dual Language Model gained high levels of academic proficiency, as demonstrated by their performance on the state exam. In 2005, 94% of the students under this model met the state reading assessment compared to 73% for all fifth graders in the district. For mathematics, there was a 94% passing rate for the students in the dual language program, where only 78% of the fifth graders in the district met the standard. The middle school results also showed a high percentage of students who met the state standards in Reading and Math.

Economically Disadvantaged Students

The number of students who are economically disadvantaged or in poverty has increased dramatically in Texas public schools. According to the National Center for Children in Poverty, 45 percent of the seventy-two million children live in low-income families and 22 percent, equivalent to 16.1 million, live in poor families (Jiag, Ekono, & Skinner, 2014). The poverty

rate in 2014 for children under age 18 was 46.6 percent (U.S. Census Bureau, 2015). Berliner (2009), states that “the problems of achievement among America’s poor are much more likely to be located outside the school than in it.” Berliner (2009) identified several problems that contribute to student achievement among America’s poor: health care, food insecurity, pollution, family violence, and neighborhood. Other non-factors that have a negative effect on poor students’ achievement, those that a school cannot control, include prenatal disadvantages, increased illness and injury, nutritional problems, exposure to pollutants, hazardous neighborhoods, struggle to survive, family violence, lack of adult attention, residential instability, and lack of educational activities and materials (Miami-Dade County Public Schools, 2009).

The National School Lunch Program (NSLP) is a federally assisted meal program that provides nutritionally balanced, low-cost or free lunches to eligible students in public and non-profit schools and residential child care institutions. Children are eligible for free lunch if their family’s income is at or below 130 percent of poverty level which is equivalent to \$30,615 for a family of four. On the other hand, children whose family income is between 130 percent and 185 percent of the poverty level are eligible for reduced-price lunches (National School Lunch Program, 2013). A school’s socio economic status (SES) is usually measured by the percent of students eligible for reduced-price or free lunch programs (Sirin, 2005).

Studies of Economically Disadvantaged Students

Studies have demonstrated a correlation between the size of a school’s economically disadvantaged population and academic achievement (Anderson, Hollinger, & Conaty, 1992; Banks, 2001; Rusk, 2002). According to *The Getting Down to Facts (GDTF)* (2008), a California research project conducted by Stanford University, academic achievement of

economically disadvantaged students decreased when the population of economically disadvantaged students in a school district increased (Loeb, Bryk, & Hanushek, 2007). Other studies have demonstrated that the status of a school's population can affect students' academic achievement. Economically disadvantaged students achieve below federal and state standards at a lower level than non-economically disadvantaged students. Additionally, these students have a higher drop-out rate and score at the bottom of national assessment, such as the SAT and ACT.

Anderson, Hollinger, and Conaty (1992) analyzed the reading, math, history, and science test scores from the National Education Longitudinal Study of 1988 (NELS:88) to examine the relationship between student poverty, school poverty, and academic achievement. Results showed that students in more affluent schools scored higher than students in the poorest schools. As the percentage of students in the school receiving free or reduced price lunch increased, the lower the score in the four subjects. Furthermore, in the NELS:88 achievement tests, students with low socio-economic status (SES) scored lower than students from high socio-economic status (SES).

Rusk (2002) proved Coleman et al. report (1966) that socioeconomic characteristics of a child and the child's classmates had a negative effect on academic success. In his study, Rusk (2002) noticed that academic achievement can be improved for both middle class students and low income students for every one percent increase of middle class students; however middle class students' standardized test scores decreased as the percentage of low income students increased.

Similar results were demonstrated by Banks (2001), with data based on North Carolina End-Of-Grade (EOG) reading and math test scores of grades three through eight. Findings of the study showed that poverty concentration has an impact on the students' test scores in reading and

math. Banks (2001) concluded that a large increase in the concentration of poverty in a school would produce significant changes in student growth.

Strategies that high poverty schools can implement to raise the achievement of economically disadvantaged students include: socioeconomic integration of schools, rigorous curriculum, cultural congruence in instruction, ongoing assessment, advanced course work and career education, smaller schools and classrooms, hiring a strong instructional leader, hiring highly-qualified teachers, displaying sensitivity to the needs of children in poverty, collaboration, high expectations, professional responsibility, safe and disciplined environment, student mobility, parent involvement, preschool programs , out-of-school programs, extended school hours, coordination with the community for needed health and social services, resource teams, school-based health care and nutrition programs (Miami-Dade County, 2009).

Differentiated Instruction

With the initiative of RTI (Response to Intervention), many teachers across the nation are restructuring their reading teaching methods to reduce the number of students who are referred to special education. Differentiated instruction is one of the principles of RTI, which requires teachers to provide the proper targeted instruction to all students, taking into consideration their strengths, weaknesses and interests. To better serve students, teachers must have a repertoire of instructional strategies that will allow each student to work at their capacity and learn more effectively. It is not effective to provide the same instruction to all students and require the same assignments. Teachers need to accept that students are at different points along the road leading to full and meaningful literacy (Walpole & McKenna, 2007).

Instructional Strategies

Tomlinson (1999), recommended the following differentiated instructional strategies that teachers can implement with students to provide effective instruction: centers or stations, tiered activities, learning contracts, compacting, choice boards, and agendas. Kapusnick & Hauslein (2001), created a list of the most common differentiated instruction strategies: acceleration, curriculum compacting, independent study, flexible grouping, independent learning centers, complex questions, tiered activities, and contracts. Kapusnick and Hauslein (2001) explained how each differentiated instruction strategy can be implemented with students.

Tiered Activities

Tiered activities enable teachers to teach a skill or concept to students with different learning needs at different levels of complexity. The “one-size-fits-all” activity, which occurs in many classrooms, does not always benefit the struggling reader or the grade-level reader. By providing tiered activities, the teacher ensures that each student internalizes the information and is appropriately challenged. Tomlinson (1999) provided six guidelines that teachers can follow to develop a tiered activity:

1. Select the concept, generalizations or skills on which the activity will focus for all learners.
2. Use assessments in regards to readiness, interests, learning profile, and talents.
3. Create an activity that is interesting, requires high-level thought and focuses on elements that require students to use the skills or concepts.
4. Chart the complexity of the activity from low to high.
5. Clone the activity to ensure challenge and success for students.
6. Match a version of the task to each student based on profile and task requirements.

Teachers can gather many resources to differentiate reading instruction in the classroom through websites. For example, The Indiana Department of Education and The Florida Center on Reading Research provide language arts tiered activities and multiple interventions differentiated by interest, readiness, and learning style.

Matching Reader and Text Level

Teachers can differentiate instruction by providing readers with reading material at their reading levels. Allington (2011) stated that matching struggling readers with a text or texts that they can actually read is the single-most critical factor to achieve success. Studies show that using classroom texts that are too difficult for students produces little or no benefit. In many classrooms, students are required to read content area textbooks above their reading ability. According to Allington, if the curriculum requires the students to study biographies, teachers can locate biographies at students' reading levels. Students should have texts they are able to read and comprehend so that they will feel successful and be motivated to continue reading books in which they are interested. Mathes, Denton, Fletcher, Anthony, Francis, and Schatschneider (2005) show that using appropriately difficult texts produced substantive growth (as cited in Allington). Therefore, a fourth grade student reading at a second grade level should be provided with texts at the second grade level. However, schools continue to provide students with texts that are not at their appropriate reading level. At the beginning of every school year, schools distribute language arts basal and content area texts book to every student regardless of whether they are too simple or too difficult for them. Fountas and Pinnell (2006) explained the effects that occur when forcing students to read texts that are too difficult: students think that reading is basically saying one individual word after another, students lose meaning of the text, students

have difficulty anticipating the next word, students practice inappropriate reading behaviors, and students become frustrated with reading and avoid it altogether.

Choice Boards

A choice board provides the opportunity for students to complete activities selected from a list that targets specific student's needs. The list of activities, which are linked to the standards, skills, or unit being studied, can be placed on a picture over the selected topic or in a grid or table. During an author study, students can select from various activities such as creating a billboard, designing a four-frame cartoon, preparing a reenactment or creating an open-mind portrait. This strategy allows the student the opportunity to be successful, since they are choosing activities in their areas of strengths and interest. In addition, choice boards give students ownership in their learning and meet individual needs (Chapman & King, 2008). The choice board can be implemented by placing the assignments in a pocket chart. Students are asked to select an activity from a certain line in order to target student needs. For older students, the task can be listed on a card; however, for young nonreaders, the cards can be coded with icons or colors (Tomlinson, 1999).

Assessment

It is important that assessments are conducted before differentiated instruction is being implemented with any particular students. Studies show that assessment guides instruction, which will assist the teacher in providing the proper instruction students need depending on their different characteristics (Ankrum & Bean, 2008). Tomlinson (1999) stated that assessments provide teachers with information about students' readiness, interests, and learning styles. The International Reading Association requires that different screening techniques be in place (International Reading Association, 2009). States across the country are choosing one

assessments for screening, instructional planning, and progress monitoring. Minnesota's model utilizes Clay's (2002), *Observation Survey of Literacy Achievement*, while Wisconsin schools use the *Classroom Assessment Based on Standards* (Walker-Dalhouse et al., 2009). Teachers should also observe students in different situations throughout the instructional day to monitor their progress. Ankrum and Bean (2008) explained various simple techniques to assess student progress. Teachers can use post-it notes to record anecdotal notes and observe students' reading during informal conferences. Informal conferences allow teachers to discover their students' strengths and weaknesses by having conversations with the students.

Flexible Grouping

Flexible grouping allows students the opportunity to be placed in different grouping arrangements throughout the instructional day. Teachers need to make sure that different grouping arrangements are being used in their classrooms to maximize students' learning potential. Different arrangements are recommended by the literature. Ankrum and Bean (2008) recommend that the instructional block include whole-class, small-group, and individualized instruction. Gregory and Chapman (2007) explained the acronym TAPS (total, alone, partner, small group) that teachers can utilize to plan instruction and group students according to the way they learn best.

In flexible grouping, students are consistently changing grouping arrangements based on continuous assessments (Chapman & King, 2008). Many ideas on implementing flexible grouping have been recommended by literature. Valentino (2000) described specific activities that can be done with each type of grouping format. For dyads or pairs, students can share their writing with each other, while the teacher can present strategies in small groups or to the whole class.

Professional Development

Teachers need professional development to better implement differentiated instruction in their classrooms. Most of the research states that ongoing professional development should be provided for teachers. Tomlinson (1999) suggested that staff development sessions should involve defining, discussing, and illustrating differentiated instruction. She presented a continuous model for staff development around the ideas of differentiated classrooms. In the input phase, staff development includes presentations, reading, watching videos, or individual and small-group inquiry. After the input phase, teachers need time to make sense of the ideas through reflection and setting long-term and short-term personal goals. Finally, the teachers implement the new ideas, either through co-teaching or individual teaching. Walker-Dalhouse et al. (2009), recommended a problem-solving model that emphasizes one-to-one professional development and facilitation to teach teachers more effective classroom intervention strategies. Xu and Drame (2008) asserted that traditional in-service professional development programs do not assist teachers in gaining the knowledge and skills to provide this type of instruction (as cited in Walker-Dalhouse et al., 2009). Birman, Desimore, Porter, and Garet (2000) found in their study of 1000 teachers that 79% of teachers are involved in traditional professional development, but only 21% participate in professional development that requires collective participation with staff from their grade level, building, or department.

Studies in Differentiated Instruction

Bradfield (2012) investigated how differentiated instruction improved students' reading fluency for first grade students in a quasi-experimental non-equivalent control group. The convenience sample consisted of sixty first grade students; 25% were ELLs and one-third were struggling readers. The experimental group consisted of 40 first grade students and the control

had 20 first grade students. Both groups were administered the Aimsweb Benchmark Assessments and observations in the fall and spring. Students were assessed in phoneme segmentation, Nonsense Word Fluency (NWF) and reading fluency known as Reading Curriculum Based Management (R-CBM). A one-way ANOVA was used to determine if there was a significant change in test scores for the experimental and control groups. Results indicated that the experimental group that received differentiated instruction had a greater increase in reading fluency. In addition, Bradfield (2012) revealed the following differentiated instruction implemented in the classrooms: whole group instruction, flexible grouping, centers or workstations, and task card, or cubing.

McCullough (2011) investigated whether differentiated instruction had a positive effect on the vocabulary and the reading comprehension of struggling second grade students. The pre-experimental, one-group pretest-posttest design consisted of ninety-eight second grade students from an urban Title I school in eastern Virginia. Students were administered a pre and post Student Achievement in Reading (STAR) and Phonological Awareness and Literacy Screening (PALS). The differentiated instruction strategies implemented were reading aloud, small-flexible grouping, and tiered assignments. The study revealed a statistically significant difference in students' vocabulary and comprehension performance after the implementation of differentiated reading instruction.

Darryl (2011) provided an account of teachers' perceptions of differentiated instruction and its impact on students' reading. The mixed-methods, sequential exploratory study consisted of two phases. In the first phase, qualitative data was collected through classroom observations and teacher interviews. The second phase consisted of quantitative data through a pre and post benchmark exam using the Georgia Online Assessment System (OAS of Georgia). Thirty-seven

second grade students from a rural district in central Georgia were selected for the sample. OAS benchmark results indicated that the reading comprehension of students in differentiated classrooms was significantly higher than that of students in the traditional classrooms. Furthermore, observations and teacher interviews showed that years of experience influenced and guided implementation of differentiated strategies.

Reis, McCoach, Little, Muller, and Kaniskan, (2011) examined the effects of differentiated instruction and school wide enrichment model reading framework (SEM-R) on students' reading fluency and comprehension. The SEM-R consists of three phases: exposure to high quality literature through short read-alouds; implementation of differentiated instruction in conferences and engagement of supported independent reading (SIR); and the opportunity to complete self-choice reading activities. Participants included 1,192 second through fifth grade students and 63 teachers from five rural, urban, and suburban elementary schools across the United States. Teachers in the treatment group taught language arts for one hour using the regular language arts program and the other hour was devoted to SEM-R. The control group's teachers provided language arts instruction for two hours using their district's language arts program. Data collection consisted of oral reading fluency (ORF), the Iowa Tests of Basic Skills (ITBS) Reading Comprehension test, Teaching and Reading Attitudes and Practices Survey (TRAPS), the SEM-R Observation Scale, and reviews of teacher and student logs. Findings indicated that differentiated and enrichment teaching methods resulted in higher fluency and reading comprehension in some students, especially in high-poverty urban schools.

Literacy Centers

The joint statement of the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC) (1998) advocates the use of literacy-

enriched centers for all students for literacy development. In addition, Pressely, Rankin, and Yokoi's (1996) study showed that 85% of effective first grade primary-level literacy teachers reported using centers. In Morrow's et al (1997) seminal work, the term *literacy center* is viewed as an area designed to provide space and materials for cooperative activities, composed of a library corner and a writing area. The idea of the literacy center has changed and is defined differently by proponents of this instructional approach. Diller (2003) coined the term "literacy work stations" to refer to an area where students work independently or with one another to explore and expand their literacy using available instructional materials that teachers had taught. Nations and Alonso (2001) described literacy centers as a place or activity that allows students to practice skills and strategies that have been modeled and taught in a balanced literacy program while the teacher conducts small group work.

Nations and Alonso (2001) described how Cambourne's conditions of learning are correlated to literacy centers to promote active engagement by the students. Cambourne's conditions of learning include the following:

- Immersion: the teacher provides a print-rich environment and students are immersed with books and book talk to develop skills and strategies.
- Demonstration: the teacher explains in detail and models the activity before it is placed in the center.
- Expectation: literacy centers are implemented based on what students can do, but in a challenging manner.
- Employment: students are given many opportunities to practice and apply skills and strategies through the literacy center activities.

- Approximation: the teacher provides many practice opportunities without expecting immediate mastery and process should be valued, not just the finished product.
- Responsibility: the teacher shares responsibility for new learning by teaching and modeling the center expectations and allowing choice within centers.
- Response: teachers provide feedback to the learning and activities, students are allowed to positively critique students' work and students are encouraged and informed about their progress.

Literature has shown that the implementation of literacy centers in the classroom has many benefits (Blakemore & Ramirez, 1999; Diller, 2003; Fountas & Pinnell, 1996; Holliman, 1996; Nations & Alonso, 2001; Owocki, 2005; Swartz et al., 2003). According to Swartz et al., literacy centers allow students to independently practice reading, writing, listening, and speaking skills while completing the various activities. Nations and Alonso added the viewing component. Furthermore, literacy centers provide teachers the opportunity to work with individual students or small groups, which might be in the form of guided reading groups, by Fountas and Pinnell (1996) (Blakemore & Ramirez, 1999; Diller, 2003; Holliman, 1996; Nations & Alonso, 2001; Owocki, 2005). Literacy centers allow flexible grouping while students engage in small-group instruction. Nations and Alonso state, "Grouping students in heterogeneous groups gives your students a support system to complete their work in literacy centers and appreciate the strengths of center group members." (p. 32). Holliman (1996) and Fountas and Pinnell emphasize that literacy centers allow students to make choices. Nations and Alonso and Owocki stress that choice promotes engagement. Students have more ownership of their work and often exceed expectations. Nations and Alonso suggest the following list that teachers can follow to provide choice during literacy centers implementation: students select

from a variety of activities within a center; students use a variety of materials to demonstrate understanding; students work independently or collaboratively; students choose ways to respond to a text; students decide where to work in the classroom. Implementation of literacy centers also allows the learner to be engaged through interaction (Blakemore & Ramirez, 1999; Diller, 2003; Morrow, Mandel et al. 1997; Owocki, 2005). Morrow et al. (1997) revealed that students are engaged in three social behaviors when they are involved in group literacy activities: peer tutoring, peer collaboration, and peer conflict.

Owocki (2005) summarized the literacy goals to develop through literacy centers, gathered from a wide body of research on language and literacy as well as recommendations from the NAEYC, the IRA, and the National Council of Teachers of English (NCTE). Ford & Optiz (2002) and Holliman (1996) added that designing centers with the literacy curriculum in mind is an excellent way to ensure that children are exposed to state or district curricular expectations. Owocki's literacy goals include: an expanding sense of language and literacy as sociocultural practices; book-handling and book-sharing knowledge; reading comprehension and meaning-making strategies; knowledge that supports word reading and spelling; reading fluency; expanded uses of and knowledge about writing; and vocabulary.

Owocki (2005) reported three elements to differentiate instruction in literacy centers. Teachers can differentiate instruction through the support that is offered to the students to expand children's thinking, such as individual or small-group minilessons focusing on a particular writing or reading strategy. Furthermore, materials and activities can be adjusted based on students' engagement by providing choice of activities or varying the amount of writing. The procedures related to the working environment and the time frame for activities can also be

differentiated during literacy centers. Students can be offered more time to complete the activity or teachers can strategically group students based on students' needs.

Literature emphasizes that the environment of the classroom is important to the success of literacy centers (Swartz et al., 2003). Owocki (2005) added that the physical environment in a classroom greatly influences children's learning, actions, and behaviors. Various literacy resources emphasize the importance of implementing routines and procedures (Owocki, 2005; Swartz et al., 2003). Fountas and Pinnell (1996) believed that every moment invested in teaching routines is time well spent, because it will save hours of instructional time later in the school year. At the beginning of the year, teachers need to introduce centers by going over the rules and procedures, what materials to be used, where they are stored, how to get them and arrange them, and how to put them away correctly. According to Nations and Alonso (2001), "good management is critical in order for literacy centers to run smoothly."

Proponents of literacy centers recommend a management board or work board to manage student movement during center time (Diller, 2003; Fountas & Pinnell, 1996). The management board contains the names of students in heterogeneous or mixed-ability grouping which lead to higher-quality experiences for all children. Other ways that can be used to manage student movement include the pocket chart, the center contract and the work wheel. Owocki (2005) recommended three models to rotate students during center time. In the individual pace rotation model, all centers are open for students to self-select. For this model, a center contract is recommended for students to record completed centers' activities. The group in-one-center occurs when each child is assigned to a heterogeneous group for the day, for a whole week, or longer and assigned to a center. In the group with choice, each child is assigned to a group whose individuals may choose from more than one center (Owocki, 2005).

Literacy Centers Related Research

Bates (2003) explored, through the naturalistic approach, the contextual elements surrounding literacy centers in a first grade classroom and how the elements influence children's literacy development. Participants included the teacher and 21 students as well as the researcher. The study yielded five contextual elements: teacher expectations, self-monitoring behaviors, materials and resources, social interactions, and physical design.

Stefanick's (2004) qualitative study utilized the constant-comparative or analytic induction to monitor children's perceptions of the process as well as their academic and social learning. Participants included nine kinder students with different achievement levels. Quantitative data was gathered, but a majority of the analysis was based on the qualitative data such as interviews, checklists, rubrics, reading and writing assessments, anecdotal notes, and portfolio samples. Findings showed that all children made pronounced gains in reading and writing skills, expanded their social and collaborative skills, and increased responsibility for their own learning.

Rodriguez's (2008) quasi-experimental study was conducted to examine emergent literacy of bilingual students between or among types of instruction they received and level of administrative support during the implementation and monitoring of center learning in literacy-enriched environments. Participants consisted of fifty low socio economic status, bilingual, early childhood preschool children in five south Texas summer school sites. The study was conducted for four weeks during the summer school program. The control group consisted of 20 students while the experimental group had 30 students. The experimental group of students were involved in the seven super centers that consisted of a pretend and learn center, ABC center, creative center, construction center, math or science center, library or listening center, and writing center. At the end of the study, the experimental group had a significant difference in gains with emergent

literacy CIRCLE scores posttests in eight areas. The eight areas included letter knowledge, vocabulary, listening skills, rhyme task 1, rhyme task 2, alliteration, words in a sentence and syllabication.

Maurer's (2010) qualitative study demonstrated how first grade children learned and practiced the English Language Arts standards while interacting in literacy centers. The population consisted of 19 White non-Hispanic children from a small, rural elementary school in an Ohio school district. Through a rotation schedule, the students completed literacy activities. Findings showed that children learned, practiced or used 47 of the 79 first grade indicators of literacy skills in the Ohio Academic Content Standards for English Language Arts. Peer dialogue mediated the following English Language Arts standards through the use of literacy centers: decoding skills, vocabulary development, and comprehension skills.

O'Donnell and Hitpas' (2010) qualitative action research studied the use of learning centers in a kindergarten classroom. Data collection involved data triangulation through the use of interviews, work samples, anecdotal records, checklists, videotapes, and performance task documents, for six students from the kindergarten classroom. All students in the classroom were provided with a choice of 14 literacy centers that contained multiple of activities from an extensive review of literature. Results demonstrated that at-risk students made progress in achievement, accountability, and motivation.

Stout (2009) conducted an action research project to investigate the effectiveness of literacy centers implementation. The research was conducted for six weeks in a first grade classroom located in a large urban district in the American Southwest. The Pre-K through 5th grade school is designated as a Title 1 school, with 92% of students being economically disadvantaged. Eighty-six percent of the student population is Hispanic, twelve percent are

African American, and two percent are White. Data collection consisted of anecdotal records, work samples and a teacher-research journal. At the end of the study, the six selected students increased an average of four reading levels on the Developmental Reading Assessment (DRA). Data also showed that students who made the smallest improvements were the students most frequently off-task during center time compared to students who made the most improvement.

Summary of the Chapter

Research was presented demonstrating several studies conducted on the relationship between literacy development and literacy centers implementation with first grade bilingual students in south Texas schools. Previous data were shown in the areas relevant and pertinent to this study, which include the following: (1) Bilingualism, (2) Dual Language, (3) Economically Disadvantaged Students, (4) Differentiated Instruction, and (5) Literacy Centers.

Chapter 3 includes a detailed description about the methodology that was used for this study including the following sections: (1) research questions, (2) research design, (3) intervention, (4) instrumentation, (5) participants and setting, (6) sample, (7) gaining access, (8) data collection, and (9) data analysis.

Chapter III: Method

The purpose of this pretest-posttest, nonequivalent, quasi-experimental study was to investigate the use of literacy centers in first grade bilingual classrooms and their relationship to students' Tejas LEE scores. This chapter is divided into the following sections: (1) research questions, (2) research design, (3) intervention, (4) instrumentation, (5) participants and setting, (6) sample, (7) gaining access, (8) data collection, and (9) data analysis.

Research Questions

As stated in the introduction, the purpose of the study was to investigate the use of literacy centers in first grade bilingual classrooms and their impact on students' Tejas LEE scores. With this purpose in mind, the study was guided by the following research questions:

1. How do Tejas LEE scores differ in first grade bilingual classrooms of teachers implementing literacy centers and those who do not?
2. How do first grade bilingual teachers promote literacy acquisition during literacy centers implementation?

Research Design

The researcher utilized a quasi-experimental research design, where experimental and comparison groups were established but there was no random assignment of subjects. The study utilized a pretest and posttest design in which both groups were tested at two points in time, resulting in a two by two repeated measures design (Creswell, 2002). The independent variable was the implementation of literacy centers in first grade bilingual classrooms. The outcome measures were the first grade students' Tejas LEE scores, which consisted of (1) story 1 accuracy, (2) story 2 accuracy, (3) story 1 fluency, (4) story 2 fluency, (5) story 1 explicit

questions, (6) story 1 implicit questions, (7) story 2 explicit questions, (8) story 2 implicit questions, and (9) spelling.

Intervention

In this study, the students in the experimental group received literacy acquisition through the implementation of literacy centers along with the state-adopted reading program, *Tesoros*, during the language arts block. The intervention lasted for 11 weeks, three days per week, Tuesday, Wednesday, and Thursday. Mondays were dedicated for the teacher to teach all the weekly language arts objectives and review the literacy center expectations and activities. On Fridays, teachers administered all required weekly assessments. The researcher provided the teachers in the experimental group with several workshops related to the implementation of literacy centers including types of activities that targeted the skills addressed in *Tejas LEE* and the objectives from the reading adoption. Additionally, all four teachers participated in several make-and-take sessions that allowed them to prepare activities for the various literacy centers.

The classrooms in the experimental group included literacy centers that targeted the reading concepts addressed in the first grade *Tejas LEE* and the required first grade *TEKS* (Texas Essential Knowledge and Skills). Teachers in the experimental group conducted small-group instruction based on the *Tejas LEE BOY* criteria while students worked in literacy centers. The classrooms in the experimental group implemented the literacy centers explained below which were listed in the Literacy Student Planning Form, referred to as *LSPF* (Appendix A) and displayed on the literacy center management board (Appendix B). The *LSPF* was used to color-in the literacy centers that were visited on a daily basis. Students received a new form every week and completed forms were placed in their literacy center folders. Teachers used the literacy center management board for students to place their selected bug, butterfly or

hummingbird, in the literacy center that they were selecting for that time. Once the student completed the required literacy center activity, the bug was moved to another literacy center.

The following literacy centers were implemented:

- **Spelling Center:** In the spelling center, the teacher placed different games or activities that allowed the student to practice weekly spelling words. For example, in the “ransom words” activity, students cut out magazine or newspaper letters to construct the words.
- **Writing Center:** In the writing center, students practiced the weekly writing objectives by completing foldable or different writing activities, such as pop-up cards, or dioramas.
- **Library Center:** In this center, students had the opportunity to read a self-selected book independently or with a reading buddy. After reading a book, students completed a reading log with information about the book as well as a graphic organizer.
- **Computer Center:** In the computer center, students played educational games or listened to the story of the week from the reading adoption website, www.connectEd
- **Art Center:** In this center, students completed an art project from the adopted art book using different types of materials such as paint, and tissue paper.
- **Poetry Center:** In the poetry center, students practiced reading a Spanish nursery rhyme, such as “Tortillitas” (Ada & Campoy, 2003). They also worked in a poetry notebook by pasting in the nursery rhyme and illustrating it. Additionally, they sorted the poem’s words or sentences on the pocket chart or on the floor.

- **Pocket Chart Center:** In the pocket chart center, students manipulated sentence strips or picture cards with words to practice weekly reading skills such as hearing beginning sounds or noticing different types of punctuation in sentences.
- **Listening Center:** the listening center contained stories on audio from the Capstone library website. Students completed the listening log after the story.
- **Word Study Center:** In the word study center, students engaged in hands-on activities or games to practice reading words with the phonics element of the week or high frequency words.
- **Small-Group Instruction Center:** In this center, the teacher met with several students based on their needs to provide differentiated instruction such as blending, segmenting, and reading with fluency. Teachers used this time to listen to the students read orally from the reading adoption's level readers.

Teachers received 13 First Grade Literacy Centers Planning Forms that contained the activities for each literacy center on the basis of the weekly objectives for the duration of the study. Each planning form was reviewed and explained to teachers one week before activities were implemented. Each Literacy Center Planning Form contained the activities for each literacy center along with the connection to the Texas LEE literacy concepts. The students in the comparison group received language arts instruction through the implementation of the state-adopted reading program, *Tesoros*, just as the experimental group did but without the implementation of the literacy centers.

Participants and Setting

The participants were Hispanic first grade bilingual students from two south Texas elementary schools from the same district located in the Rio Grande Valley. All were from colonias.

In Texas, there are people living in colonias of extremely low-income communities along the Texas-Mexican border. Compared to the other three border states, New Mexico, Arizona, and California, Texas is the state that has both the largest number of colonias and the largest colonia population (Federal Reserve Bank of Dallas, 2015). Specifically, Texas has approximately 2300 colonias with a total population of at least 450,000. The majority of the people living in colonias are Hispanic and about two thirds are US citizens (Texas Attorney General, 2011). Hidalgo, in 2007, had the largest number of colonias, which is considered one of the counties with the highest poverty rates in the United States (CHIPS, 2007). Colonias, for the most part, lack basic facilities such as water, sewage, electricity, paved streets, and sidewalks (Texas Attorney General, 2011). In 2014, there were 337 colonias with no access to drinkable water, wastewater disposal, and legal plats (Federal Reserve Bank of Dallas, 2015). According to the factsheet from the Texas Secretary of State's Office, the lots in colonias are sold through "a contract for deed," where developers offer each lot to people with low-income. The down payment and monthly payments are low, but the owner does not receive the property title until the final payment is made.

Colonias have much higher occurrences of disease than any other part of the state. Some of the common diseases are hepatitis A, salmonellosis, dysentery, cholera, tuberculosis, and the presence of Hansen's disease or leprosy. In addition, there are cases of Dengue fever and Lyme disease carried by mosquitoes and ticks as a result of flooding and non-air conditioned

homes. People in colonias also suffer from asthma and bronchitis due to the agricultural dust from sorghum, corn, cotton fields, and burned trash. The Operation Lone Star Program was established to provide free health care to colonias' residents who lack access to basic medical and dental treatment (Ramshaw, 2011).

Sample

A convenience sample was used to select the participants for the experimental and comparison groups. According to Johnson and Christensen (2008), the use of convenience sampling allows the researcher to recruit individuals that are willing to participate in the research study. However, it is a type of non-probability sampling; thus, external validity is limited to the study's participants. At the beginning of the study, the sample consisted of 112 first grade Hispanic bilingual students. As expected, there was attrition. The 104 first grade bilingual students (59 and 45 in the experimental and comparison groups, respectively) who had both the pretest and posttest data were included in analysis and interpretation of the quantitative data. The experimental classrooms were selected due to their voluntary agreement to participate in the study. The participating elementary schools had comparable demographics based on Texas Education Agency 2011-2012 data, as shown in Table 1.

Table 1

Demographics of the Participating Schools

Elementary School	Hispanic	Economically disadvantaged	Limited English	At-Risk
School A (Experimental)	100%	97.4%	83.6%	89.4%
School B (Comparison)	100%	97.9%	83.8%	89.6%

School A was selected as the experimental group because the researcher worked there. Furthermore, the researcher knew most of the teachers, which was instrumental in obtaining permission to conduct the research in their classrooms.

Gaining Access

In order to conduct the study in the selected schools, the researcher contacted the district's superintendent for permission to conduct the study. Upon receiving the permission from the superintendent, the principals from both groups were asked for consent to use their schools as either the experimental group or the comparison group. Additionally, permission to conduct the study was obtained from the Institutional Review Board at Texas A&M University-Corpus Christi. Consent for participation in the study was obtained from teachers, parents, and students. The researcher started implementing the treatment after consent forms were received. The researcher met with several parents who had questions about the study's required activities. The consent and assent forms are in Appendix D.

Data Collection

Educators across the state of Texas are required to administer the Tejas LEE to students in order to assess their strengths and weaknesses in reading ability. Students' test scores from the Tejas LEE were obtained at the beginning of the school year to establish a baseline for the study. The researcher collected Tejas LEE scores from students in the comparison and experimental groups to answer the first research question: "How do Tejas LEE scores differ in first grade bilingual classrooms of teachers implementing literacy centers and those who do not?" Students in both groups were assessed in the following components to examine their literacy development before the study: phonemic awareness, graphophonemic knowledge, word reading and reading accuracy, fluency, and comprehension.

Data collection occurred during the study's 11-week duration. At the beginning of the school year, teachers administered the Tejas LEE. After the administration of the assessment, the researcher collected class reports that showed the areas in which students fell into either developed or needs intervention categories. A developed status meant that the child had acquired the skills from that section. If the student fell into the needs intervention category, it meant that the teacher had to provide future lessons in that skill. At the end of the study in January 2014, Tejas LEE MOY test scores were collected from both groups.

In addition, classroom observations were conducted one or two times a week for the duration of the study, using the Contextual Elements Checklist for Literacy Centers. These data were collected to answer the second research question: How do first grade bilingual teachers promote literacy acquisition during literacy centers implementation? During the observation, data were collected from both the teachers and the students.

Instrumentation

To answer the study's first research questions, Tejas LEE (El inventario de lectura en Espanol de Tejas) BOY and MOY scores were used. The Tejas LEE is a Spanish reading instrument first, and administered to students receiving instruction in Spanish in grades kindergarten through second grade to determine areas necessary to the development of Spanish reading and reading comprehension. Students are assigned a reading level from three different performance levels of scoring, namely, *desarrollado* (developed), when the student has mastered the skill; *nivel esperado* (expected performance), assigned to students who have not yet mastered the skill but are well on their way to mastery; and *nivel de intervencion* (needs intervention), when the student is performing in the lowest 25% of the population on the skill and intervention is needed. In first grade, teachers administer Tejas LEE to the students three times per year (beginning, middle, and end of year). Five reading concepts are addressed in the first grade Tejas LEE: graphophonemic knowledge, phonological awareness, reading accuracy, reading fluency, and reading comprehension. In the following section, each reading concept addressed in the inventory is described as well as the activity used to test it on the Tejas LEE (TEA & University of Texas System, 2010).

Graphophonemic Knowledge “conocimiento de los grafonemas”

Graphophonemic knowledge is the understanding that written words are composed of letters and that the pattern of letters represent the sounds of spoken words. Students are required to read a list of 15 words in isolation with increasing difficulty, from words with one syllable to multi-syllabic words.

Phonological Awareness “conciencia fonológica”

Phonological awareness is the ability to think about individual words as a sequence of sounds (phonemes) or sound units (syllables). Students are assessed in identification of initial and final sound (16 items), sound blending and segmenting (16 items), and initial, and final sound omission (10 items). Students receive one point for each correct answer and a performance level is assigned based on the correct items.

Reading Accuracy “exactitude de lectura”

Reading accuracy entails the ability to automatically decode and identify words. Words read incorrectly are tracked as the student reads a story orally. The types of errors that are counted are mispronunciations, substitutions, and omissions. Insertions, self-corrections, or repetitions are not counted as errors. The students are not allowed to continue reading if three errors are made in the first sentence. The students are assigned a level for each story depending on the number of errors for each story. The levels consist of independent, instructional and frustrational.

Reading Fluency “fluidez de lectura”

Reading fluency occurs when the student has the ability to read fluently with expression and appropriate intonation and phrasing. Fluency is measured by timing the student while reading the story in order to calculate the words correct per minute “palabras leídas correctamente por minuto,” known as PLCPM.

Reading Comprehension “comprension de lectura”

Reading comprehension refers to the ability to extract meaning from written text both explicitly (stated directly in the text) and implicitly (inferred from the text). Reading comprehension is assessed by having the student answer one implicit questions and four explicit

comprehension questions for story 1 and story 2 at the beginning of the year (BOY) and 2 implicit and 6 explicit comprehension questions at the middle of the year administration (MOY).

To collect data to answer the second research question, an a priori checklist containing the five Bates (2003) contextual elements was used to conduct classroom observations during literacy centers implementation. The checklist consisted of the following contextual elements: teacher expectations, self-monitoring behaviors, materials and resources, social interactions and physical design (Appendix C). The Contextual Elements Checklist for Literacy Centers was used twice a week for the duration of the study during classroom observations. Each of the contextual elements contained different domains that needed to be evident during the implementation of the literacy centers. A panel of experts approved the checklist before the instrument could be used in the study.

Data Analysis

The researcher performed descriptive and inferential statistics, using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were used to summarize and organize the data, which consisted of frequency and percentage distribution tables, measures of central tendency, and measures of variability. A series of t-test for independent samples (Stevens, 2009) was performed to compare the experimental and comparison groups on the basis of pretest measures of reading fluency story 1, reading fluency story 2, explicit and implicit comprehension questions story 1, and explicit and implicit comprehension questions story to establish pre-experimental equivalence. A series of 2 by 2 repeated measure analysis of variance (RMANOVA) was performed to examine and main and interaction effects of the intervention and time on the abovementioned measures. Mean difference effect sizes (Cohen, 1988) were computed to examine the practical significance of the findings and were characterized as $.2 =$

small effect, .5 = medium effect, and .8 = large effect. A series of chi-square test of independence (Field, 2013) was performed to examine the null hypotheses that reading accuracy for story 1 and story 2, coded as independent, instructional, or frustrational and membership in the intervention or comparison groups were independent of each other.

To answer the second research question, the researcher used a self-constructed a priori checklist, using Bates's (2003) literacy centers' contextual elements. The checklist consisted of five contextual elements: teacher expectations, self-monitoring behaviors, materials and resources, social interactions, and physical design. After the administration of Tejas LEE, the researcher conducted observations during the language arts block in the experimental group classrooms twice a week for 15 minutes each, using the contextual literacy center checklist. For the first three weeks, observational data were not collected. During this time, teachers introduced the literacy centers' routines. Frequency coding (Namey, Guest, Thairu, & Johnson, 2007), for each of the domains for Bates (2003) Contextual Elements that were collected, analyzed, and interpreted are presented in chapter four.

Summary of the Chapter

This chapter provided a description of the methodology and data collection utilized in order to explore the results of this study which investigated the use of literacy centers with first grade bilingual students in South Texas schools. This quasi-experimental study further investigated how first grade bilingual teachers promote literacy acquisition during literacy centers implementation. Results from the study are presented in chapter 4.

Chapter IV: Results

The purpose of this pretest-posttest, nonequivalent, quasi-experimental study was to investigate the effects of the use of literacy centers on students' Tejas LEE scores among first grade bilingual students. Quantitative and qualitative data were collected and analyzed.

Quantitative Results

The Tejas Lee scores were: (1) story 1 accuracy, (2) story 2 accuracy, (3) story 1 fluency, (4) story 2 fluency, (5) story 1 explicit questions, (6) story 1 implicit questions, (7) story 2 explicit questions, (8) story 2 implicit questions, and (9) spelling.

Analysis of Tejas LEE Scores

The study's first research question was "How do Tejas LEE scores differ in first grade bilingual classrooms of teachers implementing literacy centers and those who do not?" There were 104 Hispanic first grade bilingual students who provided the pretest and posttest data. All students from both groups, qualified for free/reduced lunch. The gender distribution is summarized in Table 2.

Table 2

Demographic Profile of Student Participants, n = 104

	Experimental Group, n = 59		Comparison Group, n = 45	
	F	%	F	%
Male	28	47.46	21	47.67
Female	31	52.54	24	53.33

The experimental and comparison groups were compared on the basis of the pretest measures of six of the outcome measures, which were continuous in nature. None of the

differences were statistically significant; thus, pre-experimental equivalence on the basis of these measures was assumed. Results are summarized in Table 3.

Table 3

Comparison of Pretest Differences on Tejas LEE Measures

	Experimental Group n=59		Comparison Group n=45			
	M	SD	M	SD	t	p
Reading Fluency Story 1	21.85	24.98	23.02	25.24	.24	.81
Reading Fluency Story 2	20.83	23.43	19.64	22.50	.26	.80
Explicit Comprehension	.54	.48	.47	.46	.76	.45
Questions Story 1						
Implicit Comprehension	.49	.50	.40	.50	.92	.36
Questions Story 1						
Explicit Comprehension	.46	.43	.34	.37	1.53	.13
Questions Story 2						
Implicit Comprehension	.56	.50	.42	.50	1.38	.17
Questions Story 2						

The largest n (59 in the experimental group) divided by the smallest n (45, in the comparison group) was less than 1.50 (1.31); thus, the two sample sizes were assumed to be approximately equal and robust with respect to the assumption of equality of covariance matrices (Stevens, 2009). A series of 2 by 2 repeated measures analysis of variance was performed to examine the main and interaction effects of intervention and time on various outcome measures.

Reading Fluency for Story 1

The pretest and posttest measures of reading fluency for story 1 are reported in Table 4.

Table 4

Means and Standard Deviations for Pretest and Posttest Measures of Reading Fluency for Story 1

	Pretest		Posttest	
	M	SD	M	SD
Experimental Group (n = 59)	21.85	24.98	42.10	28.44
Comparison Group (n = 45)	23.02	25.24	45.02	19.60

Repeated measures analysis of data showed that the time effect was statistically significant, $F(1,102) = 168.44$, $p < .01$. The intervention effect, $F(1,102) = .19$, $p = .66$, and the time by intervention interaction effect, $F(1,102) = .29$, $p = .59$, were not statistically significant. Results are summarized in Table 5.

Table 5

Repeated Measures ANOVA Summary Table-Reading Fluency for Story 1

Source	SS	df	MS	F	p
Intervention	214.08	1	214.08	.19	.66
S(Intervention)	114224.38	102	1119.85		
Time	22789.86	1	22789.86	168.44	< .01
Time by Intervention	38.90	1	38.90	.29	.59
S(Intervention) * Time	13800.59	102	135.30		

Reading Fluency for Story 2

The pretest and posttest measures of reading fluency for story 2 are reported in Table 6.

Table 6

Means and Standard Deviations for Pretest and Posttest Measures of Reading Fluency for Story 2

	Pretest		Posttest	
	M	SD	M	SD
Experimental Group (n = 59)	20.83	23.43	41.85	27.91
Comparison Group (n = 45)	19.64	22.50	43.62	23.48

Repeated measures analysis of data showed that the time effect was statistically significant, $F(1,102) = 164.71, p < .01$. The intervention effect, $F(1,102) = .01, p = .95$, and the time by intervention interaction effect, $F(1,102) = .71, p = .40$, were not statistically significant. Results are summarized in Table 7.

Table 7

Repeated Measures ANOVA Summary Table-Reading Fluency for Story 2

Source	SS	df	MS	F	p
Intervention	4.42	1	4.42	.01	.95
S(Intervention)	107569.84	102	1054.61		
Time	25841.90	1	25841.90	164.71	< .01
Time by Intervention	111.90	1	111.90	.71	.40
S(Intervention) * Time	16002.98	102	156.89		

Explicit Comprehension Questions for Story 1

The pretest and posttest measures of explicit comprehension questions for story 1 are reported in Table 8.

Table 8

Means and Standard Deviations for Pretest and Posttest Measures of Explicit Comprehension Questions for Story 1

	Pretest		Posttest	
	M	SD	M	SD
Experimental Group (n = 59)	.54	.48	.79	.36
Comparison Group (n = 45)	.47	.46	.81	.30

Repeated measures analysis of data showed that the time effect was statistically significant, $F(1,102) = 51.06$, $p < .01$. The intervention effect, $F(1,102) = .12$, $p = .73$, and the time by intervention interaction effect, $F(1,102) = 1.29$, $p = .26$, were not statistically significant. Results are summarized in Table 9.

Table 9

Repeated Measures ANOVA Summary Table-Explicit Comprehension Questions for Story 1

Source	SS	df	MS	F	p
Intervention	.03	1	.03	.12	.73
S(Intervention)	25.32	102	.25		
Time	4.51	1	4.51	51.06	< .01
Time by Intervention	.11	1	.11	1.29	.26
S(Intervention) * Time	9.01	102	.09		

Implicit Comprehension Questions for Story 1

The pretest and posttest measures of implicit comprehension questions for story 1 are reported in Table 10.

Table 10

Means and Standard Deviations for Pretest and Posttest Measures of Implicit Comprehension Questions for Story 1

	Pretest		Posttest	
	M	SD	M	SD
Experimental Group (n = 59)	.49	.50	.64	.37
Comparison Group (n = 49)	.40	.50	.58	.32

Repeated measures analysis of data showed that the time effect was statistically significant, $F(1,102) = 10.54, p < .01$. The intervention effect, $F(1,102) = 1.16, p = .29$, and the time by intervention interaction effect, $F(1,102) = .12, p = .74$, were not statistically significant. Results are summarized in Table 11.

Table 11

Repeated Measures ANOVA Summary Table-Implicit Comprehension Questions for Story 1

Source	SS	df	MS	F	p
Intervention	.29	1	.29	1.16	.29
S(Intervention)	25.14	102	.25		
Time	1.32	1	1.32	10.54	< .01
Time by Intervention	.02	1	.02	.12	.74
S(Intervention) * Time	12.80	102	.13		

Explicit Comprehension Questions for Story 2

The pretest and posttest measures of explicit comprehension questions for story 2 are reported in Table 12.

Table 12

Means and Standard Deviations for Pretest and Posttest Measures of Explicit Comprehension Questions for Story 2

	Pretest		Posttest	
	M	SD	M	SD
Experimental Group (n = 59)	.46	.43	.82	.34
Comparison Group (n = 45)	.34	.37	.79	.34

Repeated measures analysis of data showed that the time effect was statistically significant, $F(1,102) = 117.44$, $p < .01$. The intervention effect, $F(1,102) = 1.54$, $p = .22$, and the time by intervention interaction effect, $F(1,102) = 1.35$, $p = .25$, were not statistically significant. Results are summarized in Table 13.

Table 13

Repeated Measures ANOVA Summary Table-Explicit Comprehension Questions for Story 2

Source	SS	df	MS	F	p
Intervention	.32	1	.32	1.54	.22
S(Intervention)	21.31	102	.21		
Time	8.44	1	8.44	117.44	< .01
Time by Intervention	.10	1	.10	1.35	.25
S(Intervention) * Time	7.33	102	.07		

Implicit Comprehension Questions for Story 2

The pretest and posttest measures of implicit comprehension questions for story 2 are reported in Table 14.

Table 14

Means and Standard Deviations for Pretest and Posttest Measures of Implicit Comprehension Questions for Story 2

	Pretest		Posttest	
	M	SD	M	SD
Experimental Group (n = 59)	.56	.50	.58	.41
Comparison Group (n = 45)	.42	.50	.54	.41

Repeated measures analysis of data showed that the intervention effect, $F(1,102) = 1.32$, $p = .25$, the time by intervention interaction effect, $F(1,102) = 1.07$, $p = .30$, and the time effect, $F(1,102) = 2.49$, $p = .12$, were not statistically significant. Results are summarized in Table 15.

Table 15

Repeated Measures ANOVA Summary Table-Implicit Comprehension Questions for Story 2

Source	SS	df	MS	F	p
Intervention	.40	1	.40	1.32	.25
S(Intervention)	31.11	102	.31		
Time	.28	1	.28	2.49	.12
Time by Intervention	.12	1	.12	1.07	.30
S(Intervention) * Time	11.40	102	.11		

Analysis of Effect Sizes

The time effect on story 1 fluency, story 2 fluency, story 1 explicit questions, story 1 implicit questions, story 2 explicit questions, and story 2 implicit questions was statistically significant. To better understand the results, pretest to posttest mean difference effect sizes were computed and characterized as .20 = small effect, .50 = medium effect, and .80 = large effect. The effect sizes were computed for all subjects, subjects in the experimental group, and subjects in the comparison groups. As can be seen in Table 16, the largest pretest to posttest improvements belonged to reading fluency scores, while implicit comprehension scores showed the smallest improvement.

Table 16

*Pretest to Posttest Measures Difference Effect Sizes**

	ALL	Experimental Group	Comparison Group
Explicit Comprehension Questions Story 1	.69	.65	.74
Implicit Comprehension Questions Story 1	.32	.31	.33
Explicit Comprehension Questions Story 2	1.06	.96	1.19
Implicit Comprehension Questions Story 2	.14	.05	.26
Reading Fluency Story 1	1.28	1.25	1.31
Reading Fluency Story 2	1.26	1.38	1.17

*Mean Difference Effect Size: .20 = Small, .50 = Medium, .80 = Large

Analysis of Spelling Data

Both groups were post-tested on spelling. Ten words were dictated and the number of correct spellings was recorded for each child. The homogeneity of the variances assumption was met, *Leven's* $F = .77, p = .38$. Group differences were not statistically significant, $t(102) = 1.04, p = .30$. The mean difference effect size was .20, suggesting a small effect. Results are summarized in Table 17.

Table 17

Means and Standard Deviations for Posttest Measures of Spelling

	M*	SD
Experimental Group	8.32	2.88
Comparison Group	7.69	3.32

* Theoretical range: 0 - 10

Analysis of Accuracy Data

A series of chi-square test of independence was performed to test the null hypotheses that participation in the literacy centers and the pretest and posttest evaluations of reading accuracy, categorized as independent, instructional, or frustrational, were independent of each other.

On the basis of reading accuracy for story 1 at pretest, the null was not rejected, $X^2 (2, n = 104) = .91, p = .64$, and it was concluded that the two variables were independent of each other. As can be seen in Table 18, the independent level was observed the most, followed by frustrational, and instructional.

Table 18

Frequency Measures for Pretest Story 1 Accuracy, n = 104

Levels	Experimental Group n=59		Comparison Group n=45	
	F	%	F	%
Independent	29	49.20	18	40.00
Instructional	6	10.20	6	13.30
Frustrational	24	40.70	21	46.70

On the basis of reading accuracy for story 2 at pretest, the null was not rejected, $X^2 (2, n = 104) = 1.55, p = .46$, and it was concluded that the two variables were independent of each other.

The independent level was observed the most, followed by frustrational, and instructional.

Results are summarized in Table 19.

Table 19

Frequency Measures for Pretest Story 2 Accuracy, n = 104

Levels	Experimental Group n=59		Comparison Group n=45	
	F	%	F	%
Independent	29	49.20	17	37.80
Instructional	5	8.50	6	13.30
Frustrational	25	42.40	22	48.90

On the basis of reading accuracy for story 1 at posttest, the null was not rejected, $X^2 (2, n = 104) = 4.92, p = .09$, and it was concluded that the two variables were independent of each other. An examination of the count data, as shown in Table 20, showed that the independent level was observed the most, followed by frustrational, and instructional.

Table 20

Frequency Measures for Posttest Story 1 Accuracy, n = 104

Levels	Experimental Group n=59		Comparison Group n=45	
	F	%	F	%
Independent	48	81.40	36	80.00
Instructional	2	3.40	6	13.30
Frustrational	9	15.30	3	6.70

On the basis of reading accuracy for story 2 at posttest, the null was not rejected, $X^2 (2, n = 104) = .26, p = .88$, and it was concluded that the two variables were independent of each other. As can be seen in Table 21, the independent level was observed the most, followed by frustrational, and instructional.

Table 21

Frequency Measures for Posttest Story 2 Accuracy, n = 104

Levels	Experimental Group n=59		Comparison Group n=45	
	F	%	F	%
Independent	47	79.70	37	82.20
Instructional	4	6.80	2	4.40
Frustrational	8	13.60	6	13.30

Qualitative Results

Bates Contextual Elements Checklist data were analyzed to answer the study's second research question: "How do first grade bilingual teachers promote literacy acquisition in literacy centers?" Frequency coding (Namey, Guest, Thairu, & Johnson, 2007) was determined for each of the domains from the contextual elements. In the next section, the most frequent characteristic for each contextual element is described and provided with examples gathered from the classroom observations during literacy centers implementation. In addition, the frequency for each contextual element's characteristics is reported in the next section.

Teacher Expectations

In the contextual element for teacher expectations, the characteristic that occurred the most was small-group instruction ($f = 51$). The frequencies for the other characteristics under the teacher expectation contextual element include the following: heterogeneous grouping ($f = 15$); implementation of routines and procedures ($f = 25$); development of proficient readers and writers ($f = 35$); and purposeful and authentic activities ($f = 5$). Teachers in the four experimental classrooms implemented small-group instruction based on the Tejas LEE results throughout the study. Examples of this implementation were:

- Use of leveled readers to develop decoding, fluency and comprehension skills
- interventions using Tejas LEE interventions on phonemic awareness, phonics, fluency, and comprehension
- letter formation using students' names
- writing conferences on students' writing samples

Students were pulled out from the self-chosen literacy center for small-group instruction based on group name that the teacher assigned for heterogeneously mixing. During an

observation in the fifth week, Teacher A used *El bebe elefante* (Canetti, n.d), a Spanish leveled reader from the Tesoros reading adoption, to develop students' fluency development through various strategies such as choral, echo, and repeated reading. Students were provided on assistance with words they struggled with in order to improve their fluency rate or reading accuracy. In another observation, Teacher C was timing students during small-group instruction to check their fluency and accuracy rates using Tesoro's fluency passages. During the first week of the study, teachers did not conduct small-group instruction because they were making sure that students were following literacy center routines and procedures. In addition, during the first week, teachers were visiting literacy centers and supervising students. Some teachers displayed on a poster board behind the small-group instruction table the group's name along with the names of the students in each group: *perritos*, *patitos*, *jirafas* and *tiburones*. As soon as students mastered certain Tejas LEE tasks, the students were moved to another group. Students did not stay in the same group throughout the year. Teachers taught comprehension skills during small-group instruction. On several occasions, the teachers used the leveled readers, such as *Animales de la granja* (Canetti, n.d), to review the comprehension objectives of main ideas and details.

During small-group instruction, teachers met with students to review different types of reading skills that are assessed on the Tejas LEE. For the task of sound identification, Teacher B used the activity *Mr. Sound Box* with the students during week five, in which students places the picture card that contains a targeted sound either at the beginning or at the end of the word. In addition, Teacher B in week six played *BINGO de palabras* with the students to practice reading words that contained a certain phonics element or the on-level high frequency words. In another observation, students were smashing flies with a fly swatter that contained a certain word the

teacher had selected. Teachers also held writing conferences with individual students during small-group instruction to review the students' rough drafts.

Self-monitoring Behaviors

For the self-monitoring behaviors contextual element, the characteristic that was implemented frequently was students' familiarity with routines and procedures ($f = 59$). The frequencies for the other characteristics on the self-monitoring behaviors include: literacy center ownership ($f = 15$) and self-monitoring ($f = 7$). At the beginning of the study, teachers in the experimental group went over the routines and procedures and allowed teachers to conduct small-group instruction. Students were provided with opportunities to practice the routines and procedures for each of the literacy centers. Examples of this implementation were:

- self-monitoring and returning materials and resources to their original locations after use
- keeping track of literacy center visits
- placing their selected item (ladybug) on a center management board (enlarged flower)
- expectations for each literacy center
- use of the literacy folder

During the observations, the researcher noted that students had a self-monitoring chart on which they were required to keep track of assigned activities. During week four observation, one of Teacher B's student colored "auditivo" on her flower management board after completing the listening log for the story *Mantenerse activo/Being Active* (Schu, 2007). On one occasion during week four's observation, Teacher C had students place their ladybugs on the flower center management board and get the literacy folder from a rack at the beginning of literacy centers.

Students selected a literacy center that had available slots. Students changed their ladybug or bee once they finished with the literacy center. During the week three observation, one student from Teacher's A class said "Me falta escritura, poesia y ortografia" (I need writing, poetry, and spelling) looking at his flower, to see what literacy centers needed to be visited. On Mondays, teachers reviewed all the literacy center activities for that week based on the literacy center plan, so that students knew what to do the following days. For example, Teacher B implemented the "fishing for words" game in the Word Study center. Students gathered the colorful fish that contained words with a certain phonics element and the fishing rod and fish for words. Students kept the fish if the word was read correctly. In the spelling center, Teacher A had students copy one of the spelling words into a strip of construction paper and made a loop. Then they wrote another word on another strip and linked it with the other spelling word. They continued this procedure until they had a word chain with all the spelling words. In another observation of the poetry center, one student in Teacher C's class independently read the poem *El patio de mi casa* (Ada & Campoy, 2003), which was written on chart paper and placed the poem's words in order.

Materials and Resources

In the contextual elements of materials and resources, resources related to literacy task ($f = 42$), was the characteristic that was most frequently implemented by the four teachers in the experimental group. The frequency for the characteristics under the materials and resources contextual element include the following: choice, organization, meaningful relevance, and motivation ($f = 37$); displayed resources for guidance ($f = 24$); and visible, modeled, revisited and rotated ($f = 9$). Examples of this characteristic's implementation were:

- implementation of various hands-on activities in each literacy center
- accessibility to materials needed to complete activities

- familiarity with the location of needed materials
- introduction of different activities on a weekly basis
- choice of literacy center and materials used to complete the activities

On a weekly basis, teachers were provided with the different materials and resources that were needed for students to complete the literacy center activities. Teachers prepared their literacy center activities based on the planning form that was provided. For example, for week five, teachers had to gather newspapers or magazines for the Ransom Words activity for the spelling center. Students had access to the materials and resources for each literacy center activity. Students did not have to go across the room to get the materials and resources they needed to complete the literacy center activities. For instance, the spelling center contained paper strips, markers, and glue for spelling chains activity. Tissue paper was provided in the art center in order for students to make a mosaic with small pieces of colored papers to illustrate their favorite part of the story for *La pata bonita* (Canetti, n.d). After the illustration, students wrote sentences about their illustrations. Pocket chart activities were placed in baggies with appropriate materials to complete the task that allowed the student to practice the weekly objective. The baggies contained pictures representing phonics element and students had to match the corresponding word with a picture, for example, (e.g., word *novia* with the picture of a bride). For the word study center, teachers had to create the Fishing for Words activity with construction paper.

Social Interactions

In the contextual element of social interactions, scaffolding among children occurred the most ($f = 38$), compared to the other two characteristics. The frequency for the characteristics

under the social interactions contextual element include the following: ulterior conversations ($f = 4$); and positive children interrelationships ($f = 23$). Examples of this implementation were:

- classmates help each other read literacy center activity instructions
- a proficient reader helps a student who is not yet reading
- classmates help each other complete the activities

During the observations, it was noted that students helped each other with the literacy center activities. For instance, in the reading center, one student from Teacher D's class was helping his non-reader classmate with activity-related instructions that teacher had displayed at the center. After the student read the instructions to his center partner, he was able to complete the literacy center activity. The student also read a book to another student. Teacher D's week 3 students reminded each other of what needed to be done in the art center-*necesitas que hacer formas y pegarlas en tu papel*. During Teacher B's week 3 at the listening center, one student said to another student "food es comida" while listening to the book *Una visita en la granja/A Visit to the Farm* (Hoena, 2008). Teacher A's week 5 students helped each other in sorting pictures into *personas*, *animales*, and *lugar y cosa* in the pocket chart center. Teacher B's week 6 students helped each other in sorting pumpkins containing /r/ and /rr/ words. At Teacher A's week 7, two students worked together to place words from a poem in a pocket chart in the appropriate order based on the poem *Los pollitos* (Ada & Campoy, 2003). At week 8, Teacher A's students at the fishing game helped each other read the words in the worm game by breaking them down into syllables and blending them.

Physical Design

In the contextual element of physical design, the characteristic that was noted all the time was that literacy centers were placed around the perimeter of the classroom ($F = 62$). The

characteristic of well-designed literacy centers obtained a frequency of 12. Before the start of the study, teachers were provided with professional development on literacy center environments and were assisted on setting up the centers. The teachers in the experimental group had the following nine literacy centers around the classroom which remained constant throughout the study: library center, spelling center, writing center, computer center, listening center, art center, poetry center, pocket chart center, and word study center. In addition, a kidney-shaped table was in the classroom for small-group instruction, which was placed in an area where the teacher could supervise all students during the use of literacy centers. Each of the literacy centers contained a center sign so that students would understand the center boundaries. Students were allowed to use literacy centers on Tuesday, Wednesday, and Thursday. On Mondays, teachers taught all the weekly objectives during whole-group instruction and reviewed the activities that would be in the centers.

Summary of the Chapter

Chapter four investigated the effects of the use of literacy centers on students' Tejas LEE scores among first grade bilingual students. This chapter provided a detailed discussion of the qualitative and quantitative results for using Tejas LEE scores and the Contextual Elements Checklist. Conclusions and discussions from the results are discussed in Chapter 5.

Chapter V: Summary, Conclusion, and Discussion

The purpose of this pretest-posttest, nonequivalent, quasi-experimental study was to investigate the use of literacy centers in first grade bilingual classrooms and its relationship on student's Tejas LEE scores. This chapter presents the conclusions and recommendations from the study. The chapter is divided into the following sections: (1) Summary of the Study, (2) Conclusion, (3) Discussion, (4) Implications, (5) Limitations, and (6) Suggestions for Future Research.

Summary of the Study

The use of literacy centers implementation, especially with bilingual students has been largely unexplored. The researcher was able to locate only a few dissertations and articles on literacy centers and one conducted specifically with bilingual Pre-Kinder students (Rodriguez, 2008). This study contributed to the knowledge by attempting to fill a void in the area of research by examining the possibilities of fostering literacy acquisition through the implementation of literacy centers with a high economically disadvantage Hispanic students living in "colonias" and considered "at-risk" of dropping out of school. Review of related research and studies on the following topics were explored in order to better inform the reader: bilingualism, dual language, economically disadvantage students, differentiated instruction, and literacy centers.

The nonprobability sample consisted of 112 first grade Hispanic bilingual students at the beginning of the study; however, for data analysis only 104 first grade bilingual students (59 and 45 in the experimental and comparison groups, respectively) were used since pretest and posttest data was available for these students. Participants were from two south Texas elementary schools from the same district located in the Rio Grande Valley with similar demographics. The intervention consisted of the implementation of nine literacy centers for eleven weeks to

reinforce the reading concepts addressed in the first grade Tejas LEE and the first grade TEKS. The literacy centers implemented were the following: spelling, writing, library, computer, art, poetry, pocket chart, listening, and word study.

The research questions that guided the study were the following:

1. How do Tejas LEE scores differ in first grade bilingual classrooms of teachers implementing literacy centers and those who do not?
2. How do first grade bilingual teachers promote literacy acquisitions during literacy centers implementation?

The researcher examined whether there was evidence to reject the following null hypothesis: There is no difference in first grade bilingual students' Tejas LEE scores between teachers implementing literacy centers and those that do not. The alternative hypothesis that was tested by this study was that there is a significant difference in first grade bilingual student's Tejas LEE scores between teachers implementing literacy centers and those that do not.

Data collection consisted of Tejas LEE BOY and MOY from students in the both groups. The Tejas LEE scores which were investigated were: (1) story 1 accuracy, (2) story 2 accuracy, (3) story 1 fluency, (4) story 2 fluency, (5) story 1 explicit comprehension questions, (6) story 1 implicit comprehension questions, (7) story 2 explicit comprehension questions, (8) story 2 implicit comprehension questions, and (9) spelling. To investigate literacy implementation, classroom observations were conducted for the teachers in the experimental group, one or two times a week for eleven weeks using the self-constructed a priori Contextual Elements Checklist for Literacy Centers. The checklist consisted of five contextual elements: teacher expectations, self-monitoring behaviors, materials and resources, social interactions, and physical design. To answer question 1, descriptive and inferential statistics were used. A series of t-tests for

independent samples (Stevens, 2009) were performed to compare the experimental and comparison groups on the basis of pretest measures to establish pre-experimental equivalence. In addition, a series of 2 by 2 repeated measure analysis of variance (RMANOVA) was performed to examine the main and interaction effects of the intervention and time. Mean difference effect sizes (Cohen, 1988) were computed to examine the practical significance of the findings and were characterized as .2 = small effect, .5 = medium effect, and .8 = large effect. Furthermore, a series of chi-square test of independence (Field, 2013) was performed to examine the null hypothesis that reading accuracy and membership in the intervention or comparison group were independent of each other. To answer questions 2, frequency for each of the characteristics for the five contextual elements were reported.

Conclusion

Based on the quantitative results from the study, it was concluded that there was no statistically significant difference between those students who participated in literacy centers and those who did not on the basis of academic achievement in Tejas LEE scores. Therefore, the null hypothesis was not rejected. For the qualitative component, frequency coding was determined for each of the contextual elements. The characteristic with the highest frequency for each of the contextual elements are as follows based on the classroom observations: small group instruction ($F = 51$); student's familiarity with routines and procedures ($F = 59$); resources related to literacy task ($F = 42$); scaffolding among children ($F = 38$); and literacy centers placed around the perimeter of the classroom ($F = 62$).

Discussion

The results of this quasi-experimental study do not support the notion that literacy centers in first grade bilingual classrooms can result in significant gains in students' literacy

development. Even though the results were not statistically significant for several of the Tejas LEE test components, students in the experimental and the comparison groups made gains in their literacy development as can be seen on the Tejas LEE scores in Chapter 4. The difference between the mean scores could be due to chance or to the sample size rather than the intervention (McClusky and Lalkhen, 2007). Previous studies have demonstrated reading improvement when teachers implement literacy centers (Stefanick, 2004; O'Donnell, & Hitpas, 2010; Stout, 2009), including with bilingual students (Rodriguez, 2008).

This also validates and supports Vygotsky's (1978) concept of Zone of Proximal Development (ZPD) that states that children learn by interacting and communicating with others. For example, during literacy centers implementation, scaffolding among children occurred the most in the social interaction contextual element. Teacher D's week 3 students reminded each other what needed to be done in the art center-*necesitas que hacer formas y pegarlas en tu papel*. In addition, teachers scaffolded instruction during small-group work in the areas of phonemic awareness, phonics, fluency and comprehension using leveled readers or the Tejas LEE intervention activities. For the task of sound identification, Teacher B used the activity, Mr. Sound Box, with the students during week five. During this activity, students placed the picture card that contained a targeted sound either at the beginning or at the end of the word.

Effect sizes also indicate that beyond results not being statistically significant, the differences between groups on four measures were medium to large, and thus educationally relevant for both groups. In five out of six measures, the comparison group improved more than the experimental group. The reason that results were not statistically significant might have been for the reason that the instrument that was used may not have been sensitive to Tejas LEE. In

addition, students from both groups might have received good instruction since the same reading adoption was being used.

Literacy centers implementation involves more work, and demands more time than other methods of teaching. During the study, teachers had to prepare on a weekly basis the recommended literacy activities aligned with the first grade TEKS based on the First Grade Literacy Planning Forms. In addition, teachers had to plan the intervention activities that were used during small-group instruction based on students' reading abilities.

There were several factors that might have impacted these results. First of all, teacher attendance is directly related to student outcomes: the more teachers are absent, the more their students' achievement suffers (Joseph, Waymack, & Zielaski, 2014). Students whose teachers miss more days for sickness score lower on state achievement tests which occur with greater frequency in low income schools (Miller, Murnane, & Willet, 2007). During the study, the four teachers accumulated a total of ten absences which resulted in fewer observations. Teacher C had the most absences (five), followed by Teacher A with four absences. In addition, the fidelity of literacy center implementation could have impacted the results. On several occasions, during the classroom observations, some of the teachers were using Tejas LEE for progress monitoring, which was approved by the principal. Teachers were required to do progress monitoring to evaluate students' literacy development. Furthermore, the availability of the assessment instrument to the teachers from both groups, could have affected the Tejas LEE scores. Teachers have the access to the Tejas LEE BOY and MOY assessment throughout the year. Therefore, an assessment instrument that is not accessible to teachers might have been a better selection, making sure that teachers do not overuse the assessment content.

In addition, results may have been different if the characteristics from the Contextual Elements Checklist that were not frequently observed may have occurred more often. For example, in the contextual element of teacher expectations, purposeful and authentic activities occurred the least ($f = 5$) compared to the rest of the characteristics. According to Hickey, Moore and Pellegrino, (2001), authentic tasks increase achievement and motivation. Tejas LEE scores might have improved more if the activities that were required to implement may have been more authentic and purposeful. Furthermore, the characteristic of using each other to self-monitor ($f = 7$), under the contextual element of self-monitoring behaviors did not occurred frequently. This characteristic might have improved results if student's literacy folders was reviewed through individual conferences and students were involved in role-playing of different situations that might occur during the use of literacy centers. Additionally, the characteristic of visible, modeled, revisited, and rotated ($f = 9$) in the materials and resources contextual elements, occurred the least, which might have impacted test results. Teachers were responsible of modeling the activities and materials on Monday so that students knew exactly how to use them to complete the literacy center activities. Fidelity to this procedure was not done since observations did not occurred until Tuesday through Thursday. In order to monitor teacher's modeling the materials and activities, it would have been possible to conduct observations since Monday.

Implications

Although this was a small study, data from the descriptive and inferential statistical analyses can be used to provide insightful information in the areas of classroom instruction and pre-service teacher preparation programs. The major contribution of the present study is that it provides data on the effects of literacy centers to develop literacy development in first grade

bilingual students. The results did show gains in student achievement. The following implications for further research concerning the implementation of literacy centers to improve students' literacy development are recommended:

For elementary teachers, especially first grade, teachers may consider implementing literacy centers since students responded positively to this instructional approach that incorporated hands-on activities aligned with TEKS and Tejas LEE tasks. Such method appears to increase the following Tejas LEE components: fluency, comprehension and spelling. This method might increase the number of students at the independent and instructional level and reduce the number of students at the frustrational level. Literacy centers can be a valuable instructional approach for primary grade level practitioners to develop student's literacy development. Administration need to provide the appropriate professional development along with time to prepare the activities for the literacy centers.

Pre-service teacher program preparation should restructure their curriculum to include content on literacy centers implementation in their reading courses. Currently, reading courses include content on learning centers but not in literacy centers. Reading courses should provide students the opportunity to read research articles on literacy centers and how to align them with the literacy standards. These programs must ensure that pre-service teachers learn about developing student's literacy development through the implementation of literacy centers.

Limitations of the Study

Several limitations were present during the study. The first limitation to the study was the number of schools involved in this "real-life" setting investigation. There was only one school selected due to the fact that the researcher had access to the site. The number of subjects in the study is another limitation that needs to be addressed. All teachers in first grade bilingual

classrooms were invited to participate in the study; however for several reasons some first grade classrooms were unable to participate. In addition, the fidelity of treatment was another limitation to the study. As far as the data gathered during the classroom observations, the researcher was the only person documenting the observations during literacy centers implementation in the four classrooms. The amount of time spent during a classroom observation was limited to 15-20 minutes twice a week. Furthermore, the duration of the study is another limitation that needs to be mentioned. However, the findings from this study might be a starting point by educators, especially in the lower grades, on how to develop students' literacy development through literacy centers implementation.

Suggestions for Future Research

The recommendations for further research that emerged from this study are listed below:

1. Conduct a replication of this literacy center implementation study with longer treatment time (one year) or in a variety of grade levels.
2. Conduct a study that describes the attitudes and perceptions of teachers using literacy centers to develop students' literacy development.
3. Conduct a study that describes the effects of literacy centers on students' attitudes and academic achievement.
4. Use an enlarged sample of multiple schools to provide a broader sense of reading achievement and literacy centers.
5. Conduct a longitudinal literacy centers study that follows the progress of participants involved in the study, as they move to higher grades.
6. Investigate the effectiveness of small-group instruction while students work in literacy centers.

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APPENDIX A: LITERACY CENTERS PLANNING FORMS (LCPF)

1st Grade Literacy Centers Planning Form						
Week 1: Un buen comienzo						
Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Dry Erase Board *Magnetic Letters *Letter Stamps	✓	✓			
Writing	<i>The 4 Door Activity:</i> <i>Yo puedo _____.</i> <i>Me gusta _____.</i> <i>Veo el _____.</i> (Display sentence stems on sentence strips) Follow-up writing activity (Pig cut-out) Student-generated alphabet draft	✓	✓			
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log *Yo puedo, Me gusta, Los tres cerditos (Read Aloud)			✓	✓	✓
Computer	*Play Educational Game *Success Maker (Reading and Math)	✓	✓	✓	✓	✓

	*Online Interactive Student Book Reading Renaissance					
Art	*Illustrate the three types of houses using various types of materials and write a caption (tri-fold)	✓	✓			
Poetry	<i>A Jugar!</i> Illustrate poem and place in Poetry Book Place poem in correct order (sentences and words) Identify rhyming words and write on poetry notebook			✓	✓	✓
Pocket Chart	Sort pictures of book covers into “informar” y “entretener”	✓	✓			
Listening	Listen to main selection Complete Listening Center Log			✓	✓	✓
Word Study	Place the alphabet letters in order Mystery bag or box (high frequency words/ alphabet	✓	✓			
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 1 Week 1 (September 9-13, 2013)

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Dry Erase Board *Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy	✓	✓			
Writing	Soy especial (4 Door Foldable) Lo que me gusta hacer (I am Card) Build a Sentence	✓	✓			
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log *Use narrative cards to retell <i>Mimi y Pipo</i> <i>Yo si puedo, Puedo saltar, Es Memo!</i>			✓	✓	✓
Computer	*Play Educational Game (Unidad 1) *Online Interactive Level Readers *Reading Renaissance *ConnectEd	✓	✓	✓	✓	✓

Art	*Draw a picture using many kinds of lines and write a sentence describing picture	✓	✓			
Poetry	<i>Tortillitas</i> Illustrate poem and place in Poetry Book Place poem in correct order (sentences and words) Identify words that contain /m/ and /p/ and rhyming words			✓	✓	✓
Pocket Chart	Sort sentences and non-sentences Sort /m/ and /p/ pictures/words with its corresponding letter/picture	✓	✓			
Listening	Listen to main selection Complete Listening Center Log Spanish/English nursery rhymes			✓	✓	✓
Word Study	Formar palabras con m y p Clasificar palabras con m y p Moveable/magnetic Letters to form m and p words	✓	✓			
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 1 Week 2 (September 16-20, 2013)

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy *Rainbow Words	✓	✓			
Writing	Escribe sobre deportes En los juegos Foldable (Primero, Despues, Al Final) for <i>De paseo</i> Write sentences for magazine pictures	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log <i>Tito y Tita, Me gusta actuar, De paseo</i> Use narrative cards to retell <i>De paseo</i>			✓	✓	✓
Computer	*Play Educational Game *Reading Renaissance *Online Interactive Student Book/level readers	✓	✓	✓	✓	✓

	*ConnectEd					
Art	*Make crayon rubbings and write a caption for the picture	✓	✓			
Poetry	<i>Tortillitas</i> Illustrate poem and place in Poetry Book Place poem in correct order (sentences and words) Identify words that contain /t/ and /d/ and rhyming words Number of line in the poem	✓		✓	✓	✓
Pocket Chart	Scrambled Sentences Sort pictures/words into its corresponding sounds, /t/ or /d/	✓		✓		✓
Listening	Listen to main selection Complete Listening Center Log English/Spanish nursery rhymes			✓	✓	✓
Word Study	Formar palabras con t y d Clasificar palabras Concentration with /m/, /p/, /t/, and /d/ syllables to form words Mystery bag or box (high frequency words)	✓	✓			
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 1 Week 3 (1st Week)
September 23-27, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonemic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy *Rainbow Words *Magnetic Letters * Ransom Words	✓	✓			
Writing	*Puedo hacerlo! *Escribe sobre alimentos saludables *Create a diorama (Estas Creciedo)	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Log *Reading Renaissance <i>Crecemos juntos, Como Crecemos, Cuando yo sea grande</i>			✓	✓	
Computer	*Play Educational Game *Reading Renaissance *Online Interactive Student Book/level readers			✓	✓	✓

	*ConnectEd					
Art	*Make a collage with magazine pictures (write a statement sentence about the collage)	✓	✓			
Poetry	<i>Tortillitas</i> *Illustrate poem and place in Poetry Book *Place poem in correct order (sentences and words) *Read to a partner with intonation *identify words that contain /l/, /s/, /t/, /d/, /m/ and /p/ and write on poetry notebook			✓	✓	✓
Pocket Chart	Sort statement and non-statement sentences Scrambled sentences Sort /l/ and /s/ pictures with its corresponding word (include /t/, /d/, /m/ and /p/ pictures)			✓	✓	✓
Listening	<i>Una visita a la huerta de manzanas</i> (Capstone Interactive Library website) Complete Listening Center Log Read/Listen story with a buddy			✓	✓	✓
Word Study	Hacer un dibujo y rotularlo Clasificar Palabras (l y s) Fly Away Words (high frequency words or phonic element words)	✓	✓			
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions based on BOY data	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 1 Week 4 (2nd Week)

September 30-October 4, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy *Rainbow Words *Ransom Words * Spelling Chains	✓	✓			
Writing	*Hogares de animales *Create a mobile (La pata bonita) *Writing Sample	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log * Stick puppets for <i>La pata bonita</i> and narrative cards Level readers: <i>Minino, Bobi, Neno</i>			✓	✓	✓
Computer	*Play Educational Game *Reading Renaissance	✓	✓	✓	✓	✓

	*Online Interactive Student Book/level readers *ConnectEd					
Art	Make a mosaic with small pieces of cut or tear colored paper to illustrate favorite part of story (write sentence describing scene) Refer to Art Express p 118-119	✓	✓			
Poetry	* <i>El patio de mi casa</i> *Illustrate and place in Poetry Book *Place poem in correct order (sentences and words) *Read to a partner with intonation *Find words that contain /b/ and /n/ and write on post-its	✓		✓	✓	
Pocket Chart	Sort interrogative (I) and exclamatory (E) sentences What sign Am I Missing? (exclamation or question) Scrambled sentences Sort /b/ and /n/ pictures with its corresponding word/syllables			✓		✓
Listening	Capstone Interactive Library: <i>La granja (A Visit to the Farm)</i> <i>Elephants</i> <i>Una visita a la huerta de manzanas</i> Listen to main selection Complete Listening Center Log			✓	✓	✓
Word Study	Formar palabras con b y n Buscar Palabras	✓	✓		✓	

	Going Fishing (high frequency words or phonic element words) Fly Away Words					
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions based on BOY data	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 1 Week 5 (3rd Week)
October 7-11, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: * Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard	✓	✓			
Writing	Deportes en equipo Collage de un equipo Create a Literature Poster using construction paper and write a few sentences (Futbol) Sentence stems on sentence strips for students to complete	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log * Retelling Cards to retell Futbol and stick puppets			✓	✓	✓

	*Sort books based on author's purpose <i>Toma! Dame!, Pasame la pelota, deportes divertidos</i>					
Computer	* Play Educational Game (English/Spanish following LOD) *Reading Renaissance *Online Interactive Student Book/level readers *ConnectEd Resources	✓	✓	✓	✓	✓
Art	Tissue Paper Collage to decorate a soccer ball (write a complete sentence (s) with capital letter and period)	✓	✓			
Poetry	* <i>El patio de mi casa</i> *Illustrate and place in Poetry Book *Place poem in correct order (sentences and words) *Read to a partner with intonation *Find words that contain /b/ , /n/ , /v/, and /ñ/ and write on post-its			✓	✓	
Pocket Chart	*Sort cards or book covers into authors' purpose (to inform, to entertain) Place M card if sentence starts with capital letter, P card if sentences contains ending period, and MP if they have both *include previous activities that students need practice			✓		✓
Listening	Capstone Interactive Library: <i>Mantenerse activo/Being Active</i> Listen to main selection			✓	✓	✓

	Complete Listening Center Log Discuss story with a partner					
Word Study	Formar palabras con v y n Lectura en el salon de clases (v y n) Going Fishing (high frequency words or phonic element words) Fly Away Words BANG!	✓	✓		✓	
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 2 Week 1 (4th Week)
October 14-18, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonemic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: * Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words	✓	✓			
Writing	*Familias de animales *Tamanos de familias *Family Quilt about each member in the family *Pop-Up Nouns Sentences	✓	✓			
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log * Retelling Cards to retell <i>Familias diferentes</i> <i>El bebe leon, El bebe oso, El bebe elefante</i>			✓	✓	✓

Computer	<ul style="list-style-type: none"> * Play Educational Game (English/Spanish following LOD) *Reading Renaissance *Online Interactive Student Book/level readers *ConnectEd Resources 	✓	✓	✓	✓	✓
Art	<ul style="list-style-type: none"> *Paint or draw a landscape with their favorite animal from <i>Familias diferentes</i> (Art Express p64-65) 	✓	✓			
Poetry	<i>Una boquita</i> <ul style="list-style-type: none"> *Illustrate poem and place in Poetry Book *Make a list of the nouns in the poem *Identify repeating line and rhyming words *Write words with f and ch *Read poem to a partner with intonation 			✓	✓	✓
Pocket Chart	<ul style="list-style-type: none"> * Sentence completion with a noun *Sort picture cards into persons, animals, places and things *Identification of nouns in sentences: place a post-it on each noun 			✓		✓
Listening	Capstone Interactive Library: <i>Max va al zoológico/Max Goes to the Zoo</i> Listen to main selection Complete Listening Center Log Discuss story with a partner			✓	✓	✓
Word Study	Clasificar y escribir palabras con f y ch Juegos de sonidos de la f y ch	✓	✓			

	Going Fishing (high frequency words or phonic element words) Fly Away Words BANG! Juegos de Sonidos de la f y ch					
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 2 Week 2 (5th Week)

October 21-25, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy (dry erase board) *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words * Scramble Spelling	✓	✓			
Writing	*Ayuda en casa *Haz un emparedado *Literature Chain (Retelling: Un nido para dos) *Escribe acerca de como hacer tu sandwich favorito	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log *Figuras del cuento			✓	✓	✓

	* Retelling Cards to retell <i>Un nido para dos</i> <i>El perrito, Que desorden,</i> <i>Animales de la granja, el</i> <i>perrito de Roli (Take-Home Reader)</i>					
Computer	* Play Educational Game (English/Spanish following LOD) *Reading Renaissance *Online Interactive Student Book/level readers *ConnectEd Resources	✓	✓	✓	✓	✓
Art	*Rip and glue construction paper to create a scenery	✓	✓			
Poetry	<i>Una boquita</i> Illustrate poem and place in Poetry Book Identify rhyming words Count lines in the poem Place poem in order Identify words containing r and rr	✓		✓	✓	
Pocket Chart	Sort noun pictures into singular and plural Use story characters to retell the story Use post-its to identify singular/plural nouns (yellow=singular, different color=plural nouns)					✓
Listening	Capstone Interactive Library: <i>Pollita pequena/Chicken Little</i> Listen to main selection Complete Listening Center Log Discuss story with a partner			✓	✓	✓
Word Study	Combine syllables to form words containing r and rr	✓	✓			

	Formar palabras con r y rr Going Fishing (high frequency words or phonic element words) Fly Away Words BANG! Juegos de sonidos de la r y rr					
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 2 Week 3 (6th Week)

October 28-November 1, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonemic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy (dry erase board) *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words *Scramble Spelling *Student Choice Activity	✓	✓			
Writing	En un pais lejano Mi vecindario (product from Art Center) Creating Captions with assorted masculine and feminine magazine pictures Create a Windsock (<i>Blanca Begonia va a la biblioteca</i>)	✓	✓			✓
Library	* Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance			✓	✓	✓

	*Reading Log *Figuras del cuento * Story Retelling Cards Graphic Organizer (Idea Principal) Level Readers and decodable reader					
Computer	*Play Educational Game (English/Spanish following LOD) *Reading Renaissance *Online Interactive Student Book/level readers *ConnectEd Resources	✓	✓	✓	✓	✓
Art	Use various art materials to create the neighborhood and write about their art product	✓	✓			
Poetry	<i>Los Pollitos</i> Illustrate the poem and place in Poetry Book Search for words containing ga, go, gu, gue, gui Identify rhyming words Place poem's sentence strips in order by sentence and words Identify masculine or feminine nouns in the poem and write on poetry notebook	✓	✓		✓	
Pocket Chart	Place "el" or "la" in the appropriate nouns. Use Wikki Stixx/post-its to identify the masculine or feminine nouns in sentences Match /g/ words or syllables with its corresponding pictures	✓	✓			
Listening	Capstone Interactive Library: <i>Max va al doctor/Max goes to the doctor</i>			✓	✓	✓

	Listen to main selection Complete Listening Center Log Discuss story with a partner					
Word Study	Formar palabras con g y gu (Puzzle Game) Clasificar palabras con g y gu Chain of words Dry erase boards to practice /g/ words Going Fishing (high frequency words or phonic element words) Fly Away Words BANG! Juegos de Sonidos de la f y ch Juegos de sonidos de la r y rr El juego de gusanos	✓	✓			
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 2 Week 4 (7th Week)

November 4-8, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: Magnetic/Moveable Letters *Spelling Tiles *Dictate words to a buddy (dry erase board) *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words *Scramble Spelling * Spell-A-Basket	✓	✓			
Writing	Haz musica Grupo de animales Flip-Open Fun Literature Postcard (<i>Beti y la banda</i>) Escribe acerca de una diversion en el vecindario	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log			✓	✓	✓

	<p>*Graphic Organizer (principio, desarrollo, final)</p> <p>* Retelling Cards to retell <i>Beti y la banda</i> <i>El espectaculo, Una mascot para Gema, Juntos y contentos</i></p>					
Computer	<p>*Play Educational Game (English/Spanish following LOD)</p> <p>*Reading Renaissance</p> <p>*Online Interactive Student Book/level readers</p> <p>*ConnectEd Resources</p>	✓	✓			✓
Art	<p>*Draw a close-up picture with details and write a few sentences about your the picture (Art Express p70 & 71)</p>	✓	✓			
Poetry	<p><i>Los pollitos</i></p> <p>Illustrate poem and place in Poetry Book</p> <p>Identify rhyming words</p> <p>Count lines in the poem</p> <p>Place poem's sentence strips in order by sentence and words</p> <p>Identify words containing ja, je, ji, jo, ju, ge, gi</p>	✓	✓		✓	
Pocket Chart	<p>Sort nouns into "Sustantivo Propio (SP)" or "Sustantivo Comun (SC)"</p> <p>Identify "sustantivo propio" y "sustantivo comun" in sentences</p> <p>Match /j/, /ge/ y /gi/ words or syllables with its corresponding pictures</p>	✓	✓			
Listening	<p>Capstone Interactive Library: <i>Max va a la</i></p>			✓	✓	✓

	<i>peluqueria/Max goes to the barber</i> Listen to main selection Complete Listening					
Word Study	Formar palabras con g o j then write a sentence using a created word with g or j Union de silabas Chain of words Dry erase boards to practice /j/, /ge/, y /gi/ words Going Fishing (high frequency words or /j/, /ge/, y /gi/ words) Fly Away Words (/j/, /ge/, y /gi/) BANG! Juegos de Sonidos de la f y ch Juegos de sonidos de la r y rr El juego de gusanos (/j/, /ge/, y /gi/)	✓	✓	✓		
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions *identificacion del sonido inicial y final *union y segmentacion de los sonidos *omission del sonido inicial y final *reconocimiento de palabras *fluidez y comprension	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 2 Week 5 (8th Week)
November 11-15, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Spelling Tiles *Dictate words to a buddy (dry erase board) *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words *Scramble Spelling *Spell-A-Basket *Magnetic/moveable letters *Spell-A-Basket *Finger Painting	✓	✓			
Writing	Mi familia Dibuja y cuenta Creating Captions for action pictures Create a Literature Visor <i>Las ratoncitas</i> or <i>Level Readers</i> or <i>story of the week</i>	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance			✓	✓	✓

	*Reading Log *Graphic Organizer (sequence) * Retelling Cards to retell <i>Arriba y abajo por los callejones</i> <i>Los tres chivitos, Los tres ositos, Los tres ratoncitos</i>					
Computer	*Play Educational Game (English/Spanish following LOD) *Reading Renaissance *Online Interactive Student Book/level readers *ConnectEd Resources	✓	✓	✓	✓	✓
Art	Draw a still life drawing based on Frida Kahlo's painting (Art Express, p. 102-103) and write about your group of objects	✓	✓			
Poetry	<i>Gata Golosa</i> Illustrate poem and place in Poetry Book Place poem in correct order (sentences and words) Identify words that contain /x/, /ll/, and /w/ How many lines in the poem? Does the poem have stanzas? How many? Does the poem have repetition? What articles (el, la, los, las, un, una, unos) can be found on the poem?	✓	✓		✓	
Pocket Chart	Fill in the blanks with appropriate article (el, la, los, las, un, una, unos, unas) Sort words/pictures with its corresponding sound (ll, w and x)	✓	✓			

Listening	Capstone Interactive Library: <i>El papalote de Pablo/Max goes to the dentist</i> Listen to main selection Complete Listening			✓	✓	✓
Word Study	Formar y combinar palabras con x, ll, y w Clasificar palabras Union de silabas Chain of words Dry erase boards to practice words (ll, w and x) Going Fishing (high frequency words or ll, w and x)words) Fly Away Words (ll, w and x) BANG! Juegos de Sonidos de la f y ch Juegos de sonidos de la r y rr El juego de gusanos (/j/, /ge/, y /gi/) and (ll, w and x) Word Bowling (high frequency words or /j/, /ge/, /gi/, /ll/, /w/ and /x/ words			✓	✓	✓
Small-Group Instruction	Guided reading with level readers Tejas LEE interventions *identificacion del sonido inicial y final *union y segmentacion de los sonidos *omission del sonido inicial y final *reconocimiento de palabras *fluidez y comprension	✓	✓	✓	✓	✓

1st Grade Literacy Centers Planning Form

Unit 3 Week 1 (9th Week)

November 18-22, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Spelling Tiles *Dictate words to a buddy (dry erase board) *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words *Scramble Spelling *Spell-A-Basket *Magnetic/moveable letters *Spell-A-Basket *Finger Painting * Sand Tray Words	✓	✓			
Writing	Escribe a un amigo (Letter Writing) Mi amigo es genial! (Poster) Literature Wind Sock (La vaquita de Martin)	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance *Reading Log			✓	✓	✓

	<p>* Retelling Cards to retell <i>La vaquita de Martin</i></p> <p>Complete graphic organizer (Sequence)</p> <p>Level Readers: <i>Que hace Prisi? De prisa! Que dia!</i></p> <p>Time for Kids: “Come bien, sientete bien”</p>					
Computer	<p>*Play Educational Game (English/Spanish following LOD)</p> <p>*Reading Renaissance</p> <p>*Online Interactive Student Book/level readers</p> <p>*ConnectEd Resources</p>	✓	✓	✓	✓	✓
Art	<p>*Paint a self-portrait using a mirror and add something that they like to do (Art Express pg 50-51. Write about their self-portrait.</p>	✓	✓			
Poetry	<p><i>Gata Golosa</i></p> <p>Illustrate poem and place in Poetry Book</p> <p>Place poem in correct order (sentences and words)</p> <p>How many lines in the poem?</p> <p>Does the poem have stanzas? How many?</p> <p>Does the poem have repetition?</p> <p>Write verbs found on the poem.</p> <p>Identify words that contain /pl/ y /pr/</p>	✓	✓		✓	
Pocket Chart	<p>Match /pl/ or /pr/ pictures with its corresponding word</p> <p>Complete the sentence with the correct word</p> <p>Match a picture with its corresponding verb</p>	✓	✓			

	Identify the verb in sentences with a posti-it					
Listening	Capstone Interactive Library: <i>Tiranosaurio rex/Tyrannosaurus Rex</i> Listen to main selection Complete Listening Log			✓	✓	✓
Word Study placa plaga plan plancha planeta planear plano planta plata plato playa playera plaza plomero practicar pradera precavido preciosa premio prender presentar presente presidente prestar	Formar y clasificar palabras con pl y pr Play Concentration Union de silabas Chain of words Dry erase boards to practice writing words Going Fishing (high frequency words or targeted phonic element) Fly Away Words BANG! Juegos de Sonidos de la f y ch Juegos de sonidos de la r y rr El juego de gusanos (/j/, /ge/, y /gi/) and (ll, w and x) Word Bowling (high frequency words or /j/, /ge/, /gi/, /ll/, /w/ and /x/ words Capturando Palabras (pl or pr)	✓	✓			
Small-Group Instruction	Guided reading with level readers (fluency and comprehension): <i>Que hace Prisi? De prisa! Que dia!</i> Tejas LEE interventions: *identificacion del sonido inicial y final *union y segmentacion de los sonidos *omission del sonido inicial y final	✓	✓	✓	✓	✓

	*reconocimiento de palabras *fluidez y comprensión					
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1st Grade Literacy Centers Planning Form

Unit 3 Week 2 (10th Week)
December 2-6, 2013

Tejas LEE Inventory Reading Concepts

Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Spelling Tiles *Dictate words to a buddy (dry erase board) *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words *Scramble Spelling *Spell-A-Basket *Magnetic/moveable letters *Spell-A-Basket *Finger Painting *Sand Tray Words *Student Choice	✓	✓			
Writing	Construyamos Haz un cuadro Squiggle Writing Peek-a-Boo (<i>El Principe y la Princesa</i>)	✓	✓			✓
Library	*Buddy Reading			✓	✓	✓

	*Reading to a Stuffed Animal *Reading Renaissance *Reading Log * Retelling Cards to retell <i>Rosa Robot</i> Create Venn Diagram to compare characters Level Readers: Lo que sono Yuli; Imaginalo, Yoyi; El dibujo de Maya Time for Kids: Tejadora de cestas					
Computer	*Play Educational Game (English/Spanish following LOD) *Reading Renaissance *Online Interactive Student Book/level readers *ConnectEd Resources	✓	✓	✓	✓	✓
Art	*Students will paint themselves in a seascape and write a caption for their picture (Art Express, pg 84 & 85)	✓	✓			
Poetry	<i>El gato Confite</i> Illustrate poem and place in Poetry Notebook Place poem in correct order (sentences and words) How many lines in the poem? Does the poem have stanzas? How many? Does the poem have repetition? What rhyming words does the poem contain? Identify words that contain /y/	✓	✓		✓	
Pocket Chart	Match the picture with its present verb (patina)	✓		✓		

	Substitute infinite verbs into present verbs (saltar=salta) Compare and contrast two items using sentence strips					
Listening	Capstone Interactive Library: Listen to main selection Complete Listening Log			✓	✓	✓
Word Study	Formar palabras con y Clasificar palabras Word Puzzles Play Concentration Union de silabas Chain of words Dry erase boards to practice writing words Going Fishing (high frequency words or targeted phonic element) Fly Away Words BANG! Juegos de Sonidos de la f y ch Juegos de sonidos de la r y rr El juego de gusanos (/j/, /ge/, y /gi/) and (ll, w and x) Word Bowling (high frequency words or /j/, /ge/, /gi/, /ll/, /w/ and /x/ words Capturando Palabras (pl or pr) Formando Palabras	✓	✓			
Small-Group Instruction	Guided reading with level readers (fluency and comprehension): Level Readers: Lo que sono Yuli; Imaginalo, Yoyi; El dibujo de Maya Tejas LEE interventions:	✓	✓	✓	✓	✓

	<ul style="list-style-type: none">*identificacion del sonido inicial y final*union y segmentacion de los sonidos*omission del sonido inicial y final*reconocimiento de palabras*fluidez y comprension					
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1st Grade Literacy Centers Planning Form

Unit 3 Week 3 (10th Week)

December 2-6, 2013

Tejas LEE Inventory Reading Concepts						
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Spelling Tiles *Dictate words to a buddy (dry erase board) *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words *Scramble Spelling *Spell-A-Basket *Magnetic/moveable letters *Spell-A-Basket *Finger Painting *Sand Tray Words *Student Choice	✓	✓			
Writing	Descubre tu sombra Sombras de animales <i>(Mascaras, Mascaras, Mascaras)</i> Squiggle Writing Peek-a-Boo	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal *Reading Renaissance			✓	✓	✓

	*Reading Log Graphic organizer: Idea principal Level Readers: Dibuja asi! Time for Kids: Sarah entra en un cuadro					
Computer	*Play Educational Game (English/Spanish following LOD) *Reading Renaissance *Online Interactive Student Book/level readers *ConnectEd Resources	✓	✓	✓	✓	✓
Art	*Students will paint themselves in a seascape and write a caption for their picture (Art Express, pg 84 & 85)	✓	✓			
Poetry	<i>El gato Confite</i> Illustrate poem and place in Poetry Notebook Place poem in correct order (sentences and words) How many lines in the poem? Does the poem have stanzas? How many? Does the poem have repetition? What rhyming words does the poem contain? Identify words that contain /r/ and /h/	✓	✓		✓	
Pocket Chart	Complete missing word part to make complete words Sort verbs into “present tense” or “past tense” Use post its to identify the past tense verb in sentences			✓		✓

	Match main idea sentence with its corresponding picture					
Listening	Capstone Interactive Library: Feliz navidad Gus/Merry Christmas Gus Listen to main selection Complete Listening Log			✓	✓	✓
Word Study	Formar palabras con r y h Clasificar palabras Word Puzzles Play Concentration Union de silabas Chain of words Dry erase boards to practice writing words Going Fishing (high frequency words or targeted phonic element) Fly Away Words BANG! Juegos de Sonidos de la f y ch Juegos de sonidos de la r y rr El juego de gusanos (/j/, /ge/, y /gi/) and (ll, w and x) Word Bowling (high frequency words or /j/, /ge/, /gi/, /ll/, /w/ and /x/ words Capturando Palabras (pl or pr) Formando Palabras	✓	✓			
Small-Group Instruction	Guided reading with level readers (fluency and comprehension): Level Readers: Dibuja asi! Tejas LEE interventions: *identificacion del sonido inicial y final	✓	✓	✓	✓	✓

	<ul style="list-style-type: none"> *union y segmentacion de los sonidos *omission del sonido inicial y final *reconocimiento de palabras *fluidez y comprension 					
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1st Grade Literacy Centers Planning Form

Unit 3 Week 3 (11th Week)
December 9-13, 2013

Tejas LEE Inventory Reading Concepts

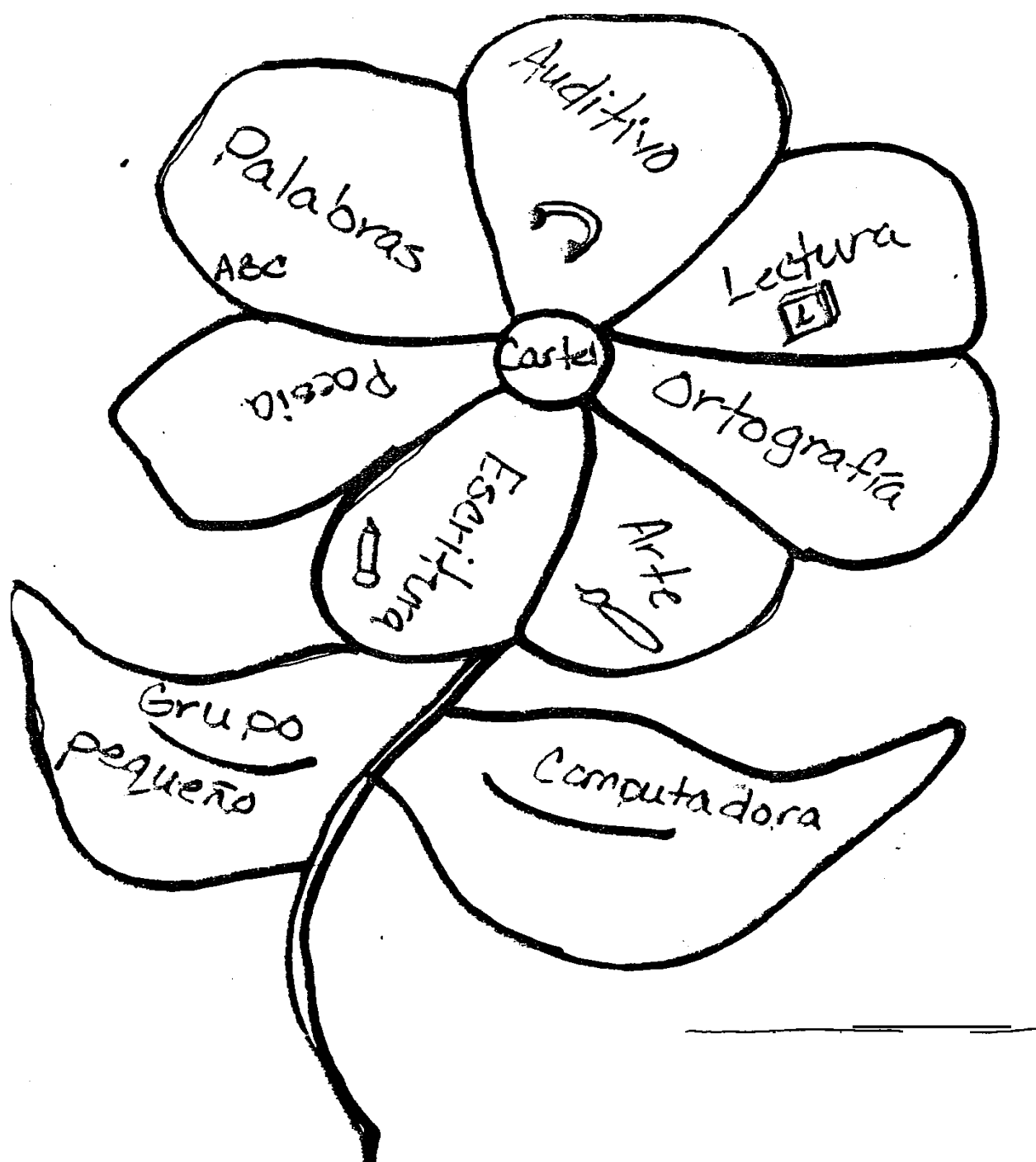
Literacy Centers	Activities	Graphophonic Knowledge	Phonological Awareness	Reading Accuracy	Reading Fluency	Reading Comprehension
Spelling	Practice Spelling Words using: *Spelling Tiles *Dictate words to a buddy (dry erase board) *Rainbow Words *Ransom Words *Spelling Chains *Spelling Keyboard *Choo-Choo Words *Scramble Spelling *Spell-A-Basket *Magnetic/moveable letters *Spell-A-Basket *Finger Painting *Sand Tray Words *Spiral Spelling and Let's Type!	✓	✓			
Writing	Tiempo en Familia Titeres de la familia Book Flag (Porque lloras Lucas? Or level reader) Construyendo Oraciones Super Pop-Ups	✓	✓			✓
Library	*Buddy Reading *Reading to a Stuffed Animal			✓	✓	✓

	*Reading Renaissance *Reading Log Graphic organizer: Idea principal Level Readers: Keli y yo; Mi hermano Kiko; Mi diente flojo Time for Kids: Burbujas					
Computer	*Play Educational Game (English/Spanish following LOD) *Reading Renaissance *Online Interactive Student Book/level readers *ConnectEd Resources	✓	✓	✓	✓	✓
Art	*Students will paint themselves in a seascape and write a caption for their picture (Art Express, pg 84 & 85) or create a mask with paper plates from Art Express	✓	✓			
Poetry	<i>La danza de la sombra</i> Illustrate poem and place in Poetry Notebook Place poem in correct order (sentences and words) How many lines in the poem? Does the poem have stanzas? How many? Does the poem have repetition? What rhyming words does the poem contain? Identify words that contain/c/, /q/ and /k/	✓	✓		✓	
Pocket Chart	Complete missing word part to make complete words or sentences Sort verbs into “present tense” or “past tense” and “future tense”			✓		✓

	Use post its to identify the future tense verb in sentences Match pictures with with its corresponding prediction.					
Listening	Capstone Interactive Library: El pastorcito mentiroso/ The Boy Who Cried Wolf Listen to main selection Complete Listening Log			✓	✓	✓
Word Study	Formar palabras con r y h Clasificar palabras Word Puzzles Play Concentration Union de silabas Chain of words Dry erase boards to practice writing words Going Fishing (high frequency words or targeted phonic element) Fly Away Words BANG! Juegos de Sonidos de la f y ch Juegos de sonidos de la r y rr El juego de gusanos (/j/, /ge/, y /gi/) and (ll, w and x) Word Bowling (high frequency words or /j/, /ge/, /gi/, /ll/, /w/ and /x/ words Capturando Palabras (pl or pr) Formando Palabras y Capturando Palabras con c, q, k and multi syllabic words	✓	✓			
Small-Group Instruction	Guided reading with level readers (fluency and comprehension):	✓	✓	✓	✓	✓

	<p>Level Readers: Keli y yo; Mi hermano Kiko; Mi diente flojo</p> <p>Tejas LEE interventions:</p> <ul style="list-style-type: none"> *identificacion del sonido inicial y final *union y segmentacion de los sonidos *omission del sonido inicial y final *reconocimiento de palabras *fluidez y comprension 					
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APPENDIX B: LITERACY CENTERS MANAGEMENT BOARD



APPENDIX C: CONTEXTUAL ELEMENTS CHECKLIST FOR LITERACY CENTERS

Teacher:

Date:

Contextual Elements Checklist for Literacy Centers	
Contextual Elements	Observations
Teacher Expectations <ul style="list-style-type: none"> <input type="checkbox"/> Heterogeneous Grouping <input type="checkbox"/> Implementation of routines and procedures <input type="checkbox"/> Development of proficient readers and writers <input type="checkbox"/> Small-group instruction <input type="checkbox"/> Implementation of purposeful and authentic activities 	
Self-monitoring Behaviors <ul style="list-style-type: none"> <input type="checkbox"/> Students are familiar with routines and procedures <input type="checkbox"/> Students have literacy center ownership <input type="checkbox"/> Students use each other to help self-monitor 	
Materials and Resources <ul style="list-style-type: none"> <input type="checkbox"/> Materials provide choice, organization, meaningful relevance, and motivation <input type="checkbox"/> Resources related to literacy task (visual directions, center management board) are evident <input type="checkbox"/> Resources that students can refer for guidance are displayed (alphabet, words walls, ect) <input type="checkbox"/> Resources are visible, modeled, revisited, and rotated 	
Social Interactions <ul style="list-style-type: none"> <input type="checkbox"/> Students are involved in ulterior conversations (conversations either related or unrelated to literacy) <input type="checkbox"/> Positive Children Interrelationships <input type="checkbox"/> Scaffolding among children 	
Physical Design <ul style="list-style-type: none"> <input type="checkbox"/> literacy centers placed around the perimeter of the room <input type="checkbox"/> literacy centers are well-designed 	

APPENDIX D: LETTERS OF CONSENT AND ASSENT FORM

Texas A&M University-Corpus Christi Consent Form for Superintendent of Schools

Working Title: Teachers' use of literacy centers to promote literacy development in first grade bilingual students in a south Texas school: A quasi-experimental study

Principal Investigator: Fernando Hernandez, doctoral student at Texas A&M University-Corpus Christi, Department of Curriculum & Instruction-Literacy

Currently I am completing a Ph.D. in Curriculum and Instruction-Literacy at Texas A&M University-Corpus Christi. As part of my dissertation research, I am planning and organizing a study that focuses on young children's literacy acquisition through the implementation of literacy centers. I would like to focus my study on several first grade bilingual classrooms at two elementary schools with similar demographics. As part of my study, I would like to provide professional development in literacy centers in the fall of 2013 to the experimental group. The study specifically targets student's literacy scores from the Tejas LEE Beginning of the Year (BOY) and Middle of the Year (MOY). In addition, participants in the experimental group will be observed using the Contextual Elements Checklist for Literacy Centers. I am asking your permission to include the two elementary schools in the study.

Any information that is obtained in connection with this study will be kept confidential and will be used only for academic purposes such as publication, education, and professional presentations. There are no anticipated risks involved in this study and the children will benefit from active involvement in literacy centers. Participation in study is voluntary and teachers are free to withdraw their consent and discontinue participation in the study at any time. If you have any questions or concerns, please contact the principal investigator: Fernando Hernandez at (956) 878-9026 or Dissertation Chair: Dr. C. Valadez at (361) 825-3201

The signature below indicates your permission to conduct the study in your district. Thank you very much for your consideration.

Superintendent's Signature

Date

Texas A&M University-Corpus Christi
Consent Form for School Principal

Working Title: Teachers' use of literacy centers to promote literacy acquisition in first grade bilingual students in a south Texas school: A quasi-experimental study

Principal Investigator: Fernando Hernandez, doctoral student at Texas A&M University-Corpus Christi, Department of Curriculum & Instruction-Literacy

Currently I am completing a Ph.D. in Curriculum and Instruction-Literacy at Texas A&M University-Corpus Christi. As part of my dissertation research, I am planning and organizing a study that focuses on young children's literacy acquisition through the implementation of literacy centers. I would like to focus my study on several first grade bilingual classrooms at your school and another elementary with similar demographics. In order to investigate the effectiveness of literacy centers, the Beginning of the Year (BOY) and Middle of Year (MOY) Tejas LEE scores will be collected and periodically observations will be conducted using the Contextual Elements Checklist for Literacy Centers. The duration of the study will be eleven weeks (September 2013-December 2013). I am asking your permission to conduct the study and to allow your teachers to participate in the study.

Any information that is obtained in connection with this study will be kept confidential and will be used only for academic purposes such as publication, education, and professional presentations. There are no anticipated risks involved in this study and the children will benefit from active involvement in literacy centers. Participation in this study is voluntary and teachers are free to withdraw their consent and discontinue participation in the study at any time. If you have any questions or concerns, please contact the principal investigator: Fernando Hernandez at (956) 878-9026 or Dissertation Chair: Dr. C. Valadez at (361) 825-3201

The signature below indicates your permission to conduct the study in your elementary school. You will receive a signed copy of this consent form for your records.

Principal's Signature

Date

Principal Investigator's Signature

Date

Texas A&M University-Corpus Christi
Consent Form for School Principal

Working Title: Teachers' use of literacy centers to promote literacy acquisition in first grade bilingual students in a south Texas school: A quasi-experimental study

Principal Investigator: Fernando Hernandez, doctoral student at Texas A&M University-Corpus Christi, Department of Curriculum & Instruction-Literacy

Currently I am completing a Ph.D. in Curriculum and Instruction-Literacy at Texas A&M University-Corpus Christi. As part of my dissertation research, I am planning and organizing a study that focuses on young children's literacy acquisition through the implementation of literacy centers. I would like to focus my study on several first grade bilingual classrooms at your school and another elementary in the district with similar demographics. As part of the study, the Beginning of the Year (BOY) and Middle of Year (MOY) Tejas LEE scores will be collected at the end of the study. The duration of the study will be eleven weeks (September 2013- December 2013). I am asking your permission to conduct the study in your campus and to allow your teachers to participate in the study.

Any information that is obtained in connection with this study will be kept confidential and will be used only for academic purposes such as publication, education, and professional presentations. There are no anticipated risks involved in this study and the children will benefit from active involvement in literacy centers. Participation in this study is voluntary and teachers are free to withdraw their consent and discontinue participation in the study at any time. If you have any questions or concerns, please contact the principal investigator: Fernando Hernandez at (956) 878-9026 or Dissertation Chair: Dr. C. Valadez at (361) 825-3201

The signature below indicates your permission to conduct the study in your elementary school. You will receive a signed copy of this consent form for your records.

Principal's Signature

Date

Principal Investigator's Signature

Date

Texas A&M University-Corpus Christi
Consent Form for Teachers-Experimental Group

Working Title: Teacher's use of literacy centers to promote literacy acquisition in first grade bilingual students in a south Texas school: A quasi-experimental study

Principal Investigator: Fernando Hernandez, doctoral student at Texas A&M University-Corpus Christi, Department of Curriculum & Instruction-Literacy

Currently I am completing a Ph.D. in Curriculum and Instruction-Literacy at Texas A&M University-Corpus Christi. As part of my dissertation research, I am planning and organizing a study that focuses on young children's literacy acquisition through the implementation of literacy centers. I would like to focus my study on several first grade bilingual classrooms at your school. In order to investigate the effectiveness of literacy centers, your student's Beginning of the Year (BOY) and Middle of Year (MOY) Tejas LEE scores will be collected. You will also be observed periodically throughout the duration of the study for eleven weeks (September 2013-December 2013) using the Contextual Elements Checklist for Literacy Centers.

Any information that is obtained in connection with this study will be coded to protect your privacy and confidentiality and will be used only for academic purposes such as publication, education, and professional presentations. There are no anticipated risks involved in this study and the children will benefit from active involvement in literacy centers. Participation in study is voluntary and you are free to withdraw your consent and discontinue participation in the study at any time. If you have any questions or concerns, please contact the principal investigator: Fernando Hernandez at (956) 878-9026 or Dissertation Chair: Dr. C. Valadez at (361) 825-3201

The signature below indicates that you have read the information provided above and have decided to participate in the study. You will receive a signed copy of this consent form for your records.

Teacher's Signature

Date

Principal Investigator's Signature

Date

Texas A&M University-Corpus Christi
Consent Form for Teachers-Control Group

Working Title: Teacher's use of literacy centers to promote literacy acquisition in first grade bilingual students in a south Texas school: A quasi-experimental study

Principal Investigator: Fernando Hernandez, doctoral student at Texas A&M University-Corpus Christi, Department of Curriculum & Instruction-Literacy

Currently I am completing a Ph.D. in Curriculum and Instruction-Literacy at Texas A&M University-Corpus Christi. As part of my dissertation research, I am planning and organizing a study that focuses on young children's literacy acquisition through the implementation of literacy centers. I would like to focus my study on several first grade bilingual classrooms at your school. I am asking permission to include you in my study. If you agree to participate in the study, your students' Beginning of the Year (BOY) and Middle of Year (MOY) Tejas LEE scores will be collected in January 2014. At the end of the study, you will have the opportunity to participate in literacy centers implementation conducted by the researcher.

Any information that is obtained in connection with this study will be coded to protect your privacy and confidentiality and will be used only for academic purposes such as publication, education, and professional presentations. There are no anticipated risks involved in this study and the children will benefit from active involvement in literacy centers. Participation in study is voluntary and you are free to withdraw your consent and discontinue participation in the study at any time. If you have any questions or concerns, please contact the principal investigator: Fernando Hernandez at (956) 878-9026 or Dissertation Chair: Dr. C. Valadez at (361) 825-3201

The signature below indicates that you have read the information provided above and have decided to participate in the study. You will receive a signed copy of this consent form for your records.

Teacher's Signature

Date

Principal Investigator's Signature

Date

PARENTAL CONSENT FORM

TEACHER’S USE OF LITERACY CENTERS TO PROMOTE LITERACY ACQUISITION IN FIRST GRADE BILINGUAL STUDENTS IN A SOUTH TEXAS SCHOOL: A QUASI- EXPERIMENTAL STUDY

Introduction

The purpose of this form is to provide you (as the parent of a prospective research study participant) information that may affect your decision as to whether or not to let your child participate in this research study. This form will also be used to record your consent if you decide to let your child be involved in this study.

If you agree, your child will be asked to participate in a research study the implementation of literacy centers to promote literacy acquisition in first grade bilingual students. The purpose of this study is to find out the difference in first grade bilingual student’s Tejas LEE scores between teachers implementing literacy centers and those that do not implement literacy centers. This study will also investigate how first grade bilingual teachers promote literacy acquisition during literacy center implementation. He/she was selected to be a possible participant because he/she is a first grade bilingual student enrolled in the schools participating in the study.

What will my child be asked to do?

If you allow your child to participate in this study, he/she will be administered the Tejas LEE at the beginning of the study (September 2013) and at the end of the study (January 2014). Children in the control group will continue with educational practices using Tesoros. On the other hand, children in the experimental group will be provided opportunities to participate in “literacy centers” to develop their literacy skills through enhanced activities and the implementation of the reading adoption, Tesoros. This study will be for 11 weeks (September 2013-December 2013).

What are the risks involved in this study?

The risks associated in this study are minimal, and are not greater than risks your child ordinarily encounters in daily life.

What are the possible benefits of this study?

The possible benefits of participation are the engagement in completing the literacy centers activities and an improvement in Tejas LEE scores at the end of the study.

Does my child have to participate?

No, your child doesn't have to be in this research study. You can agree to allow your child to be in the study now and change your mind later without any penalty. This research study will take place during regular classroom activities.

What if my child does not want to participate?

In addition to your permission, your child must agree to participate in the study. If your child does not want to participate he/she will not be included in the study without penalty. If your child initially agrees to be in the study he/she can withdraw at any point during the study without penalty.

Who will know about my child's participation in this research study?

The records of this study will be kept private. No identifiers linking you or your child to this study will be included in any sort of report that might be published. Research records will be stored securely and only Fernando Hernandez and Guang Zeng will have access to the records.

Whom do I contact with questions about the research?

If you have questions regarding this study, you may contact Fernando Hernandez at 956-878-9026, fernandohdz22@gmail.com or Dr. Corinne Valadez at (361) 825-3336, corinne.valadez@tamucc.edu.

Whom do I contact about my child's rights as a research participant?

This research study has been reviewed by the Research Compliance Office and/or the Institutional Review Board at Texas A&M University – Corpus Christi. For research-related problems or questions regarding your rights as a research participant, you can contact Erin Sherman, Research Compliance Officer, at (361)825-2497 or erin.sherman@tamucc.edu.

Signature

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the consent form for your records. By signing this document, you consent to allow your child to participate in this study.

Signature of Parent/Guardian: _____ **Date:** _____

Printed Name: _____

Printed Name of Child: _____

Signature of Person Obtaining Permission: _____

Date: _____

Printed Name: _____

Forma de Consentimiento de Padres

USO DE CENTROS LITERARIOS PARA PROMOVER LA ADQUISICION LITERARIA EN ALUMNOS DE PRIMER AÑO BILINGÜE EN UNA ESCUELA DEL SUR DE TEXAS: UN ESTUDIO QUASI-EXPERIMENTAL

Introducción

El propósito de esta forma es proveerle a usted (como padre de un posible participante en el estudio de investigación) información que podría influenciar su decisión de permitir o negar que su hijo participe en el estudio de investigación. Esta forma también será usada para archivar su consentimiento si usted decide permitir que su hijo participe en este estudio.

Si usted está de acuerdo, a su hijo se le pedirá que participe en un estudio de investigación donde se implementarán centros literarios para promover la adquisición literaria en alumnos de primer año bilingüe. El propósito del estudio es encontrar la diferencia en los resultados de Tejas LEE entre estudiantes de primer año bilingüe que participaron en centros literarios y los que no participaron en el estudio. Esta investigación también estudiará como los maestros de primer año bilingüe promueven la adquisición literaria durante la implementación de centros literarios. Él/Ella fue seleccionado a ser un posible participante porque él/ella es un alumno de primer año bilingüe registrado en una escuela que participa en esta investigación.

Que tendrá que hacer mi hijo?

Si usted permite que su hijo participe en esta investigación, él/ella se le administrará el examen de Tejas LEE al inicio del estudio (Septiembre 2013) y al final de la investigación (Enero 2014). Los niños en el grupo no monitoreado continuarán con las prácticas educacionales usando Tesoros. Por otro lado, a los niños en el grupo experimental se les proveerá oportunidades para participar en centros literarios para desarrollar sus habilidades literarias a través de actividades mejoradas y la implementación de la adopción de lectura, Tesoros. Este estudio será por 11 semanas (Septiembre 2013-Diciembre 2013).

Cuáles son los riesgos implicados en este estudio?

Los riesgos asociados a este estudio son mínimos, y no son mayores a los riesgos que su hijo enfrenta en su vida diaria.

Cuáles son los posibles beneficios de este estudio?

Los posibles beneficios de participar en este estudio son el estar envuelto en terminar las actividades de los centros literarios y un mejoramiento en los resultados de Tejas LEE al final del estudio.

Tiene que participar mi hijo?

No, su hijo no tiene que estar en esta investigación. Puede acceder a que su hijo participe en el estudio ahora y cambiar de opinión después sin ningún problema. Esta investigación se realizará durante las actividades regulares en el salón de clases.

Qué pasa si mi hijo no quiere participar?

Además de su permiso, su niño debe de estar de acuerdo en participar en el estudio. Si su hijo no desea participar él/ella no serán incluidos en el estudio y no habrá consecuencias. Si su hijo inicialmente está de acuerdo a estar en el estudio, él/ella puede renunciar en cualquier momento durante el estudio.

Quien sabrá de la participación de mi hijo en este estudio?

Los resultados de esta investigación serán archivados en forma confidencial. No serán incluidos identificadores que lo asocien a usted o a su hijo a este estudio en cualquier reporte que pueda ser publicado. Los resultados de la investigación serán archivados de manera segura y solo Fernando Hernández y Guang Zeng tendrán acceso a estos archivos.

Con quién me comunico con preguntas acerca de la investigación?

Si tiene preguntas en relación a este estudio, puede usted comunicarse con Fernando Hernández al 956-878-9026, fernandohdz22@gmail.com o Dr. Corinne Valadez al 361-825-3336, corinne.valadez@tamucc.edu.

Con quién me tengo que contactar acerca de los derechos de mi hijo como participante en la investigación?

Este estudio ha sido revisado por Research Compliance Office y/o Institutional Review Board of Texas A&M University-Corpus Christi. Para preguntas o problemas relacionados a sus derechos como participante en esta investigación usted puede comunicarse con Erin Sherman, Research Compliance Officer , al 361-825-2497 o erin.sherman@tamucc.edu .

Autorización

Asegúrese de haber leído la información anterior, aclarado sus preguntas y recibido respuestas a su satisfacción. Se le dará una copia de esta forma de consentimiento para sus archivos. Al firmar este documento, usted acepta permitir que su hijo participe en esta investigación.

Firma de Padre/Tutor: _____ **Fecha:** _____

Nombre del Padre/Tutor: _____

Nombre del Estudiante: _____

Firma de la Persona que Obtiene el Permiso: _____

Fecha: _____

Nombre de la Persona que Obtiene el Permiso: _____

Assent Form

TEACHER'S USE OF LITERACY CENTERS TO PROMOTE LITERACY ACQUISITION IN FIRST GRADE BILINGUAL STUDENTS IN A SOUTH TEXAS SCHOOL: A QUASI- EXPERIMENTAL STUDY

My name is Fernando Hernandez. I am trying to learn to see if your Tejas LEE scores at the middle of the year will be better compared to the scores that you got in the beginning of the year if you participate in literacy centers. If you would like, you can be in my study.

If you decide you want to be in my study, you will take the Tejas LEE in September and January and I will observe you and your classmates when working in literacy centers twice a week for eleven weeks.

The risks to you are no bigger than the risks you have each day. The good things that could happen to you are better scores on Tejas LEE scores, completion of hands-on activities and better prepared for 2nd grade.

Other people will not know if you are in my study. I will put things I learn about you together with things I learn about other children, so no one can tell what things came from you. When I tell other people about my research, I will not use your name, so no one can tell who I am talking about.

Your parents or guardian have to say it's OK for you to be in the study. After they decide, you get to choose if you want to do it too. If you don't want to be in the study, no one will be mad at you. If you want to be in the study now and change your mind later, that's OK. You can stop at any time.

My telephone number is 956-878-9026. You can call me if you have questions about the study or if you decide you don't want to be in the study any more.

I will give you a copy of this form in case you want to ask questions later.

Agreement

I have decided to be in the study even though I know that I don't have to do it. Fernando Hernandez has answered all my questions.

_____ Signature of Study Participant	_____ Age	_____ Date
_____ Signature of Witness		_____ Date
_____ Signature of Researcher		_____ Date

Forma de Acuerdo

USO DE CENTROS LITERARIOS PARA PROMOVER LA ADQUISICION LITERARIA EN ALUMNOS DE PRIMER AÑO BILINGÜE EN UNA ESCUELA DEL SUR DE TEXAS: UN ESTUDIO QUASI-EXPERIMENTAL

Mi nombre es Fernando Hernández. Quiero aprender si tus resultados de Tejas LEE a la mitad del año serán mejores comparados a los resultados que obtuvieron al inicio del año si participaste en centros literarios. Si quieres, puedes estar en mi investigación.

Si decides estar en mi investigación, tú tomaras los exámenes de Tejas LEE en Septiembre y Enero, y te observaré a ti y a tus compañeros cuando trabajen en los centros literarios dos veces por semana por once semanas.

Los riesgos para ti no son mayores que los riesgos que enfrentas cada día. Las cosas buenas que podrían pasarte son tener mejores resultados en los exámenes de Tejas LEE, hacer actividades manuales, y estar mejor preparados para segundo grado.

Otras personas no sabrán si estas participando en mi estudio. Yo anotaré lo que aprendí de ti junto con lo que aprendí de otros niños, por lo tanto nadie podrá saber que información es tuya. Cuando yo le dé a conocer a otras personas acerca de mi investigación, no usare tu nombre para que no sepan de quien estoy hablando.

Tus padres o tutores tendrán que decir que puedes estar en la investigación. Después de que ellos decidan, tu podrás decir si quieres participar o no. Si no quieres estar en el estudio, nadie se enojara contigo. Si tú deseas participar en el estudio ahora y cambiar de opinión después, está bien. Puedes salirte de la investigación en cualquier momento.

Mi número de teléfono es 956-878-9026. Me puedes llamar si tienes alguna pregunta acerca de la investigación o si ya no quieres estar en la investigación.

Te daré una copia de esta forma en caso de que quieras hacer preguntas después.

Acuerdo

He decidido estar en la investigación aunque sé que no tengo que hacerlo. Fernando Hernández ha contestado todas mis preguntas.

Firma del Participante en el Estudio

Edad

Fecha

Firma del Testigo

Fecha

Firma del Investigador

Fecha