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EFFECTS OF A JOINT BOOK READING STRATEGY ON EVEN START

A Dissertation
SUBMITTED TO THE GRADUATE FACULTY
In partial fulfillment of the requirements for the
degree of
Doctor of Philosophy

By
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Norman, Oklahoma
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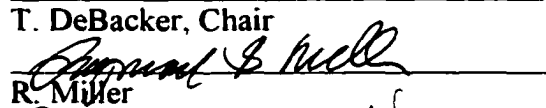
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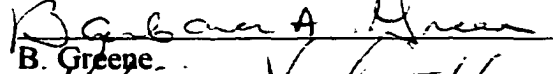
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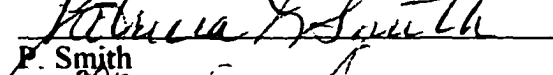
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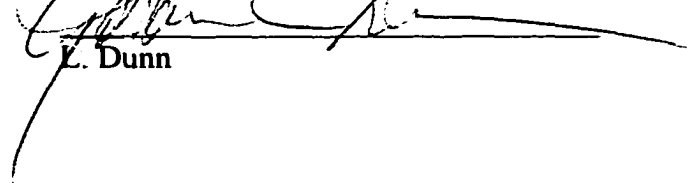
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The prayer of a righteous man is powerful and effective. (James 5:16, NIV)

I would like to thank my husband, Jim, who believed in my dream and supported me through periods of my doubting that I could persevere. He encouraged me to continue throughout the process and believed that I had the knowledge and ability to produce this dissertation. His confidence that I could do it kept me on track. His prayers must have been heard.

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ABSTRACT

Effects of teaching Spanish-speaking Even Start mothers to use dialogic reading strategies with their preschool children were examined in this experimental study. Thirty-four children and their mothers participated. Mothers in the treatment group were taught to use the strategy to engage their children in conversation while reading storybooks. Data gathered from the children at pretest and posttest were measures of receptive vocabulary (Peabody Picture Vocabulary Test-Revised), expressive vocabulary by calculating mean length of utterance and concepts about print using a checklist. Use of the Adult/Child Interactive Reading Inventory (ACIRI) provided data about mother and child behaviors at pretest and posttest. An attitudinal measure assessed the trained mothers' self-efficacy as a literacy coach. Findings include direct effects on the mothers' ability to use the strategy as well as indirect effects on the children's emergent literacy behaviors. Statistically significant effects were found for concepts about print ($p < .05$) using an ANOVA. A strong positive correlation ($r(12) = .85, p < .001$) between the treatment group mother's and child's ACIRI score was found. Time spent in Even Start ($p < .02$) and the mother's ACIRI score ($p < .01$) were positively related to the child's mean length of utterance in a multiple linear regression analysis. A moderate positive correlation was found ($r(12) = .54, p < .05$) for the relation between the mother's ACIRI score and the self-efficacy measure at posttest. Implications include a promising reading strategy resulting in the growth of emergent literacy skills for bilingual children and changed reading behaviors for their mothers in workshop format that could be easily and

inexpensively incorporated into existing curriculum in intergenerational literacy programs.

CHAPTER I

INTRODUCTION

Emergent literacy, often described as that developmental period before a child cracks the code and uses the symbols of language independently, has been a topic for educational research in recent decades. How children acquire or develop literacy skills in order to speak, read and write in their own language has been researched not only in the United States but also in many other countries in the world. Research studies have approached the question of how children learn to be literate from different avenues. Developmental psychologists have researched the notion that later literacy skills are built upon the foundation of oral language development. From a social constructivist perspective, children learn about literacy events through the socio-cultural context and especially through the mediation of a more knowledgeable other (Vygotsky, 1962). Developmental precursors in emergent literacy research include not only the skills and declarative knowledge about literacy but also the attitudes about literacy events, such as interest and motivation to engage in listening to a storybook. Some of the abilities that young children exhibit which facilitate the development of literacy skills are environmental print awareness (Hiebert, 1981; Masonheimer, Drum & Ehri, 1984), concepts of print (Clay, 1985) the realization that print is an approximation of speech (Adams, 1990; Burgess, 1997) and the requests of

young children to have a story read to them. The fields of literacy education and educational psychology have contributed much of what is known about how children learn to be literate.

Clearly, not only from research studies, but also from the popular press, we know that not all children learn to read well enough to succeed in school. Although children from all ethnic backgrounds and social class levels may be represented among those who do not learn to read well, the demographics of being poor, Hispanic or African American and attending an urban school put children at greater risk of school failure (Goldenberg, 1996; Snow, Burns & Griffin, 1998). The Committee on Preventing Reading Difficulties in Young Children (Snow et al., 1998) reported that 40 percent of all fourth graders on the most recent National Assessment of Educational Progress (1996) report were reading below basic reading levels and sixty-four percent of all fourth grade Hispanic students were reading below basic reading levels (NAEP 1996 Trends in Academic Progress, as cited in Snow et al., 1998). The Hispanic population of school-age children continues to grow and is projected to be the largest group except for non-Hispanic whites within 20 years (Population Projections Program, 2000). Within the field of emergent literacy, many studies address communities described as White, middle class and native speakers of English. In intervention research, the focus has been on at-risk children's literacy skills; however, very little emergent literacy research has been accomplished with children who are non-White, come from lower socioeconomic groups and do not speak English as their first language. There is a definite need for more attention and research in

the area of children's English language development who do not speak English as their native language.

Background

Helping young children become literate is crucial for their success, not only in school, but also for their future success in society. Literacy in English among students whose first language is not English has been a cause of concern for parents, teachers, school administrators and legislators for a number of years (Goldenberg, 1996; Snow et al, 1998). Spanish-speaking children from lower socioeconomic backgrounds are generally the least successful students in schools in the United States (Goldenberg, 1996). Teale and Sulzby (1989) identified some activities that children engage in which contribute to emergent literacy: print awareness, self-monitoring when re-telling a story read to them and modeling adult behaviors when reading a story book. There is a definite need to investigate not only methods that have been effective with mainstream children but also effective methods of teaching non-native English speaking preschool children in the area of English language development. Downing (1986) suggested that in order for young children to master literacy skills, they need to develop the concepts and specialized language of literacy, which he called the language instruction register. When children acquire this language instruction register, they are enabled to think and talk about the literacy skill of reading, for example. The way young children can develop linguistic awareness is to be exposed to opportunities to interact with language, both spoken and written.

A promising method of shared reading with children called dialogic reading has been investigated recently (Arnold & Whitehurst, 1994; Cornell, Senechal & Broda, 1988; Payne, Whitehurst & Angell, 1994; Valdez-Menchaca & Whitehurst, 1992; Whitehurst, Epstein, Angell, Payne, Crone and Fischel, 1994 and Whitehurst, Zevenbergen, Crone, Schultz, Velting and Fischel, 1999). Dialogic reading could be characterized as the conversation that occurs between the author of the book, the reader and the listener. The reader asks open-ended questions to encourage the child to become an active participant rather than a passive listener. Although emergent literacy research has recently shifted its focus to families classified as low-SES, the effectiveness of using a shared book reading strategy, such as dialogic reading, has not been investigated with parents as the readers and preschool children whose native language is not English.

Context of the Present Study

Participants in the present study were drawn from the Even Start program in a southwestern state. The most common profile of children who are at-risk of educational and economic failure is composed of those who are living in poverty and those from minority cultural backgrounds (Goldenberg, 1996; Snow, Burns, & Griffin, 1998). The need for breaking the cycle of intergenerational illiteracy and poverty was the genesis of the Even Start legislation enacted in 1988. Even Start's objective is to break the cycle of illiteracy through a comprehensive and intensive program addressing both the parent and the child. The hypothesis is

that intervention in one part of the family system will affect all other parts of the system. Therefore, the Even Start programs target families rather than providing services to either adults or to children. Even Start programs are designed to address three core areas: adult education, parenting education and early childhood education. The interrelated goals are (1) to help parents improve their basic skills through adult basic education (ABE); (2) to facilitate parental involvement through parenting education; and (3) to assist children in reaching their full potential as learners. The Even Start program is predicated on the idea that in order to have sustainable change and break the cycle of school failure, the program needs to be family-focused, intensive and comprehensive in its services, as well as sensitive to individual differences (St. Pierre & Swartz, 1995). The children of Even Start programs receive direct benefits from the early childhood classes and are affected indirectly through the educational program for their parents.

The ethnic group most heavily represented in the local Even Start program is Hispanic. Although Hispanics represent the largest Even Start group being served nationally, approximately 36% in 1994-95 (St. Pierre & Swartz, 1995), at the four city Even Start sites, the population is approximately 86% Hispanic. The population at three Even Start sites is 100% Hispanic this year. In addition, all of the families who attend the Even Start program would be classified as lower SES. The families are eligible for the Even Start program if a family (a) has a parent who is eligible to receive services under the Adult Education Act and (b) has a child less than eight years of age.

The Riverside (pseudonym) Even Start program began in 1989 as one of the 76 demonstration projects authorized by the Even Start legislation (Richardson, Reid & Brickman, 1997). After initial planning in 1990 and 1991, the local Even Start program began in the fall of 1991. The original site is housed in a wing of Riverside Elementary School. Other sites have recently been added and two of them are housed in churches. The sites have the advantage of enough rooms to separate the early childhood rooms and the adult education classrooms.

An activity that parents have done for many years, reading a book to a child, has been researched and found to be "the single most important activity for building the knowledge required for eventual success in reading is reading aloud to children" (Anderson, Hiebert, Scott and Wilkinson, 1985, p. 23). Robbins and Ehri (1994) researched storybook reading by parents and incidental acquisition of vocabulary and found that listening to stories increased children's vocabulary acquisition. Sharing a book with a child is one of the best ways to enable young children to interact with print and appreciate the act of reading, even though they are listeners at first (Adams, 1990; Teale, 1984). In most middle class homes shared book reading with children is a commonplace occurrence. Adams (1990) estimated that most children are exposed to 1,000 to 1,700 hours of picture book reading before entering first grade while a child from a low SES family is exposed on average to only 25 hours of shared reading. In the homes of the families who are eligible for Even Start sharing a book written in English or Spanish is not a commonplace event. Lack of appropriate reading material is evident in the

homes of the local Even Start families. To compound the problem of sharing a book, many of the local Even Start parents are not native English speakers; yet, most of the children's books available to the families are written in English. The Even Start parents are encouraged to read to their children and children's books are available to them. The Even Start program encourages the mothers to check out books from the Even Start library as well as the local neighborhood library. During the school year, the children are also read to daily in the early childhood classrooms in large groups. During home visits, the parents are provided with home activities to encourage their children's emergent literacy.

Recent research into emergent literacy development has shifted to populations of low socioeconomic status (SES) families. Both Head Start and Even Start serve populations that are described as low SES. Some emergent literacy studies have been conducted with the mothers and children of Head Start programs using a shared book strategy called dialogic reading (Whitehurst et al., 1994). The Head Start mothers were taught how to use the dialogic reading method leading to effects on their children's increased language development. One of the tenets of the Even Start program is to enable the parent to be their child's first teacher; however, no direct instruction has been given to the mothers locally as to a method of shared book reading or dialogic reading. This present study investigated the direct effects of a shared reading strategy using explicit instruction with the Even Start mothers and the indirect effect on the language development of their children.

Purpose of the Study

The purpose of this study was to investigate the effects of teaching the participating Even Start mothers a shared book reading strategy. Specifically, the purpose of this study was to adapt and test a maternal shared book reading strategy in a bilingual setting. The children's gain scores on the Peabody Picture Vocabulary Test- Revised (PPVT-R) (Dunn & Dunn, 1981) in receptive language development were assessed to provide evidence of the effectiveness of the intervention on children's English language acquisition. Additionally, a test of the concepts of print was used as a measure of the effectiveness of the shared book reading strategy as to the children's print awareness and book handling techniques. Descriptive information from video taped parent-child interactions while reading a storybook was included to assess the changes in the interaction between parent and child and the child's mean length of utterance. Children's expressive language development was analyzed by examining their language production while they were listening to their mothers read to them. Their expressive language was assessed by their mean length of utterance (MLU). The tapes were assessed as to behaviors exhibited by the parents and the children using an instrument designed for that purpose, the Adult/Child Interactive Reading Inventory (ACIRI) (DeBruin-Parecki, 1999). Some interactive reading behaviors found to be facilitative by parents were: use of background knowledge, expansions, extensions, questions, responses, repetitions, modeling, predicting, interpreting and summarizing (Hoffman, 1997; Huebner, 2000). Mothers were asked to evaluate themselves as literacy

coaches as a measure of their self-efficacy in that domain. Audiotapes were used to ascertain whether or not the parents implemented the dialogic reading strategies taught in the workshops.

Research Questions

The research questions investigated in this study included the following:

1. Will a dialogic reading treatment administered by trained mothers facilitate a child's receptive second language development as measured by the PPVT-R relative to a control group?
2. Will a dialogic reading treatment facilitate the development of a child's concepts of print relative to a control group as measured by a concepts about print (CAP) checklist?
3. Will a dialogic reading treatment increase the child's mean length of utterance (MLU) relative to a control group?
 - a. Will a dialogic reading treatment increase the child's expressive vocabulary by mean number of words spoken relative to a control group?
 - b. Will a dialogic reading treatment increase the child's expressive vocabulary by number of turns relative to a control group?
 - c. Will a dialogic reading treatment increase the child's expressive vocabulary by mean number of sentences spoken in English?
4. Will the dialogic reading treatment increase the mother's ACIRI scores relative to a control group?

5. Will the dialogic reading treatment increase the child's ACIRI score relative to a control group?
6. Will the dialogic reading behaviors of the adult be associated with the child's responses to the storybook reading through analysis of the ACIRI?
7. Will the factors of the mother's years of formal education, time spent in Even Start and score on the ACIRI be related to the child's scores on the ACIRI, PPVT-R, CAP and MLU?
8. Will the dialogic reading behaviors exhibited on the mother's ACIRI be related to the mother's self-efficacy as a literacy coach as measured by a self-efficacy instrument?

Theoretical Framework of the Study

Assumptions at the heart of this study were: (a) children can and do actively construct their interpretation of the world; (b) literacy is an activity that develops through interactions with the world; (c) literacy skills are acquired through social interactions with more knowledgeable others; and (d) literacy behaviors can be learned, imitated and used by children. The first, second and third assumptions are addressed by Vygotsky's theory which states that emergent literacy is constructed through sociocultural contact with a child's environment. Children in literate societies are exposed to environmental print every day in the forms of billboards, signs on stores and streets, and labels on boxes of food and on clothes. Environmental print is a cultural object and children can read environmental print long before they begin formal training in

reading in school (Mason & Allen, 1986). Children tend to approach environmental print as they do any other object in their world. They formulate a hypothesis, test it and then confirm or reject their hypothesis (McMullen & Darling, 1996). When children read signs in the environment, the words on the sign are contextually tied to the object. When children begin to decontextualize letters and sometimes words (for example, STOP means stop even when the word is not on a STOP sign), they are able to extract the word from the surrounding environment which Vygotsky called decontextualization of mediational means. They are not reading the word in the context of its environment but are actually reading the word (Vygotsky, 1962).

The third assumption is that children learn about literacy through socialization. In order to learn to read the printed words, children require help from literate members of their society. The literate members of a child's world have to provide a framework to extend, monitor and support the child's attempts to gain meaning from print. Vygotsky referred to this interaction as happening within the Zone of Proximal Development. Within the Zone of Proximal Development, a person's abilities are supported until the abilities match the task at hand. The support given a child acts as a scaffold for learning in that the child's attempts are supported until the scaffolds are no longer needed. Both the literate other and the child are operating within an arena that resembles an upwardly spiraling curriculum that uses the knowledge gained at one level to facilitate the next level (Vygotsky, 1962). The child can learn to experiment with the roles of participant, extender, questioner and communicator.

An additional assumption is that children begin to understand the function of print when they see others use print to communicate. The power of print is not lost on children when a story is read to them. Although many children will pretend to read a book by explaining the pictures, they do understand that a book tells a story. Sulzby (1985) described in her study how children progress through categories of reacting to hearing storybooks read to them. At first, the story is not even formed by the child. At another stage of development, a child will be able to retell the story in his or her own words. After experiencing multiple repetitions of the story, they can tell the story using some of the written language used in the storybook. After a while, children begin to pay more attention to the text and understand that the written words are the parts of the book that adults are reading (Sulzby, 1985).

Hiebert and Raphael (1998) explained how oral language supported reading a storybook with young children in a reciprocal language loop. As the adult identified, explained and drew attention to the pictures and print, they asked questions to do so. Their actions were imitated by the child so that the child could interpret and ask adults for information. The adult then gave feedback to the child to clarify any confusion, elaborate on their answers and continue to model the reading process using the forms and functions of literacy.

Significance of the Study

This study was designed to test the effectiveness of an adaptation of a dialogic reading method used with monolingual students to one used with

bilingual students. The findings of this study will help to augment curriculum decisions in the Even Start program as well as describe a shared reading method that may be beneficial for adult second language learners, as well as for their children in other settings.

This method of parent training would be beneficial to other programs, schools and institutions that seek to facilitate parenting practices. Whether the learners are second language students or not, this program could be used in a variety of settings. Head Start has had a mandated parent education component in their program for many years. In some cases however, Head Start parent education has been similar to PTA programs rather than intensive parent training. This workshop format for teaching dialogic reading could be easily adapted for the parents of the Head Start population. Some public school districts, including Oklahoma City and Norman, have begun to teach four-year-olds. The dialogic reading method may be effective in that arena for teachers and parents. Parents want to help their children succeed and a workshop program such as the present study would give them the strategies to do so. For many years, libraries have promoted reading to children with storybook reading programs. Usually the reader is a librarian. Libraries might be interested in a workshop program to teach parents how to read a storybook to a child while using interactive book reading strategies such as the one in the present study.

CHAPTER II

REVIEW OF THE LITERATURE

Reading readiness was the term used by researchers for many years to classify beginning reading skills. When a child was ready to read at the age of five or so, he could accomplish several skills thought to be crucial to reading success. In the last few decades of the twentieth century, researchers began to identify children who were early readers and classify their behaviors as developmental literacy skills. Clay (1979) described a developmental period before a child reads independently as "emergent literacy." All of the language arts, speaking, listening, reading and writing, play their role in emergent literacy development. Teale (1984) stated that, "Essentially in becoming literate, children are internalizing the structure of activities that involve literacy which are conducted in the world around them." (p.118). Researchers in the field of emergent literacy have studied the interactions between adult and child in constructing meaning from storybooks (Arnold & Whitehurst, 1994; Bus, van Ijzendoorn & Pelligrini, 1995; Morrow, O'Connor & Smith, 1990; Mason & Allen, 1986; Neuman, 1996; Payne, Whitehurst & Angell, 1994; Pellegrini, Galda, Jones & Perlmutter, 1995; Senechal, 1997; Sulzby, 1985; Teale, 1984; Toomey & Sloane, 1994; Valdez-Menchaca & Whitehurst, 1992; Whitehurst, Epstein, Angell, Payne, Crone & Fischel, 1994). The skills children gain from shared

storybook reading include understanding the function of print, the development of vocabulary, and the internalization of the meaning of the story.

The beginnings of emergent literacy skills are intertwined with initial language awareness. Vygotsky (1962) spoke of these beginnings when he theorized that children hear language socially, discover the purposes of language in context, and use language for purposes such as asking for the names of objects. For Vygotsky, the point in time when a child discovers that objects have names is the “crucial instant” and occurs when the divergent lines of speech and thought converge so that “speech begins to serve intellect, and thoughts begin to be spoken” (p. 43). Although language development goes through a prelinguistic period of crying, cooing and babbling, emergent language awareness begins at that “crucial instant.”

Language awareness and print awareness are different modes of emergent literacy. Speech, as well as print, are devices for communication. Both of them carry meaning through a complex series of sounds and grammatical structures. A search for meaning through listening to language patterns involves the self-discovery of those patterns. However, the symbols of spoken language are facilitated through social interaction. Gestures, intonation and facial expressions are all aides to accessing meaning in speech but are absent in print. Hearers of speech are able to question the speaker when they need to clarify the meaning; readers of print cannot directly ask questions of the author (Mason & Allen, 1986; Moerk, 1985).

Although print awareness is acquired by applying some of the same

principles of oral language acquisition, it is evident that children need to be exposed to print-rich environments in order to acquire print awareness. Young children need opportunities to hear adults read to them. One of the ways that parents have acquainted children with the concepts of print has been through shared book reading. Not only is exposure to print necessary, as well as opportunities to hear someone read, but also for some children, explicit strategies are needed in order to gain meaning from print (Klesius & Griffith, 1996; Purcell-Gates, 1989).

The purpose of this review of literature is to highlight some of the research about methods of shared book reading and its possible effectiveness with second language learners. The first section reviews the research on joint book reading. The second section regards the parental involvement component of compensatory education programs and its effects on children's emergent literacy development. The third section shows what is known about bilingual language development in second language learners and joint book reading with bilingual preschool children.

A Review of Joint Book Reading Strategies and Effects on Emergent Literacy

Reviews of joint book reading strategies such as reciprocal teaching, joint book reading and dialogic reading are included in this section. When the reciprocal method of teaching was introduced and the original study by Palincsar and Brown (1984) was published, the common method of teaching reading

consisted of teaching discrete skills to decode words in order to read text aloud. Decoding skills were taught explicitly and comprehension of the text was usually assessed by answering comprehension questions at the end of the passage. Children generally associated the subject of reading with filling in the blanks in workbooks. Strategies to improve comprehension, if taught at all, consisted of methods such as SQ3R, survey, question, read, recite and review. A paradigm shift occurred when the act of reading was redefined as gaining meaning from text. Reading had been seen as a passive exercise previously but with the advent of defining reading as an act to gain meaning, reading was seen as an active process. The covert strategies of reading employed by expert readers needed to be overtly taught. The reciprocal teaching method to teach comprehension skills showed us a possible way to do it.

The method is called reciprocal teaching because the teacher and the students share the role of “teacher.” In the reciprocal method of teaching comprehension strategies, the text, usually a paragraph, is read silently first by all the group members. The teacher models the process of asking questions, summarizing, clarifying and predicting. After modeling the process, the teacher relinquishes the role of teacher to be shared by the students. This portion of the method begins the guided practice where the students now initiate the discussion on succeeding paragraphs. When the students take the lead in the discussion, the teacher becomes the coach. The teacher not only coaches with prompts about how to construct proper questions and summaries but she also critiques. When the students are able to take on more of the responsibility for the

discussion, the teacher takes on the role of monitor, providing only as much guidance as the students need for the discussion to continue. The goal of reciprocal teaching is to enable the students to independently use the reciprocal teaching strategies in order to understand what they are reading (Palincsar & Brown, 1984).

Palincsar and Brown's reciprocal teaching method is often referenced in cognitive strategy intervention studies, especially in shared reading strategies such as joint book reading or dialogic book reading. The crux of this method is the dialogue between participants. In the original study by Palincsar and Brown (1984), the reciprocal teaching method was used with seventh graders. However, in a case study reported by Palincsar and David (1991), three treatment and control reading groups composed of younger children (five first-grade children who were non-readers, based upon inability to decode words, and one child who was progressing normally) were formed to test the reciprocal teaching method. The 30-day interaction was called listening time due to the teacher's reading of a third-grade basal text to the groups. The teachers specifically and intentionally labeled the strategies they were using to facilitate the children's use of the strategy. Although the children at first had difficulty with the reciprocal teaching comprehension strategies, by the end of the intervention they were using the labels of the strategies to identify what was happening even in whole-class discussions. The evaluation of the 30-day intervention indicated that over time the listening time discussions were less and less teacher-directed (Palincsar & David, 1991). The three experimental groups and the three control

groups were not statistically different at the beginning of the intervention. At posttest the first graders in the experimental groups outperformed the children in the control groups on measures of listening comprehension and the use of reciprocal teaching strategies. The quality of the dialogic instruction was examined by audio taping the listening time conversation eight times during the 30-day instruction period.

Palincsar and Brown's reciprocal teaching method is one of a number of cognitive apprenticeship approaches to teaching cognitive skills. The track record for this approach is good to excellent in teaching comprehension strategies in numerous studies in a variety of settings (Beck, McKeown, Sandora, Kucan & Worthy, 1996; Brady, 1997; Kelly, Moore & Tuck, 1994; McCutchen, Laird & Graves, 1993; Rosenshine & Meister, 1994). Additionally, the approach seems to have been used successfully with young children.

Other methods of teaching very young children literacy skills were included in a review of emergent literacy research by Mason and Allen (1986). One of the methods has been labeled joint book reading. Although most of the research they reviewed included correlational designs, the research supported joint book reading as a means to enhance (a) emerging language development; (b) concepts of print; (c) the ability to listen for greater lengths of time; (d) the ability to make connections with spoken and written language; (e) vocabulary development; (f) comprehension; (g) ability to retell the story; and (h) ability to create stories of their own. Their conclusion from these joint book reading studies was that parents provided scaffolding for their children's emerging

literacy skills. They hypothesized that reading stories helped children with not only the form and structure of written language but also with strategies for reading.. Three innovative strategies were described and highlighted as models that are effective: Holdaway's Shared-Book experience, Clay's Reading Recovery model and the Kamehameha Early Education Project in Hawaii (KEEP). These three programs had been found to be effective in elementary school settings. Only in recent years has the efficacy of teaching strategies to enhance preschool children's emergent literacy through shared book reading been tested.

Holdaway's Shared-Book experience uses Big Books, large versions of children's books, to demonstrate how a book is read and what readers do when they read. While Holdaway's Shared-Book experience emphasizes large group instruction in teaching strategies to learn how to read (Mason & Allen, 1986), Clay's Reading Recovery procedures include one-to-one tutoring focusing on comprehension and decoding skills to facilitate reading development with guided practice in reading and writing. The Reading Recovery strategy (DeFord, Lyons, & Pinnell, 1991) is successfully used in many school systems in the United States, including the Oklahoma City Public School System. The KEEP program specifically targeted the sociocultural context as the beginning of the reading program for the Hawaiian children (Mason & Allen, 1986). Individualized instruction is evident in the KEEP project as well as Clay's model. The focus of the strategy instruction is compatible with the community's work and social contexts and has been successful in Hawaii. When a strategy builds upon the

existing cultural values, the instruction is perceived as supportive rather than compensatory. The emphasis of the KEEP program is placed on comprehension rather than mechanics of reading. The results of these three programs show that the reading strategies employed by them can be taught to young children and are effective.

The efficacy of reading to preschool children is not without detractors and two recent reviews have had contrasting findings. Scarborough and Dobrich (1994) published their findings of over three decades (1960-1993) of research on joint book reading. In their review of literature on parent-preschooler book reading, they computed a correlation of modest strength ($r < .28$) between parental reading to preschool children and subsequent reading achievement measures. A possible reason for the modest correlation may be that some parents read storybooks to their children without ever engaging them in conversation about the story. However, they stated that the quality of the interaction while reading was not a better predictor than the number of books read to children. Scarborough and Dobrich (1994) suggested that the benefit of sharing a book with a child could not be assumed to be instructional.

Frequency of joint book reading was reported in a meta-analysis by Bus, van Ijzendoorn and Pelligrini (1995) who reported an effect size of .59 for the association between parent-preschooler book reading and language growth, emergent literacy and reading achievement outcomes. Effect sizes have recently been used in reporting the results of studies in shared book reading. Since most of the earliest research on joint book reading had been done with high to middle

class SES families, the authors used SES as a covariate to test the hypothesis that lower SES samples had weaker evidence of a relation between joint book reading and the outcome measures. They operationalized joint book reading as frequency of book reading episodes. The outcome measures were (a) language development as measured by standardized tests, such as the Peabody Picture Vocabulary Test; (b) emergent literacy skills as measured by name writing or reading, alphabet letter naming and phoneme blending; and (c) reading achievement measured after the children attended school. The combined effect size for the 16 studies on book reading and language development was .67. For the 16 studies on book reading and emergent literacy skills, the effect size was .58. The effect size for the nine studies on book reading and reading achievement was .55. The conclusions they reached supported joint book reading as being positively related to all of the outcome measures. Even with low SES families, frequent book reading with preschool children had a positive relationship to their emerging literacy skills, especially language development.

Some of the studies reviewed by Mason and Allen (1986) were said to be based on Vygotskian concepts, specifically KEEP, Reading Recovery and Shared-Book experience. Recent research in joint book reading involving strategies has also been based on Vygotsky's theory. Usually the concept of Vygotsky's zone of proximal development (ZPD) (Vygotsky, 1962) and the use of scaffolding (Bruner, 1983, as cited in Gallagher, 1991) are the bases of the reference. Vygotsky's ZPD can be seen when the adult in the joint book reading serves as the mediator between the author's words and pictures and the listening

child. The episode provides the child with an expert model and a support system for making meaning. With interactive reading strategies in shared reading and Reading Recovery, the adult and the child negotiate the construction and reconstruction of the author's words and pictures. Some researchers in this area have also invoked Vygotsky's theory about the social origins of cognition (Vygotsky, 1962). What takes place during the interaction holds the key to the effects of joint book reading. The rest of the studies in this review examine joint book reading and the emergent literacy skills that are enhanced by it.

Both of the following studies, conducted several years ago, can be seen as instantiations of Vygotsky's theory of learning in the zone of proximal development. A descriptive study in 1978 by Ninio and Bruner paved the way for strategic joint book reading. They analyzed how a mother and child interacted while reading a picture storybook. They noticed that the mother tended to direct attention to pictures, asked her child questions, provided labels, and responded by repeating or extending the child's response. They noted that the mother supported her child's emergent literacy development only as much as needed. While other researchers of the effects of shared book reading were examining the kinds of books and the number of hours children listened to stories, Sulzby (1985) contributed to the field by describing how children from ages two to five progressively are able to "read" a book prior to their being able to even attend to print. She also indicated that the mothers supported their children in a gradual arrangement of scaffolding. Both of these studies were with very young children and were important in acknowledging that emerging literacy skills begin very

early in life.

The more recent joint book reading studies have provided strategies to support very young children's emerging literacy skills. Morek (1985) extended Ninio and Bruner's (1978) study to describe how calling attention to pictures by pointing positively affects the young child's acquisition of those labels. His discussion centered on how picture books being read by an adult affect the child's language acquisition. Even children as young as nine months responded to the command, "look," and approximated pointing to evoke the same reaction from the adult. Van Kleeck, Alexander, Vigil and Templeton (1996) came to the same conclusion in their study with mothers and infants who were six months old. Senechal, Cornell and Broda (1995) examined how parents adjusted their picture book reading to the age of the young child. They noted that when parents were reading to younger infants they used more attention-gaining strategies and more elaborations. When the children were two and over, the mothers used more questions and gave more feedback. Active pointing may be a strategy that loses its supportive function as children increase in age. Cornell, Senechal and Broda (1988) found that with their sample of three-year-olds in middle class families, a single re-reading was more effective for recall of a shared picture story book than active pointing. From these studies we know that parents use strategies to scaffold the reading process for their children. They label, point and elaborate, ask questions and give feedback in order to engage their children. The next few studies show that the use of other strategies have an effect on language production.

Several studies have investigated joint book reading as a means for facilitating young children's vocabulary acquisition. Pellegrini, Galda, Jones and Perlmutter (1995) questioned what activities in joint book reading would have the greatest effects on four-year-olds' vocabulary development. They found that the most effective activities during book reading with the 19 Head Start mother-child dyads were the expansions the mothers used to support comprehension. Expansions happen when a mother repeats a word the child has said and casts the word in a sentence. The child becomes a participant in the reading process by contributing a word that is consequently framed in meaningful context. Although Scarborough and Dobrich (1994) found that simple exposure to books was not highly correlated with emergent literacy, Senechal, LeFevre, Hudson and Lawson (1996) found that parents' and children's acquaintance with children's books was modestly but positively correlated with the three to six year olds' expressive and receptive vocabulary production. Robbins and Ehri (1994) also found that kindergartners who just listened to storybooks had modest gains in their vocabulary growth. These studies have shown us that joint book reading can have an effect on vocabulary development even without the use of specific interactive strategies. However, the following studies do include the use of strategies to enhance emergent literacy.

Up to this point in this review the emphasis has been on what the adult does while reading a story to a child. Some of the adult behaviors include reading the story, pointing to engage attention, labeling, expanding and recasting. An additional area of research to enhance children's emergent literacy

skills has been investigated in several studies recently. The use of questions to elicit children's interaction during joint book reading is a strategy that has been evident in several studies in this review (Cornell, Senechal, & Broda, 1988; Ninio & Bruner, 1978). The purpose of the study by Kertoy (1994) was to see whether children who were age three to six verbally responded to the use of adults' comments or to adults' questions differently. They found that adults' commenting while sharing the storybook prompted more child verbal responses about the meaning of the story and that adult's questioning elicited more child verbal responses about the story line and print. Senechal, Thomas and Monker (1995) found that the four-year-old children who answered labeling questions during repeated joint book readings had higher comprehension scores and spoke more words than the group that just listened to the story twice. Senechal (1997) found that children who were asked to label target items, rather than indicate them by pointing, during multiple joint book readings had higher scores on expressive rather than receptive vocabulary measures. These findings show how important the child's active participation is to the process of language development.

Children need to have opportunities to use the vocabulary they hear in meaningful ways. A qualitative study by Shapiro, Anderson and Anderson (1997) found that there was much diversity in the interactions between mother and child dyads while reading storybooks. While the mothers read to their four-year-old children, a variety of strategies were employed by the mothers. Surprisingly, these middle class mothers paid much more attention to the illustrations than

they did to any other feature of the storybooks. The next most frequent strategy was to extend the children's knowledge development through questioning, predicting, clarifying and elaborating. Some of the mothers asked no questions at all while others asked up to 24 questions about one book. One of the mothers pointed out no illustrations in one book but pointed to illustrations in another book 33 times. There was very little evidence that the mothers pointed out sound-symbol relationships and infrequently did they attend to print conventions. The researchers described strategies mothers employed to engage their children in sharing the storybooks. The mothers did not emphasize decoding strategies such as letter-sound correspondence but seemed to pay more attention to the overall meaning of the story. Eliciting attention to the story was the primary focus of the mothers who used pointing to the illustrations as well as questioning strategies. The following more recent studies on the effects of joint book reading have had control groups in their designs to try to tease out the strategies that are most helpful to young language learners.

Among several strategies used in joint book reading is one entitled STaR, Story telling and Retelling. Karweit (1994) studied the efficaciousness of using this strategy with kindergartners from disadvantaged backgrounds. Although most of the research in this review of literature has been with mother and child on a one-to-one basis, STaR is a group strategy led by a kindergarten teacher. Promoting active involvement in the story by engaging the children in conversations and activities that enable the children to retell the story and model reading skills are emphasized in STaR. The first day a story is read in large

groups with the teachers providing a running conversation summarizing the main points. The entire process of reading the storybook lasted 45 minutes because of the interactive strategies and activities to support engagement. On the second day the story was dramatized with all of the children participating. The story was also retold by the children in their own words in small groups of three after the activities. With the 43 prekindergarten children who were four years old, the use of the interactive strategy was found to be effective with effect sizes of .51 to .73 on standardized tests.

Another strategy that was used with kindergartners was examined by Klesius and Griffith (1996). These children were second language learners. The interactive strategy was an extension of the one-to-one lap reading seen in the mother and child reading situations adapted for use with small groups of kindergarten children. Components of the interactive strategy were questioning, predicting, connecting the print to the conversation, scaffolding and engaging the preschool learners in conversation about the book. The purpose of the descriptive study was to determine whether lap reading techniques could be used with small groups of kindergarten children. They found that the interactive strategies were effective with groups of five or less. Several adult behaviors facilitated children's knowledge of storybooks such as clarifying information, developing story structure, extending student's responses, and pointing out textual features. Scaffolding strategies for the reader were highlighted in this study.

Whitehurst and his colleagues have been researching the dialogic reading

strategy for a number of years. Arnold and Whitehurst (1994) reported on the dialogic reading program's rationale and described the principles of it. Dialogic reading is based on Vygotsky's theory of language development being enhanced if the "boundaries of the proximal zone are pushed further than they might be spontaneously" (p. 105). The researchers explained that:

" The specific reading techniques of dialogic reading require that parents gradually reverse the typical pattern of storybook reading to permit the child to become the teller of the story and the adult the active listener – prompting, expanding, and rewarding the child's efforts to talk." (p. 105).

Gavelek and Raphael (1996) (as cited in Hiebert & Raphael, 1998) presented a figure representing the Vygotsky Space. The representation may help to explain why the interactions during dialogic reading facilitate children's emergent literacy behaviors. The Vygotsky Space is divided into four quadrants along two dimensions of social relationships. The two dimensions, the public-private and the social-individual, intersect to form the four quadrants of cognitive activity that can be observed. If the four quadrants were a clock face, the first quadrant would be from 12 to 3 and would be the social and public quadrant. In this area, the adult scaffolds the reading while the child listens as well as participates in the reading. In the individual and public quadrant, from 9 to 12 on the clock face, the child participates in the feedback loop by asking and answering questions. In these conventionalized interactions, the child has learned from the modeled reading so that he can construct his own version of reading a book. The lower half of the Vygotsky Space where the other two quadrants are located is the transformational area. The quadrant from 3 to 6 on the clock face would be the social and private area where the child engages in

“pretend” reading to himself or to others. A child appropriates literacy events, internalizes them and interprets the events of the world and the rules that apply to them. The last quadrant, from 6 to 9 on a clock face, is the private and individual area where a child transforms what he has experienced. What happens in this quadrant is within the child but an example of an observable behavior would be writing for a specific purpose, usually using invented spelling of words he has seen. The rest of the studies in this portion of the review report what children can do when adults use the dialogic reading strategies as scaffolds for their child’s emerging literacy behaviors.

In their experimental study (Arnold & Whitehurst, 1994), the strategies for teaching the two- and three-year-olds from middle to upper income families employed “what” questions to elicit children’s responses. The adults responded by asking additional questions and repeating the child’s response in a full sentence. Feedback, praise and a game-like approach were the rewards. Turn taking was important to maintain the child’s participation. The findings of this four-week study were reported as 6 months and 8.5 months gain scores, respectively, on the two measures of children’s expressive language development: the Expressive One Word Picture Vocabulary Test and the verbal expression subscale of the Illinois Test of Psycholinguistic Abilities. Although results from the receptive language development test (PPVT) favored the treatment group, the results were not statistically significant. Their assumption was that if the components of the program were effective with an advantaged group of preschool children, then the program might also be effective with

children from low-income families. The following study is a replication of the dialogic reading strategy except that the participants were low-income children.

The experimental study by Valdez-Menchaca and Whitehurst (1992) investigated the successful dialogic reading technique used in the United States that trained parents to use dialogic reading methods with their children. The purpose of this study was to replicate the research on dialogic reading with day-care children of low-income parents in Mexico. One of the differences between Arnold and Whitehurst's (1994) study and the Valdez-Menchaca and Whitehurst's (1992) study is that a teacher, who was a university graduate student, replaced the parent in the dialogic reading intervention. There was a statistically significant group effect for the experimental group over the control group in number of utterances ($p = .001$). The reported Cohen's delta effect sizes were from 1.29 to 2.08 on standardized tests. The results of this study were reported as important in three areas: (1) the teachability of the dialogic reading techniques; (2) the relation between picture storybook activities and language and (3) the effectiveness of an early educational intervention for at risk children.

While the previous research study investigated the use of the dialogic reading technique with Mexican children in Mexico, Whitehurst, Epstein, Angell, Payne, Crone and Fischel's (1994) study investigated the effectiveness of the technique with low-income families in a Head Start program in the United States. Whitehurst, et al., (1994) examined the effectiveness of a yearlong program to enhance preschool children's first language and emergent literacy skills in

several Head Start centers. Training for the preschool teachers as well as the parents consisted of a 20-minute video and brief role-playing followed by discussion. The training was offered once at the beginning of the school year. The experimental treatment consisted of the interactive dialogic reading techniques used in previous studies (Arnold & Whitehurst, 1994; Valdez-Menchaca & Whitehurst, 1992) and a sound and letter awareness program used only by the teachers in the classroom. As in the previous studies reviewed using this strategy, the objective was to enable the four –year-olds to become active participants in the emergent literacy process.

In the experimental treatment, parents used the shared book strategy in the Head Start classroom as well as at home. The classroom teacher read to a group of four children rather than individually. The children were read to on an individual basis at home through books provided to the parents. The books were altered to the extent that prompts for “who, what, where, when, how and which” questions were included. The researchers extracted four factors (language, writing, linguistic awareness and print concepts) from the multiple scores included in the study and the results of a multivariate analysis of covariance showed statistically significant main effects for the experimental group over the control group for the writing and print concepts factors. The language factor that was assessed by both receptive and expressive standardized tests was the only one that was highly correlated with the book reading at home. The researchers reported that their data showed that the Head Start children’s emergent language abilities could be enhanced by means of the dialogic reading techniques with

their preschool teachers and their caregivers.

The question of whether or not the effects of the intervention in preschool endured into elementary school was investigated and reported by Whitehurst, Crone, Zevenbergan, Schultz, Velting and Fischel (1999). Not only was the original group from the previous study investigated longitudinally but a subsequent cohort from the same Head Start sites was also. They replicated the original design and found that the results were the same for the second cohort. Statistically significant effects through kindergarten were reported but the effects did not endure at that level through second grade. Again as with the previous study, the children were exposed to the dialogic reading strategy at home and at school with the additional sound and letter awareness program in the classroom. The dialogic reading strategy was taught to the mothers in the present study but was not used in the classroom. Another difference between the previous two studies and the present study is that a program for sound and letter awareness was not used in the preschool classroom. Some of the mothers and children were Hispanic (18%) in Whitehurst et al. (1999) but no breakdown as to ethnicity and effects was reported. All of the mothers and children in the present study speak Spanish as their first language.

For over twenty years emergent literacy behaviors have been investigated with various designs. Studies range from case studies with one parent and child to experimental studies using random samples. Research has shown that shared reading strategy use is effective with first language learners. The question remains as to the efficacy of teaching parents whose first language is

not English to use shared reading strategies to facilitate their children's second language acquisition and associated literacy behaviors. The next section of this review addresses the research on parenting programs focusing on literacy skills.

A Brief Review of Parent Involvement and Emergent Literacy Skills

Bronfenbrenner's (1979) ecological theory has given us a picture of nested systems of influence on children's development. Everything within the total system has an effect on the child. The environment, the culture, the social expectations, the aspirations of the family and the activities within the family can affect the emergent literacy of the child. If literacy is valued, then parents will provide a literate environment for their children to the best of their ability. In examining the question of the effectiveness of early intervention programs with and without family involvement, Bronfenbrenner (1974) indicated that

"the family seems to be the most effective and economical system for fostering and sustaining the child's development. Without family involvement, intervention is likely to be unsuccessful, and what few effects are achieved are likely to disappear once the intervention is discontinued" (p. 300).

Although parent involvement is important throughout the child's development, the preschool years provide a foundational period for language development and literacy activities. This section will discuss parental involvement through parent education programs and the effects on emergent literacy skills.

Parental involvement in school has been researched as a contributing

factor in school achievement in two studies by Hoover-Dempsey and Sandler (1995, 1997). They explored why parents become involved in their children's education and why it makes a difference. The authors based their premise on the cognitive beliefs of parental role expectation and self-efficacy. The factors for involvement included: parental beliefs about child development, child rearing and their own personal self-efficacy about parenting. The belief about the parental role included the impetus to enact educational activities with their children. If parents believe that children do not need to be nurtured in such emergent literacy skills as conversation and reading as well as writing opportunities, their children are likely to experience poorer achievement in school (Hoover-Dempsey & Sandler, 1997). On the other hand, stronger academic performance in school has been associated with parents who value the fostering of academic skills; neither high SES nor advanced formal education were prerequisites for parental involvement or parental expectations (Scott-Jones, 1995). Hoover-Dempsey and Sandler (1997) stated that generally, one of the reasons that parents become involved in their children's education is "because it enables parents to assume that their involvement activities will positively influence children's learning" (p. 21). In addition, the researchers found that self-efficacy was a major factor in choosing (or not choosing) active parental involvement in their children's education. Sources of self-efficacy were direct experience of success; vicarious experience of others' success; verbal persuasion of their success; and emotional arousal when they did succeed. When parents are involved in children's education, children's skills, knowledge

and their personal sense of self-efficacy increases (Dauber & Epstein, 1993; Hoover-Dempsey & Sandler, 1995; Hoover-Dempsey & Sandler, 1997; Schneider & Coleman, 1993; Swick & Broadway, 1996). Parental efficacy seems to be a catalyst for parent involvement.

Enabling parents to feel efficacious about their parenting skills is one of the purposes of parent education programs. Bandura's (1986) construct of self-efficacy was first published in the seventies and continues to be a subject of study in various disciplines. Self-efficacy can be defined as the perception that a task is within a person's ability to accomplish and is accompanied by the feeling that they are competent and confident of their ability to achieve specific results. Although most of the parent education programs direct their efforts toward improving parenting skills, assessment of the parents' self-efficacy in specific domains, such as being a literacy coach, was found in only one study in this section of this review of literature (Roskos & Neuman, 1993). In the present study, one of the assessments of the intervention with the parents was an assessment of their self-efficacy as a literacy coach.

Most of the parent education programs are focused on those parents whose children are educationally at risk. Recently, compensatory parent education programs serving ethnic minority groups have tried to be more culturally sensitive and shake the "deficit" image of compensatory programs (Gallimore & Goldenberg, 1993; Gorman & Balter, 1997; Johnson, Walker & Rodriguez, 1996; Neuman, 1996; Neuman, Hagedorn, Celano & Daly, 1995). Because of the concept of compensatory programs that supply something that

participants lack, the deficit image of such programs is widely held by programs as well as by those they serve. Parenting education programs that identify participants' strengths instead of weaknesses are examples of programs that employ a strength model instead of a deficit model (Cochran & Dean, 1991).

Many early education programs have been funded to primarily teach the child but also to provide parents with knowledge of parenting skills and/or provide books for them to read aloud to their children. Head Start parents have often been the focus of parent education programs to support their children's emergent literacy skills (Fantuzzo, Childs, Stevenson, Coolahan, Ginsburg, Gay, Debnam & Watson, 1996; Halsall & Green, 1995; Neuman, 1996; Nespeca, 1995; Roskos & Neuman, 1993; Whitehurst, et al., 1994). The parent education programs in the cited Head Start locations espoused the philosophy of teaching the parents to reach the child.

The credo of Even Start, a intergenerational literacy program designed for families, is that to enable the parent to be the child's first teacher, parents need to be included as partners in the educational setting (Darling & Paul, 1994; St. Pierre & Swartz, 1995). Some family literacy programs such as Even Start and Avance Parent-Child Education Program in Texas serve toddlers and their parents (Johnson, et. al., 1996; Liu, 1996; St. Pierre & Swartz, 1995). Other programs are primarily focused on the parents, such as Parents as Partners in Reading (Edwards, 1990), the Intergenerational Reading Project (France & Hager, 1993), the West Heidelberg Early Literacy Project (Toomey & Sloane, 1994), Beginning with Books (Segel, 1994), and Family Reading (Handel &

Goldsmith, 1994). Although the commonality among the former studies is that they provide compensatory education, several researchers in the following studies also examined existing literacy conditions among low-income families who were not involved in compensatory education. In addition, the following studies provide a strength model in that the teachers expand upon the mother's introduction of a book (Dickinson, De Temple, Hirschler & Smith, 1992).

A team of researchers found that several literacy-based experiences including shared book reading influenced the emergent literacy of the five-year-olds in the Home-School Study of Language and Literacy Development (Beals, De Temple & Dickinson, 1994; De Temple & Beals, 1991; Dickinson & Tabors, 1991; Dickinson, De Temple, Hirschler, & Smith, 1992; Smith & Dickinson, 1994). One of the literacy-based experiences that was correlated with the development of decontextualized language skills was listening and responding to shared book reading. The longitudinal study is presently following 84 children from the age of three to completion of fourth grade in an urban setting. The first cohort was composed of 25 mother and child dyads. The sample was composed of all English speakers. There were 13 boys and 12 girls; seven were black and 18 were white (Dickinson, et al., 1992). The purpose of the study was an on-going examination of early literacy development in these low-income families and the effects of early literacy development on achievement over a period of time. These families engaged in activities that supported their children's emergent literacy skills. Parental engagement in explanatory and narrative conversations, book reading and conversations about the books, and experience with print in

various settings all contributed to the growth of early literacy skills. Major conclusions from these early analyses included:

“(1) Literacy draws upon oral language abilities as well as print-specific skills; (2) literacy skills are nurtured both in homes and in preschools through events that include but are not restricted to book reading; and (3) homes and preschools differ in the kinds of support they provide for early literacy development.” (Beals et al., p.4).

DeTemple & Beals (1991) examined specific kinds of talk between the mother and child while the child was listening to a book, being asked to engage in a conversation, playing with a toy or eating a meal. They found a high correlation between language development and both the talk during book reading and explanatory talk during mealtime (De Temple & Beals, 1991). The authors speculated that conversing about books is facilitative for the child’s language development because of the support of the text.

The researchers found that supportive settings for emerging literacy skills are found in the school as well as at home. Mealtime conversations are the kind of supportive home setting that offers opportunities for listening as well as speaking. However, the specific kind of talk that had the greatest effect on the children’s vocabulary scores at age five was analytic discussion during book reading by preschool teachers. The disadvantage of book reading at school is that the children do not have as many opportunities to respond, but the advantage is that they hear the other children’s responses. All of these supportive settings with adults are helpful to children’s language development.

The family literacy environment has been investigated in several studies in relation to later academic achievement. Christian, Morrison and Bryant (1998)

measured the family literacy environment by using a questionnaire asking such items as the reading habits of the parent and child. They found that the family literacy environment had a positive relationship with the kindergarten academic skills measured (receptive vocabulary, reading recognition, general information and letter recognition). The family literacy environment did not have an effect on the math achievement score. In another study Griffin and Morrison (1997) investigated students from kindergarten to second grade using the same questionnaire as the study by Christian, Morrison and Bryant (1998) with similar findings.

Another parent education program entitled Family Reading was examined by Handel and Goldsmith (1994). The premise of the family literacy program was to teach the adults so that the parents would influence their children's values about learning. While reading storybooks together in small groups and pairs in the workshops, the parents were taught to make predictions, formulate questions, learn new information and connect the story to their own lives. Each workshop included a report on the effective use of the reading strategy at home with their children. Because of the volunteer nature of the program, evaluation of the program depended upon self-reports from the participants. The researchers reported that the immediacy of using the strategies at home created a heightened sense of self-efficacy for the adults as literacy models. They also reported that some of the adults began to act as literacy resources for their friends and neighbors. The present study utilized a workshop format with presentation of reading strategies. The mothers worked in pairs to role-play

asking questions and making predictions based on the story that they had read during the workshop.

The workshop format has been a vehicle for parent training in several recent studies. In a qualitative study by Saracho (1997), a workshop similar to the workshop format in the present study was used in a parent education intervention. Fifteen families of kindergarten children whose ethnicity was not reported were the participants. The literacy workshops, taught by the kindergarten teachers, were scheduled every two weeks over a period of five months. Parents were taught how to read the storybooks to their children, as well as how to promote engaging conversation about the books. Although the parents were asked to use the literacy strategies at home, they were videotaped using the strategies in the school setting. In addition to the observations, data from the children included the children's reactions to the stories read to them. The researcher found that the parents implemented what they had learned and used resources in their homes to extend the reading of the storybook.

Even though some low-income families are supporting their children's emerging literacy skills, some of these families have limited access to books and resources which impedes their children's literacy development (Chaney, 1994; Mason & Allen, 1986; Neuman, 1996). These low-income homes would not be classified as print-rich environments where storybook reading is a common event. However, the parents in some studies indicated that they wanted to help their children succeed but did not know how to promote these critical literacy skills (Goldenberg, 1996; Roskos & Neuman, 1993). Klesius and Griffith (1996)

found that most children who have not had the experience of being read to at home might begin kindergarten with limited oral language development, literacy development, word knowledge and attentive behavior.

But just being read to may not be enough support for some children's literacy development (Gallimore & Goldenberg, 1993; Neuman, 1996; Scarborough & Dobrich, 1994). Meyer, Waldrop, Stahl, and Linn (1994) concluded that although storybook reading affects language development and other emerging literacy skills incidentally, there is "no magic in just reading to children. Instead, the magic comes as you engage them in print" (p. 83). Beals, DeTemple and Dickinson (1994) added to that statement with their conclusion that although "...some benefits are likely to accrue simply from exposure to books, the full value of reading can only be realized if the adult and child engage in conversations that support meaning construction" (p. 21).

Shared reading encompasses more than just the reading of a book. When an adult reads to a child, the adult acts as a more proficient other and the child constructs his/her own version of the story. Golden and Gerber (1990) described shared reading between an adult and child as a semiotic process. They suggested that reading a picture storybook by a "reader-performer" allowed the children to construct "multiple interpretations depending upon what the symbol offers, what the reader brings, and how the text is mediated by the participants in a social context" (p. 205). In a very real sense, a picture storybook's meaning is understood by the words and the pictures blended together. In addition, the researchers stated that "oral performance and

instructional cues are woven together, thereby creating a multi-layered system of intersecting cues" (p. 207). The objective of the present study is to provide the nonnative English-speaking mothers with the strategies to be a reader-performer when they read books to their children. The next section includes research studies that deal with the processes of emergent literacy development for linguistically diverse children.

A Brief Review of Bilingual Children's Language Development and Joint Book Reading with Bilingual Children

According to Vygotsky's theory (Vygotsky, 1962), cognitive development early in life is heavily influenced by the people and the culture that surrounds the individual. Literacy not only depends upon perceptual development but also on cognitive development processes (Harste, Woodward, & Burke, 1984). Vygotsky (1962) studied the mental processes of symbol systems, especially thought and language. The use of symbolic language transfer has special bearing on young children's second language learning. In this section of the review, research on language acquisition is highlighted from the aspects of phonological memory, vocabulary development and emergent literacy strategies. What is at issue is the question as to how bilingual children accomplish all of these tasks. An additional issue is since joint book reading is beneficial for native English speaking children, what effect might it have on bilingual children's language development.

Encoding language and then using the new vocabulary words involves not only phonological memory but also rehearsal and use. Researchers have

recently studied the development of phonological memory in young children in relation to their acquisition of new words (Gathercole, Willis, Emslie & Baddeley, 1992; Hoffman, 1997). One factor that may be an underpinning for young children's learning new words is their ability to encode new words into phonological memory. Researchers who have studied the phonological loop of working memory have found that children as young as four years of age are able to verbally rehearse new words to refresh their phonological memory (Diaz, Padilla & Weathersby, 1991; Hulme, Thompson, Muir & Lawrence, 1984 as cited in Gathercole, et. al. 1992).

An instance of verbal rehearsal is the use of private speech to solve problems. Diaz, Padilla and Weathersby (1991) reported on bilingual preschoolers' use of private speech to direct their efforts to solve problems during self-regulation in Piagetian classification settings. They found that the 34 Spanish-speaking children in a bilingual preschool program in Texas used spontaneous private speech in much the same way as monolingual children of the same age did. Their bilingualism learned in the context of an additive bilingual preschool program, which emphasized the development of both English and Spanish, had positive effects on their use of private speech to accomplish the classification tasks. Although most bilinguals engage in frequent code-switching (switching from one language to another) in conversation, the children's use of code-switching during private speech was infrequent in this study. The use of their native language or English in their private speech was not reported.

In older children and adults, there may be a facilitating mediation between new words and existing words that would lead to vocabulary development being the precursor to second language acquisition rather than phonological memory. However, for children who are four to five years of age, "phonological memory plays a critical role in learning new words during this developmental period" (Gathercole & Baddeley, 1989, as cited in Gathercole et al., 1992). For non-native English speaking children, learning a second language allows them to internalize the concept of language as a symbol system with two names for objects that they store in their memory. However, individual differences in phonological memory ability may be related to differences in children's ability to acquire new words in a second language. Gathercole et al. (1992) found in a longitudinal study with monolingual young children that phonological memory ability seemed to be highly correlated to vocabulary knowledge. For children who were between five and eight years of age, the researchers found that vocabulary knowledge came to the developmental forefront of vocabulary acquisition rather than phonological memory.

Perez (1997) reported that young bilingual children seemed to develop literacy strategies in the same sequence as monolingual children did and children's theories about the concepts of print seemed to be very similar across cultures. When children begin to understand that print conveys a message through a written code that maps speech, they are developing strategies that will transfer to learning a second language's written code.

Bilingualism has been seen as advantageous for children's cognitive

development in some studies (Bialystok & Herman, 1999; Diaz, Padilla & Weathersby, 1991; Gonzalez, 1994; Jimenez, Garcia, & Pearson, 1996; Ricciardelli, 1992); however, reports have also indicated that care must be taken in teaching a second language to preschool children when their literacy is emergent in both languages (Diaz, 1990; Gonzalez, 1994; Snow et al., 1998). The controversy has not been resolved and has been fueled once again by the statements made by the committee on the Prevention of Reading Difficulties in Young Children. They emphasized that, if at all possible, bilingual children should be proficient in their first language before attempting to learn a second language (Snow et al., 1998). The authors stated that "in families with many academic and literacy resources, initial instruction in literacy in a second language is unproblematic" (p. 235). However, there is still a question as to "what level of first language must be prerequisite to instruction of second language literacy teaching" (p. 234).

The optimal outcome is for the child to be literate in both languages. Bialystok and Herman (1999) discussed bilingualism and early literacy as to three basics of literacy acquisition: listening experience with storybooks, concepts of print and phonological awareness. They suggested that "bilingual children are better able to produce the story structure and literate vocabulary of a language in which they are read stories." (p. 41). As to concepts of print, they said "those aspects of print that are based on the functional significance of writing are understood better by bilingual children than by monolinguals." (p. 42). They also said that bilingual children have a small advantage over monolinguals

on some measures of phonological awareness.

The issue of whether to teach non-English speakers in their native language or in English is especially contested in states such as Texas and California who have large populations of Spanish-speakers. There have been reading programs taught in Spanish in heavily populated Spanish areas that have been successful in teaching the children to read in Spanish. The more successful ones are those that teach Hispanic children in Spanish for a longer period of time (Ramirez et al., 1991 as cited in Snow et al., 1998). However, some Spanish-speaking students who are taught and tested in Spanish still score much lower than the national average when compared to those who were taught and tested in English (Goldenberg, 1996). These troubling data have been reported but have not been researched as to the cause. Other obstacles cited by The Committee on Preventing Reading Difficulties (Snow et al., 1998) that can create reading difficulties for Hispanic children are the cultural mismatch between home and school, attendance at low-quality schools, and low educational goals. Perhaps other risk factors, such as low SES, also contribute to the below average scores on standardized tests.

The following studies in this review have arrived at different conclusions about the issue regarding teaching preschool children in their native language. A family literacy program in Houston (Title VII Enhancement Project, 1996) taught 12 four-year-olds in Spanish for all but 30 minutes of the half-day program. After participation in the prekindergarten program, the gap between the students who had attended the program and other Spanish speaking

kindergartners who were fluent in English was no longer apparent in their mean scores on the Language Assessment Survey. Although a previous study had suggested that Spanish-speaking preschool children lost their proficiency in Spanish by attending either monolingual English or bilingual preschool, several studies by Diaz and his colleagues have had different results (Diaz, Padilla, & Weathersby, 1991; Rodriguez, Diaz, Duran & Espinosa, 1995; Winsler, Diaz & Espinosa, 1997).

Bilingual preschool programs that are based on an additive model which emphasizes the development of both English and Spanish are considered advantageous to young bilingual language learners. Rodriguez, Diaz, Duran and Espinosa (1995) reported that in their study there was no evidence of loss in Spanish proficiency due to attending a bilingual preschool. They also reported that the children experienced large gains in English proficiency. Winsler, Diaz and Espinosa (1997) reported that after the second year of bilingual education, the same cohort of preschool children continued to gain proficiency in both languages. Carlisle and Beeman (2000) reported their results in an exploratory investigation of the effects of learning in either Spanish or English for Hispanic first graders. Whether they were taught in English or Spanish, the children did equally as well in reading and writing in English. The children who were taught in Spanish were stronger in Spanish reading and writing. The children who were taught in English were superior in listening tasks in English. The authors suggested that the difference might have been due to the children's not being able to decode well enough in English.

Shanahan, Mulhern and Rodriguez-Brown (1995) reported on a family literacy program in Chicago entitled FLAME that provided direct services to the Hispanic parents in the community. Spanish was used in all instruction for the parents except for English as a second language instruction. The parents were taught English in the context of children's storybooks in order to enhance their ability to share a book with their children. The authors voiced concern about family literacy programs that promote parental reading of children's storybooks written in English when the parents are not proficient in English. In order for non-English speaking parents to successfully use interactive strategies when reading a storybook in English, provision of time to practice reading and/or multiple presentations of the book would need to be included in a family literacy program. The following study provided a method of teaching English as a second language through multiple presentations of storybooks.

A study that used joint book reading with bilingual children was authored by Thornburg (1993). The author examined the effects of an intergenerational family literacy program using storybook reading. The goal of the New York City program was to teach the nine mothers, eight who spoke Spanish and one who spoke Arabic, to read storybooks to their children in English. The 15 children ranged in age from two years seven months to five years and one month. The mothers' reading level in their native language was the sixth grade or below and their reading level in English was at the first grade level or below. When the children were tested before the program began, their pretest scores showed that they were six to twelve months below established norms for English but within

established norms for their native languages. Activities in the six-month program centered on reading the storybooks. The mothers and their children met one day a week for two hours. The first hour was devoted to whole group reading instruction that emphasized multiple presentations of the storybooks. The storybooks were read twice by everyone who read together in a choral reading. The two teachers would help the families sing children's songs that were interactive. While one of the teachers led the reading of the storybook, the monolingual teacher would comment during the reading about plot events in the storybook. Sometimes, the children would be given representations of the various characters in the story that they placed on a felt board. The last activity was a hands-on art project related to the story just read. The program's last event was another circle time to sing a song about the book they had read. During the second hour the parents and teachers used the time for instruction in methods for comprehension, clarification of vocabulary in the storybook, and sharing the previous week's experiences reading that week's storybook. The children participated in a supervised playgroup while the mothers were in their English instruction. The results of the study showed that both the parents and children's scores on the language tests showed statistically significant increases in their English proficiency. The participating parents' performance was measured by the English version of the California Test of Basic Skills as a pre and post test. Their children were administered the English version of the Peabody Picture Vocabulary Test. Although the data for the t-tests were provided ($t = 1.94$ and $t=1.88$, respectively), the alpha level was not. A statistical

table provided the information that the *t* values were statistically significant different with 8 degrees of freedom and 14 degrees of freedom at the .05 level of significance for a one-tailed test.

In this review of literature, many studies have contributed information that is helpful to the present study. Few studies have investigated an Even Start population. However, a recent study by Taverne and Sheridan (1995) investigated the efficacy of a parent training program with an Even Start population. The sample was comprised of six parent child dyads; two of the six were described as first-generation Mexican immigrants. However, three other mothers reported that in their childhood homes Spanish was spoken. The typical reading skill of the mothers at baseline was fourth grade as measured by the Test of Adult Basic Education (TABE). The children were between three and five and a half years of age. During the seven-week program that was conducted after school, the mothers were taught how to read interactively with their children. Each weekly training session of one hour consisted of discussion, modeling, role-playing and performance feedback. During the shared reading of the weekly book, the target behaviors taught to the mothers were pointing out the main parts of the storybook, labeling and discussing pictures, reading to the child and pausing to ask questions. The transcript reviews of the taped interactions showed that the number of coded statement units increased from an average of 18 at baseline to 233 at post then declined to 129 after the one-week follow-up. The average pre-post increase in minutes read and number of days read was 54 minutes per week and 1.93 days per week. Five of the children's PPVT scores

were available with an average pre-post gain score of 15.6 with a standard deviation of 10.9. Although the authors did not report whether the gain score was a raw score, usually chronological age is taken into consideration to produce scores with maturation taken into account. In addition, since the administration of the PPVT was separated by six months rather than the seven weeks of the program, intervening variables such as participation in the Even Start program might be the reason for the differences found.

Research for the last decade has emphasized the importance of certain kinds of activities such as shared book reading on children's emergent literacy skills. The role of conversation when reading a book with a child would seem to be crucial for the emergent literacy development of bilingual children as well (Gonzalez, 1994). However, not much research has been found to answer the question of what effect the strategy of joint book reading would have on preschool children's second-language development of English.

Although there are many studies on joint book reading and its usefulness to emergent literacy, very few research studies have addressed the effects of joint book reading on second language acquisition. Based upon the number of studies reported in the present review of literature that found that the use of joint book reading was highly correlated to language development, I believe that joint book reading may be helpful in teaching preschool children and their mothers English as a second language. Based on the research in the field of cognitive psychology and specifically on the research of the dialogic reading method, I believe that a joint book reading strategy based on the model of cognitive

apprenticeship can be effective in promoting preschool children's second language acquisition.

CHAPTER III

METHODOLOGY

The purpose of this study was to investigate the effects of teaching the participating Even Start mothers a shared book reading strategy. Specifically, the purpose of this study was to adapt and test a maternal shared book reading strategy in a bilingual setting. This chapter describes the design, sample, measures, procedures and data analysis.

Design

The design for this study was a two-group pretest posttest comparison, a quasi-experimental design. The treatment group was composed of the mother/child dyads at the Even Start Ellison (pseudonym) site. The control group was a sample of the mother/child dyads at the Riverside (pseudonym) Even Start site. Matching the children as to age was possible so that the design was quasi-experimental. The dependent variables for the children were the receptive language development scores as measured by the PPVT-R; the expressive language development scores as measured by the mean length of utterance (MLU), and the scores on the concepts of print test. The experimental variable in this study was the treatment with two levels: the dialogic reading method used by the mothers and a control group not exposed to the treatment. Other variables of interest for correlational analyses were: the changes in the reading behaviors of

both mother and child as measured by the Adult/Child Interactive Reading Inventory (ACIRI) (DeBruin-Parecki, 1999); changes in mothers' self-efficacy as a literacy coach; mothers' years of education and the length of time in the Even Start program. The training consisted of providing the mothers with a workshop to instruct them in the dialogic reading method. The workshop met once a week for an hour for six weeks during the spring semester of 2002 at the Ellison Even Start site.

In a pilot study in 1999 which was approved by the Institutional Review Board IRB (98-51), the workshop presentation was used with a group of mothers at the Riverside site with statistically significant results as measured with the Preschool Language Scale –3 (PLS-3). In a t-test comparing the means at pre (74.156) and post (82.05) test scores of 19 children, a mean gain score of 7.89 was found ($p = .018$ for 2-tail significance). The scores on the PLS-3 use the date of birth of the child in order to take maturation into account in the computation of a gain score. There was no control group available at the time so the scores from the previous Even Start year group were used for comparison. Using the previous Even Start year group as a control group showed a mean gain score of 5.25 which was not statistically significantly different than what could be expected from normal language development due to maturation. When the means of the two groups were compared, the difference between the control group and the experimental groups as far as effect size was a modest .30 and was not statistically significant.

Sample

The objective of Even Start is to break the cycle of illiteracy. The families who are eligible for the Even Start program are identified as families who have children who are educationally at-risk. The children can be at risk because of being taught in a second language, having parents who do not have a high school diploma and/or being considered to be in low SES. Another requirement to be included in the Even Start program is that the parent must have a child under the age of eight. The children who were invited to be in the study were three-, four- and five-year-olds who were not yet eligible for kindergarten. All of the mothers and children were Hispanic and attended Even Start during the academic school year. The mothers in the treatment group were afforded the opportunity to participate in the workshop, received the free books and implemented the shared book reading strategy at home. The participants in the control group were also given the free books but did not receive training in the dialogic reading method. At the conclusion of the study, the mothers in the control group were offered the opportunity to receive training in the dialogic reading method during the 2003 spring program at the Riverside Even Start site.

The curriculum at both of the Even Start sites is essentially the same for both the mothers and the children. There were more adults at the Riverside Even Start site than there were at the Ellison site. The adults were divided into three adult classes taught by an adult basic educator at Riverside while there were two adult classes at Ellison, which were also taught by an adult basic educator. The teachers at both sites were native English speakers who were certified to teach in the state of Oklahoma. The children's classes were divided

by age: infant, younger preschool and older preschool. At both sites, the children in the older preschool had a lead teacher who was a native English speaker who was assisted by two bilingual aides. Both lead teachers from both sites were also certified to teach. The bilingual aides at both sites were graduates of the Even Start program. In the younger preschool classroom at both sites, the lead teacher was a graduate of the Even Start program who was not a native English speaker but was bilingual. Each lead teacher was assisted by bilingual aides. Although there were more children at the Riverside site, some of the younger children were not included in the sample because of their inability to understand English well enough to have a basal score on the PPVT-R. A basal score is reached when a child identifies 8 pictures correctly. These same children also had difficulty with the Concepts about Print checklist. The number of children who were able to be tested at the Ellison site constrained the number of children in the sample at both sites. All of the children who were in the groups were also available for posttesting.

Although there were 17 children included in both the treatment group and the control group, there were 16 mothers in the treatment group and 15 mothers in the control group at pretest. One treatment mother had two children who were included and two control group mothers each had two children included in the study. The age of the two groups of children was matched as closely as possible. The mean age for the control group was 51.59 months with a standard deviation of 8.06 months. The mean age for the treatment group was 50.64 months with a standard deviation of 6.45 months. There was no statistically

significant difference found in their ages. At posttest, there were 5 females and 9 males in the treatment group while there were 5 females and 12 males in the control group. All of the children as well as the mothers spoke Spanish as their native language.

The length of participation in the Even Start program was gathered from the participants with their consent. The mothers in the control group had a mean of 1.69 (sd=.81) years of Even Start participation while the mothers in the treatment group had a mean of .83 (sd=.47) years. The number of years of formal education was also an item on the consent form. The mothers in the control group had been in school an average of 8.24 years (sd = 4.22) and the treatment group had an average of 8.57 (sd=2.10) years of formal education.

Throughout the six weeks of the training program at Ellison, the attendance was good for thirteen of the sixteen mothers. Three mothers attended every training session. Five mothers missed only one and five other mothers missed two. One of the mothers attended only two sessions and the other two attended three sessions. The data for these three mothers and their children were not included in the analysis due to the abbreviated attendance during the workshops.

At the end of each workshop, each of the mothers was given a free copy of the book that was used in the workshop that day. All of the mothers in the control group were given the six free books at the beginning of the study. The mothers in the treatment group were given blank audio tapes and the use of a tape recorder as well as a calendar to record the books read to provide

information about the use of the reading strategy. The audio tapes were used as a check for compliance with training. Mothers in the treatment group were asked to audiotape themselves as they read to their children at home on a weekly basis. As an additional measure for compliance, the mothers indicated on a calendar the books read and the length of time spent reading to their children each day.

Measures

Three measures were used with only the children: the Peabody Picture Vocabulary Test-Revised (PPVT-R), forms L (pre test) and M (post test), the concepts of print checklist and the mean length of utterance (MLU). The MLU (number of words spoken) was computed at pre and post for the children's conversation during the videotaped reading. One measure, the ACIRI, was used with both the mothers and the children. One other measure, the reading self-efficacy assessment, was used only with the mothers.

Peabody Picture Vocabulary Test-Revised

The PPVT-R score, a continuous measure, was used to provide a measure of the children's receptive language development. It is administered individually and provides a score to represent a child's receptive language ability at a specific age. The scores obtained on the PPVT-R can be examined as gain scores. Maturation of the child is taken into account since the scores were compared with the age of the child upon administration. A constant score over time represents the idea that the child's language score is the expected score

due to maturation. An increased score, or gain score, from pre to post indicates that the child's language abilities have increased while taking into consideration normal language development due to maturation.

The PPVT-R has been normed on a nationwide representative sample and has been shown to be a reliable measure of receptive vocabulary among children whose first language is English (Dunn & Dunn, 1981). The Peabody Picture Vocabulary Test (PPVT) has been used for a number of years and has been included as a dependent measure when using reading strategies such as the dialogic reading method since the PPVT has high content and construct validity (Dunn & Dunn, 1981). The PPVT-R is a more recent version of the Peabody Picture Vocabulary Test.

The PPVT-R test is administered by recording responses which are computed between the basal and ceiling (lowest eight consecutive responses containing six errors). The score is computed by subtracting the number of errors from the ceiling score. Tables allow scores to be converted to percentile rank, an age equivalent score or to a standard score. The internal consistency is reported as from .67 to .88 (Form L) and .61 to .86 (Form M). The alternate form reliability is from .73 to .91. The questions are scored as pass or fail. Test-retest reliability over a short time interval (9 to 31 days) ranged from .52 to .90 for raw scores. All these measures of reliability are at least in the adequate range. Content validity was supported by comparing the words in the PPVT-R to items on age-leveled referenced vocabulary lists. Construct validity was supported by using W-difficulty scores through Rasch-Wright latent trait analysis. Concurrent

validity was computed by coefficients of concurrence with the PPVT, .53 to .87 (Examiner's Manual, Dunn & Dunn, 1981). The PPVT-R was administered by the researcher. The PPVT is a series of plates with pictures on them and is not included as an appendix.

Concepts about Print

The Concepts About Print (CAP) Test (Clay, 1985) was developed by Marie Clay in New Zealand and has been used in the Reading Recovery program in the United States. Clay described the reliability and validity of her CAP test as having "the qualities of a good test" (Clay, 1991, p.150). Criterion-related evidence of validity was reported as .79 correlation for word reading for 100 six-year-old children. Internal consistency reliability coefficients were measured by Kuder-Richardson formula at .95 using 40 urban children aged 5 to 7 years old in 1968 (Clay, 1970, as cited in Clay, 1979). Test-retest reliability coefficients were reported as .73-.89 and corrected split-half coefficients .84-.88 (Day and Day, 1980 as cited in Clay, 1993). The original test is used with a storybook entitled *Stones*.

An abbreviated checklist version of the Concepts About Print Test adapted by the researcher from one by the Tempe School District (1993) was used in the present study. An abbreviated version was necessary in order for the test to be age-appropriate for bilingual three-, four- and five-year-olds. It is a checklist that can be quantified as to the number of behaviors that the children exhibit. For instance, left to right reading directionality is assessed as well as knowledge of how books are read from the front to the back. The abbreviated version was

pilot-tested during the summer of 2001. Sixty-seven children from two preschools in Norman were available for testing. Since the checklist is dichotomously scored, the Kuder-Richardson technique was used to check for internal consistency of the instrument. Using the Kuder Richardson 20 formula, the internal consistency of the abbreviated checklist was .76. The checklist was administered by the researcher for the pre and post assessment for the children at the Even Start sites. The Concepts of Print checklist to be used can be found in Appendix A.

Mean Length of Utterance

The videotaped interaction between the mother and child while the mother was reading a book provided the opportunity to count the number of words in each utterance by the child. The mean length of utterance was calculated by counting the total number of words spoken divided by the number of times the child spoke. The mother and child were videotaped as a pretest before the intervention and as a posttest immediately afterwards.

Adult/Child Interactive Reading Inventory

The ACIRI was used to assess both the mother and child dialogue while reading a storybook. The ACIRI was developed by DeBruin-Parecki (1999) as an observational tool to evaluate adult/child behaviors while reading. The inventory was piloted with an Even Start program (DeBruin-Parecki, 1999). The participants in the pilot program were of diverse ethnicity. Although the original purpose of the inventory was diagnostic/prescriptive, the 12 literacy behaviors are similar to those promoted in the reviewed literature on shared, joint and

dialogic reading research and were assessed in the present study. In addition, the children's literacy behaviors and responses can be assessed using the ACIRI. The scoring is on a 0-3 scale. If the behavior is not present, the score is zero. If the behavior is exhibited infrequently, the score is one. For "some of the time", the score would be a two and "most of the time" would be scored as a three. Each individual question on the ACIRI for the mother was examined for correlations with the corresponding one for the child. Additional correlations were accomplished for the mean scores on each of the three categories as well as the total mean score on the ACIRI. These correlations for categories helped to explain the interactions between mother and child. The author indicated that all of the correlations for items on the ACIRI pilot test were statistically significant at the .01 level of significance (DeBruin-Parecki, 1999). Interrater reliability for the ACIRI was accomplished through interrater agreement among eight raters and reported to be at 97% agreement. The ACIRI is included as Appendix B.

The ACIRI scores were used in the present study by summing each of the 12 individual statements to produce a score for the mother on one side of the ACIRI score sheet and another separate score for the child on the other side of the score sheet. Each item on the score sheet could be scored as a 0, 1, 2, or 3. The highest score possible on the ACIRI would be a 36, if all 12 of the items were scored as a 3.

Reading Self-Efficacy Assessment

The mothers' attitudes of confidence in their abilities and perceived competence in reading books to their children was assessed by asking them to

respond to a reading attitude instrument. The reading attitude instrument is similar to one authored by Henk and Melnick (1995), the Reader Self-Perception Scale (RSPS), which was reported to be based on Bandura's theory of perceived self-efficacy. The RSPS was created to measure how intermediate elementary children perceived themselves as readers. Although the RSPS assessed four subscales (Progress, Observational Comparison, Social Feedback and Physiological States), only eight of the statements seemed to be appropriate for the Even Start mothers. One of the statements that was added was about being the child's first reading teacher. The RSPS also used a Likert-like scale of five possibilities while I used only four possibilities. The self-efficacy instrument is entitled Reading Attitudes Assessment and is included as Appendix C.

Data Collection Procedures

Pre-testing

After informed consent from the parents as well as the children was obtained, pre-testing was accomplished with both groups before the workshops began. Pre tests were administered to children in both groups in order to assess their concepts about print (CAP) and their receptive language by using the PPVT-R, Form L. No statistically significant differences between the groups were found on any of the pretest measures using a t-test for independent means for each of the measures. Means at pretest on all measures are reported in Table 1.

The participants in both groups were video taped so that the interaction while the mothers were reading either *Jump, Frog, Jump* or *Friends* to their

child(ren) could be assessed using the ACIRI. Video taping allowed the researcher to provide actual instances of conversation about the book and assess the use of dialogic reading strategies as well as calculate the MLU and the number of words spoken by the child. The mothers were given the choice of location for videotaping, either at school or in their homes. Most of the mothers in the control group chose to be videotaped at home while most of the mothers in the treatment group chose to be videotaped at school. The videotapes were scored using the ACIRI for both the mother and the child.

Treatment

The workshops were developed by the researcher and provided as an opportunity during the spring semester of 2002. The workshops at the Ellison Even Start site were held during the spring semester for six weeks. A bilingual assistant provided Spanish translation during the workshops. The mothers at Ellison who volunteered to participate were trained to use the dialogic reading method with their children. In the control group there were fifteen mothers since two of them had two children in the study. Initially, sixteen mothers were in the treatment group since one had two children in the study. Three mother/child dyads from the treatment group were not included in the analysis at posttest due to low attendance in the workshops. The two groups of children were matched so that they were approximately the same number of children of the same age in both groups. The score on the PPVT-R would take into account the difference in age. The measure for expressive language would be sensitive to age differences since older children usually speak not only more words but more words at one

time. The groups needed to be approximately equivalent in age to compare MLU.

The training could be characterized as one hour of instruction in the dialogic reading method and five practice sessions in which the mothers read additional books using the dialogic reading method. Training consisted of six workshops where a storybook was read in English and then discussed in English and Spanish. The books were read by the trainer first and then chorally read aloud by the participants. At each workshop the strategies of asking prediction questions, asking for recall, and elaborating on the child's responses were practiced and role-played by the mothers. One of the reasons for using a bilingual assistant was that she interpreted the directions into Spanish during the workshop to insure that the mothers understood the plot and vocabulary of the books so that they could ask appropriate questions in English.

After several of the control group mothers had been videotaped reading the book, *Jump, Frog, Jump*, one of the children told me that they had read the book at school. This particular book is described as a predictable book since the title is the repeated refrain and is represented on every other page. It is also cumulative so the words from the first page are repeated until the end of the story. The decision had been made for the groups to read the same book at pretest and posttest. I chose a different storybook for the treatment group to read that had not been read at school. The book is entitled *Friends* and is not as predictable as *Jump, Frog, Jump* but is at the same level of difficulty. The treatment group read *Friends* at pre and posttest while the control group read

Jump, Frog, Jump.

After watching the mothers read during the pretest phase of the study, the decision was made to use bilingual books during the training program. The bilingual books were ordered as a set from Scholastic Publishing Company. All but one of the books had both English and Spanish on each page. One of the books, *Say Hola to Spanish*, used mostly English but would end the sentences in Spanish. For example, a chair is a silla. One other book was a book about the seasons which was descriptive. These two bilingual books were fairly easy to read. *Say Hola to Spanish* was written as a poem, not as a story with a plot. The rest of the books were written with the elements of characters, a setting and a plot. These were longer and not as easy to read.

The reason for using these bilingual books was that in order for the mothers to understand the questions to ask, they needed to be able to understand the story. Although most of the mothers were able to read in English and then translate, for some of the mothers the cognitive load of reading in English was so great that they were not able to ask questions or engage their children in the book. Their compromised ability to read in English was apparent during the pretest video. Since the objective of the intervention was for them to share the reading and help their child become an active participant, books in both languages facilitated the process of compliance with the shared reading method.

Both the control and the intervention groups were given the books. From examination of the calendar that was given them to record the books read, all of them used the bilingual books and read them numerous times. Not only did the

mothers read the bilingual books but the mothers reported that the older children read them to their younger siblings also. Another benefit of using bilingual books was that there was no measurement of their ability to comprehend as they read in English built into the design of this study. The use of bilingual books allowed them to read and comprehend in Spanish and then read it in English. The use of bilingual books enabled all of the mothers to participate regardless of their ability to read and speak English.

Post-testing

For the children of both groups, the same three tests used in the pre-testing were administered at post test immediately after the training program was over. The PPVT-R, Form M, and the CAP checklist were used. The week after the training program, another videotape was made not only to assess the MLU of the child but also to use the ACIRI to evaluate the dialogue and interactions by both the mother and the child. The self-efficacy instrument, the Reading Attitudes Assessment, was administered to the mothers in the treatment group only. Due to the kinds of statements used in the self-efficacy instrument that were written to contrast previous behavior, the instrument was not designed to be used as a pre and post test. For example, "I can talk to my child about storybooks better than I could before" would be difficult to understand at pretest.

Data Analysis

The following research questions were designed to collect data in an examination of the direct and indirect effects of the dialogic reading treatment.

1. Will a dialogic reading treatment administered by trained mothers facilitate a child's receptive second language development as measured by the PPVT-R relative to a control group?
2. Will a dialogic reading treatment facilitate the development of a child's concepts of print relative to a control group as measured by a concepts about print (CAP) checklist?
3. Will a dialogic reading treatment increase the child's mean length of utterance (MLU) relative to a control group?
 - a. Will a dialogic reading treatment increase the child's expressive vocabulary by mean number of words spoken relative to a control group?
 - b. Will a dialogic reading treatment increase the child's expressive vocabulary by number of turns relative to a control group?
 - c. Will a dialogic reading treatment increase the child's expressive vocabulary by mean number of sentences spoken in English?
4. Will the dialogic reading treatment increase the mother's ACIRI scores relative to a control group?
5. Will the dialogic reading treatment increase the child's ACIRI score relative to a control group?
6. Will the dialogic reading behaviors of the adult be associated with the child's responses to the storybook reading through analysis of the ACIRI?
7. Will the factors of the mother's years of formal education, time spent in Even Start and score on the ACIRI be related to the child's scores on the ACIRI,

PPVT-R, CAP and MLU?

8. Will the dialogic reading behaviors exhibited on the mother's ACIRI be related to the mother's self-efficacy as a literacy coach as measured by a self-efficacy instrument?

Inferential statistical procedures were used to investigate whether the differences in the groups were at statistically significant levels. All data analyses were accomplished using the statistical software package, Statistical Package for the Social Sciences (SPSS) 10.0 for Windows.

Research questions one through five about the effects of the dialogic reading treatment on the receptive vocabulary (PPVT-R), the concepts about print (CAP) checklist, the measure of expressive vocabulary (MLU) and the effects of the ACIRI were answered by using a separate repeated measures ANOVA for each research question. Research question six about the association between the child's responses and mother's responses on the ACIRI was answered using correlation. Four separate multiple regressions examined the factors of the mother's years of formal education, time spent in Even Start and score on the ACIRI and the child's scores on the ACIRI, PPVT-R, CAP and MLU. Another correlation was run to answer question eight as to the relation between the mother's self-efficacy as a literacy coach and her scores on the ACIRI.

Use of the dialogic reading method was assessed from the video transcription of the participants' storybook reading conversations in the study. The interactions were taped by the researcher as pre and post training

assessments and measured by using the ACIRI. A bilingual graduate student who was a certified teacher also evaluated the tapes using the ACIRI to provide inter-rater reliability. Disagreements on scores were resolved through discussion leading to 100% agreement. The ACIRI is included as Appendix B.

CHAPTER IV

RESULTS

The purpose of this chapter is to show the results of the data analyses that will facilitate understanding of the research questions of the present study. Data were collected on the mothers' variables as well as the children's variables to explain to what extent the dialogic reading method taught to the mothers would affect the children's second language acquisition of receptive vocabulary, expressive vocabulary and concepts of print. Additionally, tests were performed to investigate the changes in reading strategy behaviors exhibited by the mothers and children. Data were also collected for independent variables for the mothers, time in Even Start and number of years of formal education, that might be predictors of the children's variables. Two mothers attended three sessions and one mother attended twice. This adjustment made the treatment group ($n=14$) smaller than the control group ($n=17$). A possibility of Type I error is evident with this design since multiple statistical tests were run without adjusting the level of significance. Adjusting the level of significance by dividing it by the number of tests would control for Type I error. However, since both groups were small in number and such small groups would have low power to detect differences even at the .05 level, the decision was made to test at that level of significance.

Inspection of the calendars and audiotapes used for compliance showed

that most of the mothers in both groups read to their children on a regular basis. Although some of them read daily and even indicated how long they read to their children, some read only for five days a week and did not include how long they read the storybooks.

In tests of whether the dialogic reading treatment would facilitate the child's receptive second language, the treatment group did not have scores on the PPVT-R at posttest that were statistically significantly different than the control group. The scores on the PPVT-R (English version) were analyzed using a 2 (time) by 2 (group) mixed design ANOVA for repeated measures. This method was used to examine the effects of group (treatment and control) and time (pretest and posttest) on PPVT-R scores. The time by group interaction ($F(1,29) = .60, p > .05$), the main effect for time ($F(1,29) = .64, p > .05$), and the main effect for group ($F(1,29) = .56, p > .05$) were all not statistically significant. Using the delta effect size comparison, the effect size for the gain scores on the PPVT-R measure showed a small effect size of .39.

In order to determine whether the dialogic reading treatment would facilitate a child's concepts about print, an additional 2 by 2 mixed design ANOVA for repeated measures was calculated to examine the effects of the group (treatment and control) and time (pretest and posttest) on concepts about print scores. Statistically significant differences were found for the scores on the concepts about print checklist. A statistically significant time by group interaction was present ($F(1,29) = 5.14, p < .05$). In addition, the main effect for time was statistically significant ($F(1,29) = 35.57, p < .001$). The main effect for group was

not statistically significant ($F(1,29) = 1.43, p > .05$). As a follow-up to the significant interaction, the groups were compared using an independent t -test for means at pretest that resulted in a t -value of .04 and a p value of .97. There were no statistically significant differences between the groups at pretest. At posttest the t -value was -2.05 with a p -value of .05. The difference between the two groups at posttest is readily apparent in Table 1 and Figure 1.

The difference between posttest scores can also be expressed in terms of effect size. Using the difference between means as the numerator and using the standard deviation of the control group as the denominator, an effect size of .82 was calculated. An effect size of that magnitude would be considered a large effect size (Fraenkel & Wallen, 1996).

Statistically significant differences were found in regard to the child's mean length of utterance between the treatment and control groups. A 2 by 2 mixed design ANOVA for repeated measures was calculated to examine the effects of group (treatment and control) and time (pretest and posttest) on MLU scores. The group by time interaction ($F(1,29) = .02, p > .05$) and the main effect for time ($F(1,29) = .62, p > .05$) were not statistically significant. The main effect for group was statistically significant ($F(1,29) = 7.87, p < .05$) with the control group having higher MLU scores. The control group had higher scores on the measure at a statistically significant level at pretest with a t -test value of 2.47, $p = .02$. Both groups had decreased scores at posttest with the difference between them at a magnitude of .07. Therefore, the delta effect size computed for the gain scores was a very small effect size of .04.

Table 1

Mean Scores and Standard Deviations of Mother and Child Variables

	Control Group Pretest	Control Group Posttest	Control Group Gain	Treatment Group Pretest	Treatment Group Posttest	Treatment Group Gain
Age - Child	51.59 (8.06)			51.00 (6.68)		
Concepts About Print	3.53 (2.35)	4.94 (2.22)	1.41 (2.09)	3.50 (1.74)	6.64 (2.45)	3.14 (2.14)
PPVT-R	56.47 (15.61)	56.53 (15.65)	.06 (10.89)	58.14 (11.24)	62.43 (20.14)	4.29 (18.94)
MLU	2.66 (1.07)	2.42 (1.26)	-.24 (1.70)	1.70 (1.08)	1.53 (1.21)	-.17 (1.03)
Words Spoken	33.82 (25.90)	43.00 (43.80)	9.18	40.72 (55.73)	48.93 (82.22)	8.21
Turns Taken	12.77 (8.13)	15.24 (12.70)	2.47 (11.67)	16.93 (21.05)	19.86 (27.46)	1.43 (7.49)
Formal Ed	8.24 (4.22)			8.57 (2.49)		
Time in Even Start	1.69 (.81)			.83 (.53)		
Self-efficacy					29.36 (2.91)	
Age - Mother	31.59 (4.39)			30.57 (6.67)		
ACIRI -Mother	15.94 (3.34)	14.83 (5.29)	-1.12 (4.64)	19.00 (5.37)	19.35 (3.82))	.35 (5.08)
ACIRI- Child	16.29 (4.00)	15.71 (5.69)	-.59 (5.00)	16.71 (5.20))	16.50 (7.49)	-.29 (4.89)

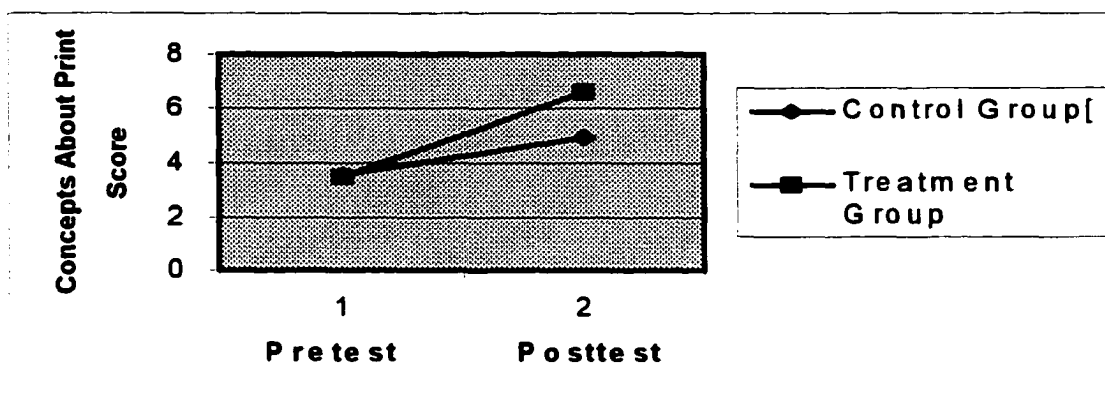
Note. PPVT-R = Peabody Picture Vocabulary Test, Revised

MLU = Mean Length of Utterance

ACIRI = Adult/Child Interactive Reading Inventory

Figure 1

Comparison of Concepts about Print Scores



The mean length of utterance is calculated by counting the total number of words spoken and dividing it by the number of times the child took turns speaking. The data were available to analyze both the number of words spoken and turns speaking. A 2 by 2 mixed design ANOVA for repeated measures was used to compare the number of words spoken by the children at pre and posttest. No effects were found. The time by group interaction ($F(1, 29) = .004, p > .05$), the main effect for time ($F(1, 29) = 1.46, p > .05$), and the main effect for group ($F(1, 29) = .13, p > .05$) were all not statistically significant. The delta effect size was found to be -.08, a very small effect size.

A 2 by 2 mixed design ANOVA for repeated measures showed that there were no statistically significant effects when comparing the number of turns the children took when talking to their mothers about the storybook. The time by group interaction ($F(1, 29) = 1.99, p > .05$), the main effect for time ($F(1, 29) = .01$,

$p > .05$) and the main effect for group ($F(1,29) = .49, p > .05$) were not statistically significant. The delta effect size was also a very small effect size, $-.09$.

To test the question about the effects of the ACIRI, the mother's scores were examined using a 2 by 2 mixed design ANOVA for repeated measures to compare the ACIRI scores for the mothers at pretest and at posttest. The time by group interaction ($F(1,29) = .80, p > .05$) and the main effect for time ($F(1,29) = .21, p > .05$) were not statistically significant. The main effect for group ($F(1,29) = 7.28, p < .05$) was statistically significant. The difference between the posttest scores was 4.52 points. The two groups had statistically significant differences at both pretest and posttest using t -tests. A delta effect size of $.32$, a small effect size, was calculated for the mother's posttest ACIRI scores by dividing the difference between the means of the gain scores by the standard deviation of the control group (Fraenkel & Wallen, 1996).

The question for the child ACIRI score was investigated by another 2 by 2 mixed design ANOVA which was calculated to examine the effects of the group (treatment and control) and time (pretest and posttest). No effects were found. The time by group interaction for the child ACIRI scores ($F(1,29) = .04, p > .05$), the main effect for time ($F(1,29) = .20, p > .05$) and the main effect for group ($F(1,29) = .11, p > .05$) were all not statistically significant. An effect size of $.06$, a very small effect size, was calculated for the gain scores on this measure using the delta effect size method.

Pearson correlation coefficients were calculated to assess the relationship

between mother and child pre and post scores for the ACIRI variables. Strong positive correlations suggest an association of the child's responses and the mother's reading behaviors. Figures 2 and 3 for all of the mother show the scatter plots. Table 2 shows the intercorrelations for both groups.

Four separate multiple regressions were calculated to answer the seventh research question about the mother's variables that might be related to the child's posttest scores on the ACIRI. All participants from both groups were included in the regressions. The first multiple regression was used to show how the variables of (a) mother's educational level, (b) the time spent in Even Start and (c) mother's post test score on the ACIRI were related to the child's ACIRI posttest score. The regression equation was statistically significant ($F(3,30) = 24.66, p < .05$). The model summary showed that the proportion of the variance in the dependent variable (ACIRI posttest score) that could be explained by variation in the independent variables of mother's educational level and time spent in Even Start was .73 (R^2). In other words, 73.3% of the variation in the child's post ACIRI score can be explained by differences in the mother's variables of educational level and time spent in Even Start. Even after taking into account the effects of the other variables, there was a statistically significant relation between the mother's ACIRI score and the child's ACIRI posttest score. Table 3 shows the regression information.

The second multiple linear regression was calculated to examine how the variables of mother's educational level, time spent in Even Start and posttest score on the ACIRI were related to the child's PPVT-R posttest score. The

Figure 2

Correlation of Mother and Child Scores on Pre ACIRI

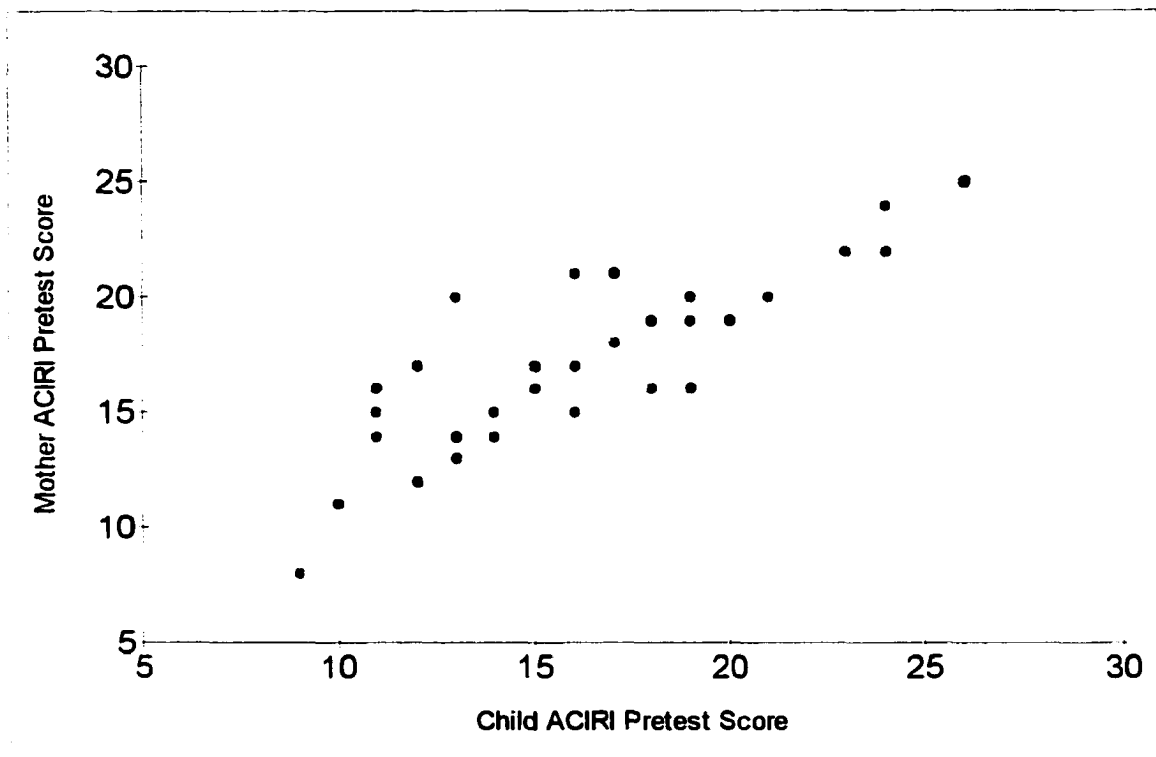


Figure 3

Correlation of Mother and Child Scores on Post ACIRI

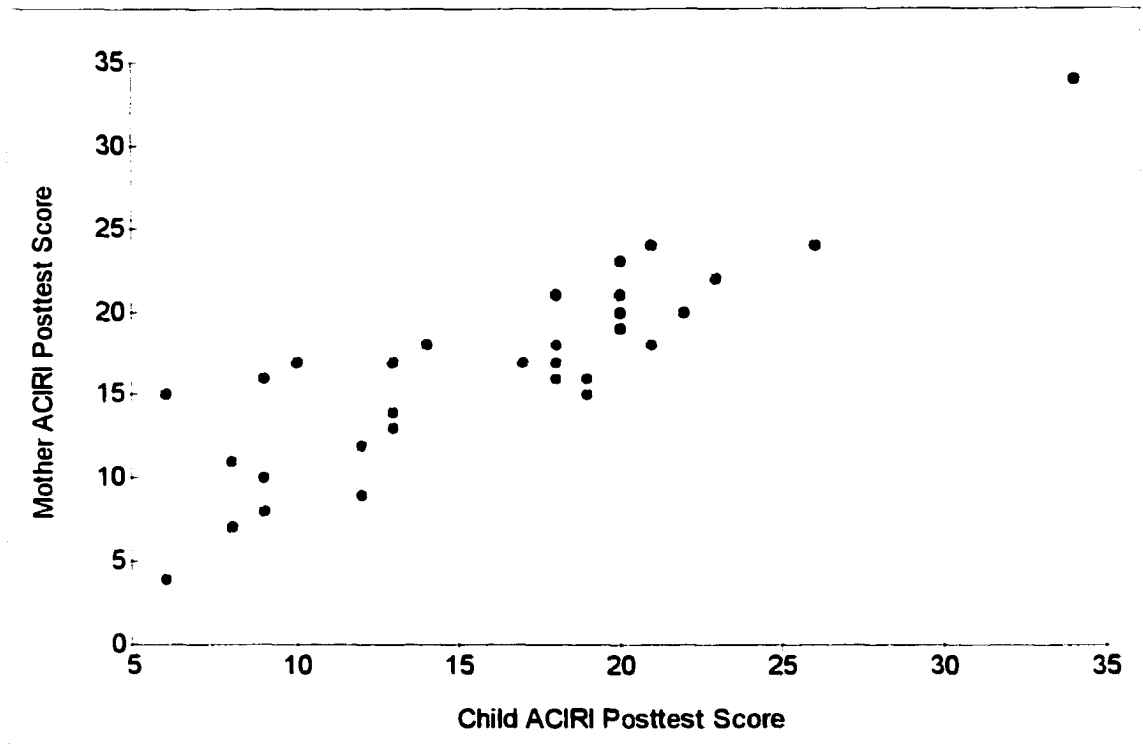


Table 2

Intercorrelations between Measures for Mothers and Children

Measures	1	2	3	4
Treatment Group (n = 14)				
1. ACIRI (pretest – mother)	-	.56*	.88**	.60*
2. ACIRI (post – mother)	-	-	.64**	.89**
3. ACIRI (pretest- child)	-	-	-	.76**
4. ACIRI (post – child)	-	-	-	-
Control Group (n = 17)				
1. ACIRI (pretest- mother)	-	.50*	.91**	.64**
2. ACIRI (post – mother)	-	-	.37	.94**
3. ACIRI (pretest – child)	-	-	-	.51*
4. ACIRI (post – child)	-	-	-	-

Note. * Correlation is significant at the 0.05 level (1-tailed).

** Correlation is significant at the 0.01 level (1-tailed).

ACIRI – Adult/Child Interactive Reading Inventory

Table 3

Summary of Multiple Regression Analysis for Mother Variables

Predicting Child Post ACIRI Scores at Statistically Significant

Levels (N = 31)

Variable	<i>B</i>	<i>p</i>	<i>R</i> ²	<i>F</i>
Regression model			.73	24.66
Educational Level	.01	.89		
Time in Even Start	.07	.46		
Mother ACIRI Post	.86	.00		

Note. ACIRI = Adult/Child Interactive Reading Inventory

regression equation was not significant ($F(3,30) = 1.38, p > .05$) with an R^2 statistic of .13. None of the variables (mother's educational level, time in Even Start or posttest score on the ACIRI) could be used to predict PPVT-R posttest scores.

The third multiple linear regression was calculated to investigate how the variables of mother's educational level, time spent in Even Start and the mother's posttest score on the ACIRI were related to the child's CAP posttest score. The regression equation was not significant ($F(3,30) = .90, p > .05$), with an R^2 statistic of .09. None of the variables (mother's educational level, time in Even Start or posttest score on the ACIRI) can be used to predict CAP posttest scores.

The fourth multiple linear regression was calculated to ascertain the relation between the mother's variables of educational level, time in Even Start and posttest score on the ACIRI and the child's MLU post score. The regression equation was significant ($F(3, 30) = 3.75, p < .05$). The variance explained by all three variables was .29 (R^2). The mother's educational level was not found to be related to the child's MLU score at statistically significant levels; however, time spent in Even Start and the mother's posttest score on the ACIRI were positively related to the child's posttest MLU score. Table 4 shows the regression information.

A Pearson Product Moment correlation coefficient was calculated for the relationship between the mother's ACIRI posttest scores and the self-efficacy scores for the treatment group only. A moderate positive correlation was found ($r(12) = .54, p < .05$) for the posttest score on the ACIRI which indicated a statistically significant linear relationship.

The self-efficacy instrument had nine questions about the mother's confidence concerning not only her reading ability but also her ability to read to her children. The 4-point Likert scale ranged from strongly agree to strongly disagree. Overall most of the mothers answered positively with no one indicating a response at the strongly disagree level. The mean score for the 13 mothers in the treatment group was 29.77 (sd = 2.91) out of a possible 36. The total score for the mothers ranged from 23 to 35. The overall mean score on the answers to the statements was 3.31 out of a possible 4. Table 5 indicates the means of each statement on the self-efficacy instrument.

Table 4

Summary of Multiple Regression Analysis of Mother Variables

Predicting Child Post MLU Score at Statistically Significant Levels

(N = 31)

Variable	<i>B</i>	<i>p</i>	<i>R</i> ²	<i>F</i>
Regression model			.27	3.84
Educational Level	-.07	.65		
Time in Even Start	.39	.03		
Mother ACIRI Post	.41	.02		

Table 5

Scores for Mothers' Attitudes about Reading

(N = 13)

Statement	Means
1. I feel confident that I am a good reader.	2.62
2. I like to read aloud to my child.	2.91
3. I feel good inside when I read to my child.	3.62
4. When I read, I don't have to try as hard as I used to.	3.38
5. I am getting better at reading storybooks to my child.	3.46
6. Reading is easier for me than it used to be.	3.46
7. I can now read faster than I could before.	3.46
8. I can understand what I read better than I could before.	3.46
9. I feel confident about being my child's first reading teacher.	3.63
Average	3.31

Note. Possible range of scores was from 1 (strongly disagree) to 4 (strongly agree).

CHAPTER V

DISCUSSION

The use of the dialogic reading treatment with bilingual Spanish/English mother-child dyads was helpful in several areas of literacy development in this study. The children whose mothers used the treatment with them showed an increase in concepts of print. The findings were not as strong in other areas of emergent literacy for the children. With an intervention that is of low cost and easily implemented within existing curriculum, the mothers effectively changed their reading behaviors as evidenced by their scores on the Adult/Child Interactive Reading Inventory and videotaped sessions. The purpose of this chapter is to discuss the findings of this study.

Mothers' Findings

The treatment group mothers' interactive reading behaviors increased as evidenced by their ACIRI scores from pretest to posttest. In contrast, the control group mothers' scores on the ACIRI decreased for the same time period. The difference in the scores of the ACIRI between the treatment and control group at posttest was 4.52 points. The difference between group means was large and statistically significant for the main effect for group; however, using the delta method for computing effect size, the effect size for the difference between the gain score means was in the small range (.32).

The differences found in the ACIRI scores could be attributed to the use of different books for the videotaped sessions. The control group read a predictable book, *Jump, Frog, Jump*, at both pretest and posttest. Since questions are part of the text of the book they read and were not counted as interactive reading behaviors, the control group mothers' scores may have been suppressed on that part of the ACIRI. In contrast, the book the treatment group read was not a predictable text and did not have questions as part of it. In order to employ interactive reading behaviors, some of the mothers in the treatment group devised their own questions in response to the text or answered their children's questions. If the mothers asked their own questions, their ACIRI score reflected that behavior.

No time effect or interaction effect was found for the mothers' ACIRI scores. The treatment group displayed more interactive reading behaviors and had higher scores at pretest and posttest in comparison to the control group which contributed to finding no effect for time. Perhaps the intervention of six weeks was not long enough to produce measurable changes in the mothers' reading behaviors. Although the mothers in the treatment group did display interactive reading behaviors in their responses to the book they read, the differences found on the ACIRI could be in the books themselves as noted above. Finding differences is also difficult with such small groups as these were. If the groups had been larger, the statistical tests would have had more power to detect differences.

Mother's factors as predictors

The mother's educational level was not a predictor of any of the child's variables (PPVT-R posttest scores, CAP posttest scores, MLU scores or ACIRI posttest scores). The finding that there was no relationship found for the mother's educational level and the child's variables could be valuable information. Generally, the more education the mother has, the higher the children's academic achievement in school (Payne et al., 1994). The same relationship was found for mothers who did not have as much education: the less education the mother has, the lower the children's academic achievement at school. In other studies, the maternal education level has been combined with other factors such as intelligence and SES to produce home literacy factors that relate to children's academic achievement (Barnett, Frede, Mobasher & Mohr, 1987; Chaney, 1994; Christian et al., 1998). One of the ways to be included in compensatory programs such as Even Start is not having a high school diploma.

The present study showed that the dialogic reading treatment had a statistically significant effect as far as the child's variable of concepts of print regardless of the mother's educational level. Most of the mothers' educational levels were between the eighth and twelfth grades with a mean of 8.24 years in school for the control group and 8.57 for the treatment group. Both of the groups had a wide range with the control group ranging from two years of formal education to sixteen years. The treatment group ranged from third grade to twelfth grade. The most common formal educational level was eighth grade completion for both groups. If mothers of lower educational levels can be taught to use effective reading strategies with their children so that they acquire

emergent literacy behaviors such as concepts of print, the possibility of breaking the cycle of illiteracy or low literacy might be realized. Longitudinal research into the phenomenon of the academic achievement of these bilingual children over time could be particularly interesting. If these bilingual children whose mothers are undereducated can do well in supporting the acquisition of an essential skill such as reading, the dialogic reading intervention could be a step in the right direction to leaving no child behind.

Time of participation in the Even Start program was found to be a statistically significant predictor for the child variable of MLU. The mothers and the children in the control group had been in the Even Start program longer than the treatment group. The control group had been in the program an average of 1.69 years with a standard deviation of .81 years. The treatment group had been in the program an average of .83 years with a standard deviation of .47 years. A possible explanation for the MLU score favoring the control group could be that the children had experienced the Even Start curriculum in the classroom and home visits by the home facilitators for a longer time than the treatment group. Another possibility is the practice effect for the control group since they had read the book at Even Start.

The dialogic reading treatment as measured by the mother's ACIRI posttest score was associated as a statistically significant predictor of the child variables of MLU and the reading behaviors as measured by the child's posttest ACIRI. The reading behaviors of the mother were positively associated with changes in the child's emergent literacy abilities of being an active participant in

the reading of storybooks. The children who could be described as active participants asked more questions, made more observations, pointed to what was being read and used the words from the story to do so. Use of dialogic reading was also associated with the number of words spoken at one time while engaging in reading during the videotape and the increased score on the measure of receptive vocabulary.

Self-efficacy Measure

The moderate correlation between the score on the mother's posttest ACIRI and the self-efficacy measure showed that there was a relationship that the mothers in the treatment group felt in their confidence to be a literacy coach for their children and their reading behaviors. The Even Start program at both sites placed an emphasis on reading to children. This finding of moderate self-confidence in the mothers' ability to read to their children was not unexpected. An interpretation of this finding is clouded because the measure was not administered at pre test or given to the control group.

Children's Findings

Concepts about Print.

As far as the children's measurements, most notable was the effect on the children's concepts about print. Of the children's factors studied, the children's concepts about print measurement was one that showed a statistically significant difference between the two groups. Both the control group and the treatment group increased in their ability in this area of emergent literacy from pretest to

posttest, but the treatment group's gain was statistically significantly larger than the control group's score. This finding was interesting in that the mothers were not instructed specifically teach their children book handling techniques.

Children who have knowledge about books and how books work are able to use that knowledge to facilitate their emerging concepts of literacy. Recognition of pictures as context clues helps children engage in constructing their own interpretation of the story. Noticing that the left page is talked about before the right page supports left to right orientation. Pointing to the words can facilitate the recognition that speech can be written down and read by readers and is also read from left to right. All of these emerging literacy behaviors pave the road to reading acquisition and increase the likelihood that children who have had these experiences will be readers.

The mothers were not aware of the items on the CAP checklist, such as identifying the front or back of the book. Since both groups were given the same books, the difference did not lie within the bilingual books. The novelty of the use of new books was the same for both groups and can also be discounted as the underlying reason for the differences found on this measure.

An explanation for this finding is that the treatment mothers may have spent more time reading the books to their children and consequently, more time engaging in a conversation about the books increased the book knowledge as measured by the CAP checklist. Another explanation could be that in using the dialogic reading techniques, their children paid more attention to how their mothers read the books and what the mothers attended to while reading. During

the treatment program, the mothers were instructed to point to the words as they were reading. Pointing may have directed the children's attention to where the words appeared in the text. One of the areas on the concepts about print checklist asked the children to show the part of the book that is read. Five children in the treatment group could identify the part of the book that showed a word at posttest as compared to only one child who could do so before the intervention. In contrast, two children in the control group identified a word at pretest while only one could at posttest. In the treatment group the mothers practiced reading the books to each other during the workshop, so familiarity with the books may have contributed to the mother's ability to read the story so that the child was more interested and paid more attention.

Receptive Vocabulary

In regard to the changes in the child's receptive vocabulary (PPVT-R scores), the differences between the two groups were not at the level of statistical significance. However, inspecting the means indicates that the treatment group showed larger gains in this area than the control group. The mean for gain score for the treatment group was 4.29 while the mean gain score for the control group was .06. Since this study was an adaptation of other dialogic reading studies (Arnold & Whitehurst, 1994), the decision to use the same measure of receptive vocabulary (PPVT-R) was made in order to compare results.

In a dialogic reading study evaluating high-SES two and three year old children's PPVT scores, results favored the treatment group but were not at

statistically significant levels, which were similar results as in the present study (Whitehurst, et al., 1988, as cited in Arnold & Whitehurst, 1994). However, Valdez-Menchaca & Whitehurst (1992) found that the high-risk, low-income two and three year old children's PPVT-R scores increased 7 points on the PPVT-R in an experimental study using the dialogic reading strategy. The increases found in PPVT-R scores in that study were at statistically significant levels. However, the results found in Valdez-Menchaca & Whitehurst (1992) using the PPVT-R were with a sample of children who were being tested in their native language.

Perhaps the reason the results of the PPVT-R analysis were not statistically significant in the present study was that the PPVT-R test was not in their native language, Spanish, but in English. Using the PPVT-R had advantages and disadvantages. Strengths of the PPVT-R include that it has been widely used and shown to be a valid measure of receptive vocabulary of English speaking children in the United States. The initial items on the plates are ones of common objects found in the home, neighborhood or school. It is also designed to allow retesting with an alternate form in increments of two months time. The PPVT-R has norms tables and scores can be converted to stanine, standard scores or age-equivalent scores. Weaknesses include that the PPVT-R does not target vocabulary that may have been in the books they heard their mothers reading to them. The items used in some of the plates may not be familiar ones for these Spanish-speaking preschool children.

Differences in receptive vocabulary that are at levels of statistical significance may be revealed in a similar research design but may need to be examined over a longer period of time. Children add words to their vocabulary at an astonishing rate of about 5 words per day for a total of about 10,000 known words by age 6. However, there is usually a lag between comprehending vocabulary (receptive) and being able to produce those same words (expressive) (Menyuk, Liebergott & Schultz, 1995 as cited in Berk, 1997). Not much research has been done to examine how preschool children whose first language is not English differ from monolinguals in regard to vocabulary acquisition of English words. These Spanish-speaking children may require a longer time to acquire words in English.

The possibility of finding statistically significant differences in receptive vocabulary might have been realized in the present study if the group sizes had been larger. The issue of power has to be taken into consideration since small groups must have large differences in order to find statistically significant differences. Whitehurst et al. (1994) found large increases in receptive vocabulary using the dialogic reading strategy when they studied three-year-olds in groups of 22, 26 and 19 for six weeks in a daycare situation. The largest groups were in a Head Start intervention using four-year-olds in groups of 94 in the intervention group and 73 in the control group where they also found large increases in receptive vocabulary. However, Valdez-Menchaca and Whitehurst (1992) investigated the use of the dialogic reading strategy with two small groups

of 10 two-year-olds in Mexico where they found statistically significant effects for receptive vocabulary.

Expressive Vocabulary

Another area of emergent literacy development examined in the present study was expressive language. The findings favored the control group over the treatment group; this result was puzzling. Pre-existing differences were evident between the two groups on this measure at pretest favoring the control group. Possible reasons for the control group to have an increased score at pretest could be that the control group children have been in the Even Start program for a longer period of time. They may understand that part of the role of a student in school is to respond by verbally expressing themselves. The possibility also exists that the school situation promotes more opportunities for the children to engage in classroom talk with teachers, aides and other children. Another possibility could be that since the control group had both the longer experience in Even Start and the higher MLU scores, the finding may merely be an artifact. The time in Even Start was found to be a statistically significant predictor of the child's MLU score ($\beta = .39$).

For this measure in the present study, there was not much evidence of growth in expressive language as measured by mean length of utterance for the treatment group. Mean length of utterance was chosen as the expressive measure because it had been used as an indicator of expressive language acquisition in other dialogic reading studies (Arnold & Whitehurst, 1994; Valdez-Menchaca & Whitehurst, 1992). Another factor that might contribute to the

findings for the two groups is that the groups read different books at pre and posttest. Although the control group read the same book at pre and posttest, it had been read to some of them previously in class. The format of *Jump, Frog, Jump* elicited that response from the children since it is the repeated refrain. The older children in the control group had learned that the refrain was “their” part. The treatment group read the same book, *Friends*, at pre and posttest but the book had not been used in class. Neither the mother nor the child in the treatment group had read the book previously.

One of the shortcomings of using MLU as a measure of expressive vocabulary is that a child may say many words but the number of words are divided by the number of turns. For instance, one of the treatment children spoke 203 words at pretest and 286 words at posttest. Although she spoke many more words at posttest, her MLU scores were similar for pretest (2.6) and posttest (2.9).

To shed further light on differences in expressive vocabulary, a comparison was made between the groups using the number of words spoken and by the number of turns taken. Neither of these measures indicated statistically significant differences. The number of words spoken was analyzed using a repeated measures ANOVA which showed no statistically significant effects. The means showed that the treatment group had higher scores at pre and posttest; however, the gain scores favored the control group resulting in an effect score of $-.08$. The number of turns taken by the children in the videotapes was also available for analysis. All of the effects were not statistically significant

using a repeated measures ANOVA. The means showed that the treatment group had higher scores at pre and posttest but the control group had an increased gain score to the extent that the effect size was $-.09$.

Another way to analyze the findings for expressive vocabulary would be to count the number of words spoken in English. The number of words spoken in English was computed using the videotapes at pre and posttest. The difference between the children's English production was evident in the videotaped reading interactions. The children in the treatment group spoke in one word utterances in English, usually counting or naming colors. Four of the children spoke two-word utterances in English one time for each of the children. The children in the control group who had experienced having the same book read to them in their classroom was evident in the number of times they chimed in with the refrain, "jump, frog, jump." They repeated the refrain 32 times at posttest for a total of 96 of the 205 words spoken in English. These children who were in the older preschool room heard their English-speaking teacher read the book to them in English. The statistically significant group main effect for MLU could be due to the control group having heard the book at Even Start. A possible explanation for the differences seen in the two groups for words spoken in English could be that the control group showed a practice effect in responding to the book by chiming in. In contrast, the treatment group who had not heard their book read to them in English by their classroom teacher identified colors, animals and counted items to account for most of the 68 words spoken in English. One child in the control group spoke 69 words in English at posttest; however, 24 of them were the

refrain, "jump, frog, jump."

Another way to analyze the children's expressive vocabulary was in the number of sentences in English they used in the videotaped interactions. The control group outscored the treatment group on this measure. A string of words was counted as a sentence if it had a subject and a predicate. At pretest, one child in the treatment group spoke one sentence and three children in the control group spoke three sentences. At posttest, four of the older preschool children in the control group spoke one sentence in English each and one other older child spoke four complete sentences in English. There was only one child in the treatment group who spoke a complete sentence in English at posttest. The refrain was not counted as a sentence.

The children in the control group who were the most proficient in the number of English words spoken as well as number of sentences produced were in the older preschool classroom. Older children would be expected to produce more words as well as more sentences due to maturation and normal language development. The older preschool children in the treatment group, however, did not show evidence of maturation being a factor in English proficiency. In fact, the only child who produced an English sentence was in the younger preschool room at Ellison. A possible explanation for the control group's increased performance in spoken English may be due to time in Even Start and the familiarity of the book read at posttest. A modest correlation of .31 exists between time in Even Start and number of words spoken in English at posttest.

MLU was used as a measure of expressive language because actual use of words during reading of a storybook was preferred instead of using prepared tests asking them to identify pictures and seemed to be a more authentic test of expressive language. Perhaps, a six-week program did not allow for enough time to measure expressive language by examination of mean length of utterance. The use of different books may also be the source of the differences and lack of support found using this measure.

Children's ACIRI

Although the mothers' reading behaviors showed a group main effect for the ACIRI, there were no group main effects, no effects for time or interaction effects found for the children. The mothers received direct instruction in how to read a book to their children while the children were not a part of the intervention. Both groups of children had similar scores at pretest and decreased mean scores from pre to post test of about the same magnitude. The intervention of six weeks may not have been long enough to have noticeable effects on the children's responses to their mother's changed reading behaviors. Additionally, the differences in the books may have contributed to not finding any effects. Another cause could be that the findings may have been masked by low power due to the small number of participants.

Adult/Child Interactive Inventory (ACIRI) Videotapes.

After examining the videotapes to determine ACIRI scores for both the mothers and the children, the statistically significant correlation that was found was not surprising. Even at pretesting, the mothers who interacted with their

children in their presentation of the storybooks had children who asked questions, made comments, counted animals, turned pages, laughed, and generally enjoyed the experience. High scores for both mother and child were noticeable as well as corresponding low scores for the mothers with low scores for the children in some mother-child dyads.

Some behaviors used by the mothers were noteworthy. Most of the mothers in both groups tried to read the books to their children in English. Thirteen of the fifteen mothers in the control group read in English while eight of the thirteen mothers in the treatment group read in English. Most of the mothers used a technique of reading the print written in English silently and then reading it aloud in English. However, they would ask their children questions in Spanish and elaborate on their answers in Spanish. The ability of the mothers in the control group to read in English may be a contributing factor to their children's increased ability to express themselves in English in contrast to the treatment group. Since both groups elaborated in Spanish, the children's expressive language in English should not have been affected by this strategy. The children in both groups responded most of the time in Spanish, especially if their mother had spoken to them in Spanish. The treatment group showed a mean of 46.07 words in Spanish at posttest compared to 32.47 words in Spanish for the control group.

The children would code-switch, also. Code-switching is defined as use of both languages while speaking. Most often, code-switchers will use one language until they run into a word they remember better in the other language.

When the children would count characters or objects, they would count in one language and then code switch to the other. If they started in English, they would continue in English until they would struggle with the next number. At that point, they would look at their mother and switch to Spanish. Many of the children counted objects during the reading whether they were prompted or not. The same process held true for colors. They would name the colors in Spanish or English then switch if they met difficulty. Many of the children in both groups displayed these behaviors involving code switching.

From the data obtained from the videotapes, the children's preference was to hear the story in Spanish. Some of the mothers were confident enough with their English fluency that they read in English. However, most of the mothers were not at the point of fluency to read in English without hesitation and concentration. The children were for the most part patient with their mother's attempts to read to them in English. However, the difference in their attention when their mother read in Spanish was striking. The following example of the attention a child paid to her mother reading in English and then in Spanish is illustrative. As a mother was trying to read the book in English, her child was noticeably inattentive. In the middle of the session the mother switched to reading silently in English and then translating the story in Spanish; the child moved closer to her mother, looked at the pictures and began to converse with her mother about the book. There had been no response from the child while the mother was reading in English. Another mother had two children in the study. Her method of keeping them interested in the book was to embellish the story to

keep it interesting. She told the story in Spanish. There was no noticeable translation from English into Spanish. She looked at the pictures and improvised from them. She was very expressive and her children paid attention to the book and commented on the pictures. She asked them what the animals sounded like and then they all clucked or quacked. The children enjoyed the experience of watching their mother tell them the story. In this instance, her children learned that reading a book can be a source of entertainment not only for them but also for their mother. For her reading a book was much more than reading the words, especially if she was not confident of her ability to read in English. Her children learned that books tell a story, that you read from the front to the back and that you read the left page before the right page. However, they did not hear the story in the language it was written in.

Limitations of the Study

Due to the fact that many of the preschool children in the Even Start program are either related to each other or live in close proximity, the possibility of using an experimental design with a treatment and control group at the same site was not feasible. Since the mothers ride the same bus and attend the same classes, the results might be confounded if the treatment group shared what they were doing with their children with the mothers in the control group. There were not enough mothers at any one site to have a control group and a treatment group of an appropriate size. Since intact groups at both sites were used, there could be some sampling bias.

The sample for this study was limited in number due to the available pool of participants at the treatment site. Although several more dyads volunteered at the control site, some of the younger preschoolers were not included because they were unable to achieve a basal score on the PPVT-R. The children at the two sites were matched on the basis of the age of the seventeen children at the treatment site. Interpretations of these results should be examined with caution because of the small number of participants and the large number of variables used in these analyses. Null results from some of these analyses may be because the small sample size did not have adequate power to detect differences.

The possibility of the Hawthorne Effect also needs to be recognized. Both groups were recruited to be in the study and were aware of the purpose of the study. Appointments were made with all of the mothers to videotape them reading to their children. Both groups of the mothers may have changed their usual style of reading behaviors with their children during the program's duration since they knew the reason to videotape them. Both groups were given the same books; however, the mothers in the control group seemed to view the books as gifts. The mothers in the treatment group seemed to treat the books as material for the workshop. All of these actions may have contributed to their feeling that they should reciprocate in some manner because they were included in the study.

Since this was a quasi-experimental design without random assignment, generalizability of the results is questionable. This is the most serious limitation

of this study. As researchers we want to know whether something we observe in a sample represents an actual phenomenon in the larger population. While differences were apparent between the groups, these changes may be artifacts of the intact groups that may not be indicative of the rest of the population. Further research in children's bilingual language development with the mothers' use of the dialogic reading treatment needs to be conducted using larger, randomly-selected groups. Children's conversational ability depends upon the situational context and different contexts may require different kinds of scaffolding that could also be researched.

Another limitation of this study was that the control group read a different book at pre and posttest than the treatment group did. The books were at the same level as far as readability and appropriate for reading to preschool children. However, the classroom teacher for the control group chose to read the same book used for pre and post testing without my knowledge. The practice effect was evident in the number of times the control group children repeated the refrain of "jump, frog, jump."

Although the samples at the Even Start sites were not representative of the population parameters of the rest of the Even Start programs in the United States, there is a growing trend for Hispanic families to seek family literacy programs such as Even Start. Hispanics represent the fastest growing group in the United States and states beyond the border states touching Mexico are also seeing their Hispanic population increase as well. (St. Pierre & Swartz, 1995).

Implications for Further Research

Since the present study showed that a promising dialogic reading treatment resulted in the growth of bilingual children's emergent literacy skills, it should be investigated with larger groups that could be randomly selected over an extended period of time. The dialogic reading treatment also showed changed reading behaviors of the mothers in a workshop format that would be fairly easy and inexpensive to incorporate into the existing curriculum in other Even Start programs.

This study was designed to investigate the effects of teaching the mothers to use the shared reading strategies with their children. A study of the additional effects of classroom teachers using the dialogic strategies with bilingual children might be worthwhile. Further research might also investigate whether children who interact with the same book at home and at school would increase their receptive vocabulary differently than children who were read to only at home or only at school. Another plan for research would be to examine the effects of repeated readings of books with targeted vocabulary over an extended period of time so that the children's receptive vocabulary of the targeted words could be researched. Audio tapes provided information about how the mothers in the treatment group read to their children during the intervention. Audio tapes for the control group were not provided but could have revealed if the control group mothers used any of the strategies taught to the treatment group. Having both groups provided audio tapes during the intervention would be helpful in further research into this topic.

The groups in this study were preschoolers who were 3, 4, and 5 years of age. Additional study of these three, four or five year olds would add to the growing body of knowledge about how bilingual children acquire a second language. There is not much research about the individual differences of monolingual children's language development of this age and very little beyond the references cited in the present literature review about how bilingual preschool children acquire a second language. Studying the longitudinal effects of an early literacy intervention could be accomplished by following a group of children through preschool into elementary school. Following a cohort of children whose mothers had been trained to implement the dialogic reading treatment in Even Start would be helpful to see how enduring the treatment effects might be over time.

Other research questions that emerge from this study could be to examine the relationship between scores on the measures and gender of the children. The use of an instrument that would target vocabulary from the storybooks rather than the PPVT-R as a measure of receptive vocabulary would be a worthwhile pursuit. Additionally the use of a standardized instrument to measure expressive vocabulary rather than the use of MLU could result in clearer findings. Comprehension, such as a retelling, could be measured to determine what the children were able to remember from the storybook. An examination of the relation of the PPVT-R scores and other standardized instruments, such as the PLS-3, which is administered to the children every year in Even Start, would be informative. Use of a storybook that was not predictable could be investigated

since the predictable format may have an effect on the kinds of questions and interactions the mother and child display during shared book reading. Changes in the child's receptive vocabulary in Spanish as measured by the Spanish version of the PPVT-R might also be an avenue for further research. Another research question to investigate could be to determine the effects of the dialogic reading treatment on the mothers' achievement on a standardized instrument, such as the Wide Range Achievement Test (WRAT) or the Test of Basic Skills in English (TABE). In addition, the self-efficacy question should be addressed by using a self-efficacy instrument that would be appropriate at pre and posttest.

The study could be replicated with other groups of mother-child dyads to be implemented and investigated in other settings, such as Head Start, community library programs, and preschool programs.

References

- Adams, M. J. (1990). *Learning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
- Anderson, R. C., Hiebert, E. H., Scott, J. A. & Wilkinson, A. G. (1985). *Becoming A Nation of Readers: The Report of the Commission on Reading*. Washington, D.C.: National Institute of Education.
- Arnold, D. S. & Whitehurst, G. S. (1994). Accelerating language development through picture book reading: A summary of dialogic reading and its effects. In D. K. Dickinson (Ed.), *Bridges to literacy: Children, families and schools* (pp.103-128). Cambridge, MA: Blackwell Publishers.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barnett, W. S., Frede, E. C., Mobasher, H. & Mohr, P. (1987). *The efficacy of public preschool programs and the relationship of program quality to efficacy*. 37-49.
- Beals, D. E., DeTemple, J. M., & Dickinson, D. K. (1994). Talking and listening that support early literacy development of children from low-income families. In D. K. Dickinson (Ed.), *Bridges to literacy: Children, families and schools* (pp. 19-40). Cambridge, MA: Blackwell Publishers.
- Beck, I. L., McKeown, M. G., Sandora, C., Kucan, L. & Worthy, J. (1996). Questioning the author: A yearlong classroom implementation to engage students with text. *The Elementary School Journal*, 96, 385-414.
- Berk, L. E. (1997). *Child Development*, 4th ed. Boston, MA: Allyn & Bacon.
- Bialystok, E. & Herman, J. (1999). Does bilingualism matter for early literacy? *Bilingualism: Language and Cognition*, 2, 35-44.
- Brady, N. C. (1997). The teaching game: A Reciprocal peer tutoring program for preschool children. *Education and Treatment of Children*, 20, 123-149.
- Bronfenbrenner, U. (1974). Is early intervention effective? *Columbia Teachers College Record*, 76, 279-303.
- Bronfenbrenner, U. (1979). *The ecology of human development; Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Burgess, S. (1997). The role of shared reading in the development of phonological awareness: A longitudinal study of middle to upper class children. *Early Child Development and Care*, 127-128, 191-199.
- Bus, A. G., van Ijzendoorn, M. H. & Pelligrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65, 1-21.
- Carlisle, J. F. & Beeman, M. M. (2000). The effects of language of instruction on the reading and writing achievement of first-grade Hispanic children. *Scientific Studies of Reading*, 4, 331-353.
- Chaney, C. (1994). Language development, metalinguistic awareness, and emergent literacy skills of 3-year-old children in relation to social class. *Applied Psycholinguistics*, 15, 371-393.
- Christian, K., Morrison, F. J., & Bryant, F. B. (1998). Predicting kindergarten

- academic skills: Interactions among child care, maternal education, and family literacy environments. *Early Childhood Research Quarterly*, 13, 501-521.
- Clay, M. (1979). *Reading: The patterning of complex behavior*. Exeter, NH: Heinemann.
- Clay, M. (1985). *The early detection of reading difficulties: A diagnostic survey with recovery procedures*. Auckland, New Zealand: Heinemann.
- Clay, M. (1985). *The Early Detection of Reading Difficulties*, 3rd Ed. Hong Kong: Heinemann.
- Clay, M. (1991). *Becoming literate: The construction of inner control*. Portsmouth, NH: Heinemann.
- Clay, M. (1993). *An observation survey of early literacy achievement*. Auckland, New Zealand: Heinemann.
- Cochran, M. & Dean, C. (1991). Home-school relations and the empowerment process. *The Elementary School Journal*, 91, 261-269.
- Cornell, E. H., Senechal, M. & Broda, L. S. (1988). Recall of picture books by 3 year old children: Testing and repetition effects in joint reading activities. *Journal of Educational Psychology*, 80, 537-542.
- Darling, S. & Paul, S. (1994). Implications for family literacy programs. In D. K. Dickinson (Ed.), *Bridges to literacy: Children, families and schools* (pp. 273-284). Cambridge, MA: Blackwell Publishers.
- Dauber, S. L. & Epstein, J. L. (1993). Parents attitudes and practices of involvement in inner-city elementary and middle schools. In N. B. Chavkin (Ed.), *Families and schools in a pluralistic society* (pp. 53-71). Albany, NY: SUNY Press.
- DeBruin-Parecki, A. (1999). Assessing adult/child storybook reading practices. CIERA Report #2-004: www.ciera.org.
- DeFord, D. E., Lyons, C. A. & Pinnell, G. S. (Eds.) (1991). *Bridges to literacy: Learning from Reading Recovery*, (pp.37-54).
- De Temple, J. M. & Beals, D. E. (1991). Family talk: sources of support for the development of decontextualized language skills. *Journal of Research in Childhood Education* 6, 11-19.
- Diaz, R. M. (1990). Bilingualism and cognitive ability: Theory, research, and controversy. In A. Barona & E. E. Garcia, (Eds.). *Children at risk: Poverty, minority status, and other issues in educational equity* (pp. 91-99). Washington, DC: National Association of School Psychologists.
- Diaz, R. M., Padilla, K. A. & Weathersby, E. K. (1991). The effects of bilingualism on preschoolers' private speech. *Early Childhood Research Quarterly*, 6, 377-393.
- Dickinson, D. K., De Temple, J. M., Hirschler, J. A. & Smith, M. W. (1992). Book reading with preschoolers: Co-construction of text at home and at school. *Early Childhood Research Quarterly*, 7, 323-346.
- Dickinson, D. K. & Tabors, P. O. (1991). Early literacy: linkages between home, school and literacy achievement at age five. *Journal of Research in Childhood Education*, 6, 30-46.
- Downing, J. (1986). Cognitive clarity: A unifying and cross-cultural theory for

- language awareness phenomena in reading. In D. Yaden & S. Templeton (Eds.), *Metalinguistic awareness and beginning literacy. Conceptualizing what it means to read and write* (pp. 13-29). Exeter, NH: Heinemann.
- Dunn, L. M. & Dunn, I. M. (1981). *Peabody Picture Vocabulary Test-Revised*. Circle Pines, MN: American Guidance Service.
- Edwards, P. A. (1990). Fostering early literacy through parent coaching. In A. Barona & E. E. Garcia, (Eds.). *Children at risk: Poverty, minority status, and other issues in educational equity* (pp. 199-213). Washington, DC: National Association of School Psychologists.
- Elya, S. M. (1998). *Say Hola to Spanish*. New York: Scholastic, Inc.
- Fantuzzo, J., Childs, S., Stevenson, H., Coolahan, K. C., Ginsburg, M., Gay, K., Debnam, D., & Watson, C. (1996). The Head Start teaching center: An evaluation of an experiential, collaborative training model for Head Start teachers and parent volunteers. *Early Childhood Research Quarterly*, 11, 79-99.
- France, M. G. & Hager, J. M. (1993). Recruit, respect, respond: a model for working with low-income families and their preschoolers. *The Reading Teacher*, 46, 568-572.
- Fraenkel, J. R. & Wallen, N. E. (1996). *How to Design and Evaluate Research in Education* (3rd Ed.) (p. 231). New York: McGraw-Hill.
- Gallagher, T. M. (Ed.) (1991). *Pragmatics of language: Clinical practice issues* (p. 76). San Diego, CA: Singular Publishing Co.
- Gallimore, R. & Goldenberg, C. (1993). Activity settings of early literacy: home and school factors in children's emergent literacy. In E. A. Forman, N. S. Minick, C. A. Addison (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp. 315-335). New York: Oxford University Press.
- Gathercole, S. E., Willis, C. S., Emslie, H. & Baddeley, A. D. (1992). Phonological memory and vocabulary development during the early school years: A longitudinal study. *Developmental Psychology*, 28, 887-898.
- Golden, J. M. & Gerber, A. (1990). A semiotic perspective of text: The picture story book event. *Journal of Reading Behavior*, 22, 203-219.
- Goldenberg, C. (1996). The education of language-minority students: Where are we, and where do we need to go? *The Elementary School Journal*, 96 (3), 353-361.
- Gonzalez, V. (1994). A model of cognitive, cultural, and linguistic variables affecting bilingual Hispanic children's development of concepts and language. *Hispanic Journal of Behavioral Sciences*, 16, 396-421.
- Gorman, J. G. & Balter, L. (1997). Culturally sensitive parent education: A critical review of quantitative research. *Review of Educational Research*, 67 (3), 339-369.
- Griffin, E. A. & Morrison, F. J. (1997). The unique contribution of home literacy environment to differences in early literacy skills. *Early Child Development and Care*, 127-128, 233-243.

- Halsall, S. & Green, C. (1995). Reading aloud: a way for parents to support their children's growth in literacy. *Early Childhood Education Journal*, 23 (1), 27-31.
- Handel, R.D. & Goldsmith, E. (1994). Family reading – Still got it; Adults as learners, literacy resources and actors in the world. In D. K. Dickinson (Ed.), *Bridges to Literacy: Children, Families and Schools* (pp. 150-174), Cambridge, MA: Blackwell Publishers.
- Harste, J., Woodward, V. and Burke, C. (1984). *Language stories and literacy lessons*. Portsmouth, NH: Heinemann.
- Heine, H. (1996). *Friends*. New York, NY: Scholastic Publishing Company.
- Henk, W. A. & Melnick, S. A. (1995). The Reader Self-Perception Scale (RSPS): A new tool for measuring how children feel about themselves as readers. *The Reading Teacher*, 48, 470-482.
- Hiebert, E. H. (1981). Developmental patterns and interrelationships of preschool children's print awareness. *Reading Research Quarterly*, 16, 236-259.
- Hiebert, E. H. & Raphael, T. E. (1998). How do young children become literate? *Early Literacy Instruction* (pp. 18-32), Orlando, FL: Harcourt Brace College Publishers.
- Hoffman, P. R. (1997). Phonological intervention within storybook reading. *Topics in Language Disorders*, 17, 69-88.
- Hoover-Dempsey, K. V. & Sandler, H. M. (1995). Parental involvement in children's education: Why does it make a difference? *Teachers College Record*, 97, 311-325.
- Hoover, Dempsey, K. V. & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67, 3-42.
- Huebner, C. E. (2000). Promoting toddlers' language development through community based intervention. *Journal of Applied Developmental Psychology*, 21, 513-535.
- Jimenez, R. T., Garcia, G. E., & Pearson, P. D. (1996). The reading strategies of Latina/o students who are successful readers: Opportunities & obstacles. *Reading Research Quarterly*, 31, 90-112.
- Johnson, D. L., Walker, T. B. & Rodriguez, G. G. (1996). Teaching low-income mothers to teach their children. *Early Childhood Research Quarterly*, 11, 101-114.
- Kalan, R. (1981). *Jump, Frog, Jump*. New York: Greenwillow Books.
- Karweit, N. (1994). The effect of story reading on the language development of disadvantaged prekindergarten and kindergarten students. In D. K. Dickinson (Ed.), *Bridges to literacy: Children, Families and schools* (pp. 43-65), Cambridge, MA: Blackwell Publishers.
- Kelly, M., Moore, D. W., & Tuck, B. F. (1994). Reciprocal teaching in a regular primary school classroom. *Journal of Educational Research*, 88, 53-61.
- Kertoy, M. K. (1994) Adult interactive strategies and the spontaneous comments of preschoolers during joint storybook readings. *Journal of Research in Childhood Education*, 9, 552-560.

- Klesius, J. P. & Griffith, P. L. (1996) Interactive storybook reading for at-risk learners. *The Reading Teacher*, 49 (7), 552-560.
- Liu, P. (1996) Limited English Proficient children's literacy acquisition and parental involvement: A tutoring/family literacy model. *Reading Horizons*, 37, 60-74.
- Mason, J. M. & Allen, J. (1986) A Review of Emergent Literacy with Implications for research and practice in reading. *Review of Research in Education*, 13, 3-47.
- Masonheimer, P. E., Drum, P. A. & Ehri, L. C. (1984). Does environmental print identification lead children into word reading? *Journal of Reading Behavior*, 16, 257-271.
- McCutchen, D., Laird, A. & Graves, J. (1993). Literature study groups with at-risk readers: Extending the grand conversation. *Reading Horizons*, 33, 313-328.
- McMullen, M. B. & Darling, C. A. (1996). Symbolic problem solving: An important piece of the emergent literacy puzzle. *Early Child Development and Care*, 121, 25-35.
- Meyer, L. A., Wardrop, J. L., Stahl, S. A., & Linn, R. L. (1994). Effects of reading storybooks aloud to children. *Journal of Educational Research*, 88, 69-84.
- Moerk, E. L. (1985). Picture-book reading by mothers and young children and its impact upon language development. *Journal of Pragmatics*, 9, 547-566.
- Morrow, L. M., O'Connor, E. M. & Smith, J. K. (1990). Effects of a story reading program on the literacy development of at-risk kindergarten children. *Journal of Reading Behavior*, 22, 255-275.
- Nespeca, S. M. (1995) Parental involvement in emergent literacy skills of urban Head Start children. *Early Child Development and Care*, 111, 153-180.
- Neuman, S. B. (1996). Children engaging in storybook reading: The influence of access to print resources, opportunity, and parental interaction. *Early Childhood Research Quarterly*, 11, 495-513.
- Neuman, S. B., Hagedorn, T., Celano, D. & Daly, P. (1995). Toward a collaborative approach to parent involvement in early education: A study of teenage mothers in an African-American community. *American Educational Research Journal*, 32, 801-827.
- Ninio, A. & Bruner, J. (1978). The achievement and antecedents of labeling. *Journal Of Child Language*, 5, 5-15.
- Palincsar, A. & Brown, A L. (1984). Reciprocal teaching of comprehension fostering and comprehension-monitoring activities. *Cognition and Instruction*, 1(2), 117-175.
- Palincsar, A S. & David, Y. M. (1991). Promoting literacy through classroom dialogue. E. H. Hiebert, (ed.) in *Literacy for a diverse society*, Teachers College Press, New York, 122-140.
- Payne, A. C., Whitehurst, G. J., & Angell, A. L. (1994). The role of home literacy environment in the development of language ability in preschool children from low-income families. *Early Childhood Research Quarterly*, 9, 427-440.

- Pellegrini, A. D., Galda, L. Jones, I. & Perlmutter, J. (1995). Joint reading between mothers and their Head start children: Vocabulary development in two text formats. *Discourse Processes*, 19, 441-463.
- Perez, B. (1997). Constructs children use in developing first and second language literacy. *Early Child Development and Care*, 127-128, 157-165.
- Population Projections Program, Population Division (2000). Projections of the resident population by race, Hispanic origin and nativity: Middle series, 1999 and 2000. Washington, DC: U. S. Census Bureau.
- Purcell-Gates, V. (1989). Written language knowledge held by low-SES inner city children entering kindergarten. *Cognitive and Social Perspectives for Literacy Research and Instruction*, 38th Yearbook of the National Reading Conference, 95-105.
- Ricciardelli, L. A. (1992). Bilingualism and cognitive development in relation to threshold theory. *Journal of Psycholinguistic Research*, 21, 301-316.
- Richardson, D. C., Reid, J. R., & Brickman, S. (1997). *Even Start Family Literacy Program Evaluation, 1996-97*. Unpublished manuscript, Oklahoma City University.
- Robbins, C. & Ehri, L. C. (1994) Reading storybooks to kindergartners helps them learn new vocabulary words. *Journal of Educational Psychology*, 86 (1), 54-64.
- Rodriguez, J. L., Diaz, R. M., Duran, D. & Espinosa, L. (1995). The impact of bilingual preschool education on the language-development of Spanish-speaking children. *Early Childhood Research Quarterly*, 10, 475-490.
- Rosenshine, B. & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research*, 64, 479-530.
- Roskos, K. & Neuman, S. (1993) Enhancing Head Start parents' conceptions of literacy development and their confidence as literacy teachers: A study of parental involvement. *Early Child Development and Care*, 89, 57-73.
- Saracho, O. N. (1997). Using the home environment to support emergent literacy. *Early Child Development and Care*, 127-128, 201-216.
- Scarborough, H. S. & Dobrich, W. (1994). On the efficacy of reading to preschoolers. *Developmental Review*, 14, 245-302.
- Schneider, B. & Coleman, J. S. (1993). *Parents, their children, and schools*. Boulder, CO: Westview Press.
- Scott-Jones, D. (1995). Parent-child interactions and school achievement. In B. A. Ryan, G. R. Adams, T. P. Gullotta, R. P. Weissberg, & R. L. Hampton (Eds.) *Issues in children's and families' lives*. Vol. 2. *The family-school connection: Theory, research and practice* (pp. 75-107). Thousand Oaks, CA: Sage.
- Segel, E. (1994). "I got to get him started out right": Promoting literacy by beginning with books. In D. K. Dickinson (Ed.). *Bridges to literacy: Children, families and schools* (pp. 66-79), Cambridge, MA: Blackwell Publishers.
- Senechal, M. (1997). The differential effect of storybook reading on preschoolers' acquisition of expressive and receptive vocabulary. *Journal of Child Language*, 24, 123-138.

- Senechal, M., Cornell, E. H., Broda, L. S. (1995). Age-related differences in the organization of parent-infant interactions during picture-book reading. *Early Childhood Research Quarterly*, 10, 317-337.
- Senechal, M., LeFevre, J., Hudson, E. & Lawson, E. P. (1996). Knowledge of storybooks as a predictor of young children's vocabulary. *Journal of Educational Psychology*, 88, 520-536.
- Senechal, M., Thomas, E. & Monker, J. (1995). Individual Differences in 4-year old children's acquisition of vocabulary during storybook reading. *Journal of Educational Psychology*, 87, 218-229..
- Shanahan, T., Mulhern, M., & Rodriguez-Brown, F. (1995). Project FLAME: Lessons learned from a family literacy program for linguistic minority families. *The Reading Teacher*, 48 (7), 586-593.
- Shapiro, J., Anderson, J. & Anderson, A. (1997). Diversity in parental storybook reading. *Early Child Development and Care*, 126-128, 47-59.
- Smith, M. W. & Dickinson, D. K. (1994). Describing oral language opportunities and environments in Head Start and other preschool classrooms. *Early Childhood Research Quarterly*, 9, 345-366.
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.) (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- St. Pierre, R. G. & Swartz, J.P. (1995). The Even Start Family Literacy Program. In S. Smith (Ed.), *Advances in applied developmental psychology*, 9. *Two generation programs for families in poverty: A new intervention strategy*, Norwood, NJ: Ablex, 37-66.
- Sulzby, E. (1985). Children's emergent reading of favorite storybooks: A developmental study. *Reading Research Quarterly*, 20 (4), 458-481.
- Swick, K. J. & Broadway, F. (1996). Parental efficacy and successful parent involvement. *Journal of Instructional Psychology*, 24, (1), 69-75.
- Taverne, A. & Sheridan, S. M. (1995). Parent training in interactive book reading: An investigation of its effects with families at risk. *School Psychology Quarterly*, 10, 41-64.
- Teale, W. H. (1984). Reading to young children: Its significance for literacy development. In H. Goelman, A. Oberg and F. Smith (Eds.) *Awakening to literacy*, p. 110-121. Exeter, N. H: Heinemann.
- Teale, W. H. & Sulzby, E. (1989). Emergent literacy: New Perspectives. In D. Strickland & L. M. Morrow (Eds.). *Emerging Literacy: Young Children Learn to Read and Write*, p. 1-15. Newark, DE: International Reading Association.
- Thornburg, D. G. (1993). Intergenerational literacy learning with bilingual families: a context for the analysis of social mediation of thought. *Journal of Reading Behavior*, 25 (3), 323-349.
- Title VII Enhancement Project for Compartiendo Culturas/Sharing Cultures 1995-96 (1996). Houston Independent School District.
- Toomey, D. & Sloane, J.(1994). Fostering children's early literacy development through parent involvement: A five-year program. In D. K. Dickinson (Ed.), *Bridges to literacy: Children, families and schools*_(pp. 129-149), Cambridge, MA: Blackwell Publishers.

- Valdez-Menchaca, M. C. & Whitehurst, G. J. (1992). Accelerating language development through picture book reading: A systematic extension to Mexican day care. *Developmental Psychology*, 28 (6), 1106-1114.
- van Kleeck, A., Alexander, E. I., Vigil, A. & Templeton, K. E. (1996). Verbally modeling thinking for infants: Middle-class mothers' presentation of information structures during book sharing. *Journal of Research in Childhood Education*, 10 (2), 101-113.
- Vygotsky, L. S. (1962). *Thought and language*. Cambridge, MA: The M.I.T. Press.
- Whitehurst, G. J., Arnold, D. S., Epstein, J. N., Angell, A. L., Smith, M. & Fischel, J. E. (1994). A picture book reading intervention in daycare and home for children from low-income families. *Developmental Psychology*, 30, 679-689.
- Whitehurst, G. J., Epstein, J. N., Angell, A. L., Payne, A. C., Crone, D. A. & Fischel, J. E. (1994). Outcomes of an emergent literacy intervention in Head Start. *Journal of Educational Psychology*, 86, 542-555.
- Whitehurst, G. J., Zevenbergen, A. A., Crone, D. A., Schultz, M. D., Velting, O. N. & Fischel, J. E. (1999). Outcomes of an emergent literacy intervention from Head Start through second grade. *Journal of Educational Psychology*, 91, 261-272.
- Winsler, A., Diaz, R. M. & Espinosa, L. (1997). *Learning a second language does not mean losing the first: a replication and follow up of bilingual language development in Spanish-speaking children attending bilingual preschool*. Paper presented at the annual conference of the American Educational Research Association, Chicago, IL.

Appendix A
Concepts About Print Checklist

Concepts About Print Checklist Score Sheet

Date_____

Name_____DOB_____Age_____

Evaluator_____Mother's Name _____

Score 1 if accomplished and 0 if not Total Score_____

Item	Score	Comment
1. Where is the front of this book?		
2. Where is the back of this book?		
3. I'll read the story. You help me. Where should I start reading?		
4. Which way do I go now?		
5. Where do I go after that?		
6. Point to it while I read it.		
7. Turn the page and ask, Where do I begin now? (Left page before right page)		
8. Read one page. Then say, Show me one letter.		
9. On the same page, say, Show me one word.		
10. Where is the last part of the story?		

Adapted from Concepts About Print Score Sheet, Tempe School District #3,
1993

Appendix B
Adult/Child Interactive Reading Inventory

ADULT AGE _____ DOB _____
 CHILD AGE _____ DOB _____

PRE _____ POST _____ COMFORT LEVEL OF ADULT
 High _____ Moderate _____ Low _____

SCORE (0-3)
 3 = MOST OF THE TIME (4 or more times)
 2 = SOME OF THE TIME (2-3 times)
 1 = INFREQUENTLY (1 time)
 0 = NO EVIDENCE

Teacher's Name _____ General Comments:
SCORE

Adult/Child Interactive Reading Inventory

ADULT BEHAVIOR	Adult's Name: Case # Date: OBSERVATION	CHILD BEHAVIOR	Child's Name: Case # Date: OBSERVATION
I. Enhancing Attention to Text 1. Attempts to promote and maintain physical proximity 2. Sustains interest and attention through use of child-adjusted language, positive affect and reinforcement 3. Gives child opportunity to hold book and turn pages 4. Shares book with child (i.e. displays sense of audience in book handling when reading)		I. Enhancing Attention to Text 1. Child seeks and maintains physical proximity 2. Child pays attention and sustains interest 3. Child holds book and turn pages on his/her own or when asked 4. Child initiates or responds to book sharing which takes his/her presence into account	
II. Promoting Interactive Reading and Supporting Comprehension 1. Poses and solicits questions about the book's content 2. Points to pictures and words to assist child in identification and understanding 3. Relates book content and child's responses to personal experiences 4. Pauses to answer questions child poses		II. Promoting Interactive Reading and Supporting Comprehension 1. Child responds to questions about book 2. Child responds to parent cues or identifies pictures and words on his/her own 3. Child attempts to relate book content to personal experiences 4. Child poses questions about the story and related topics	
III. Using Literacy Strategies 1. Identifies visual cues related to story reading (i.e. pictures, repetitive words) 2. Solicits predictions 3. Asks child to recall information from the story 4. Elaborates on child's ideas		III. Using Literacy Strategies 1. Child responds to parent and/or identifies visual cues related to the story him/herself 2. Child is able to guess what will happen next based on picture cues 3. Child is able to recall information from story 4. Child spontaneously offers ideas about story	

NAME OF BOOK:

AUTHOR:

Andrea DellBasta Pasicki 6/97

Appendix C
Reading Attitudes Assessment

ATTITUDES ABOUT READING*

Listed below are statements about reading. Please read each statement carefully. Then circle the letters that show how much you agree or disagree with the statement. Use the following:

SA = Strongly Agree
A = Agree
D = Disagree
SD = Strongly Disagree

DIRECTIONS: Respond to these statements about how you feel when you are reading in English to your child.

- | | | | | |
|--|-----------|----------|----------|-----------|
| 1. I feel confident that I am a good reader. | SA | A | D | SD |
| 2. When I read, I don't have to try as hard as I used to. | SA | A | D | SD |
| 3. I am getting better at reading storybooks to my child. | SA | A | D | SD |
| 4. I am confident I can read aloud to my child. | SA | A | D | SD |
| 5. Reading is easier for me than it used to be. | SA | A | D | SD |
| 6. I can now read faster than I could before. | SA | A | D | SD |
| 7. I can understand what I read better now than I could before. | SA | A | D | SD |
| 8. I feel confident about being my child's first reading teacher. | SA | A | D | SD |
| 9. I can talk to my child about storybooks better than I could before. | SA | A | D | SD |

***This reading attitude instrument was translated into Spanish for the study. It was scored as SA = 4, A = 3, D = 2, SD = 1. The scores could range from 10 to 36.**