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SUPPORTING HISPANIC MOTHERS WITH PRESCHOOL CHILDREN WITH SPEECH AND/OR LANGUAGE DELAYS VIA DIALOGIC READING AND COACHING WITHIN THE HOME

by

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A dissertation submitted in partial fulfillment of the requirements
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ABSTRACT

Young children who are Hispanic, from low-income homes and have developmental delays are at a disadvantage for not having the basic early literacy foundation to become successful readers later in school (Ballantyne, Sanderman, D'Emilio, & McLaughlin, 2008; Hammer, Farkas, & Maczuga, 2010; Ezell & Justice 2005; McCardle, Scarborough, & Catts, 2001). These challenges can be addressed in several ways. Early intervention including parent education and collaboration along with shared book reading are considered best practices and critical to improving child outcomes (NELP, 2008). In addition, children who have a solid foundation in early literacy skills including vocabulary development in their native language will later transfer to the development of vocabulary in English (Ballantyne et al., 2008). Yet, research on shared book reading practices within the home of Hispanics is minimal (Hammer and Miccio, 2006). It is necessary to expand the literature on how to adapt best practices to meet the needs of Hispanic families who are economically disadvantaged.

The purpose of this study was to investigate the impact of parent training and coaching of dialogic reading strategies in Spanish on mothers' implementation of the strategies and total vocabulary expressed by the child during shared book reading within the home environment. In addition, the researcher explored parent receptiveness towards shared book reading strategies. The research design for the study was a single-subject multiple baseline across three mother-child dyad participants. The independent variable was the intervention which consisted of parent training video on dialogic reading, parent handouts, and researcher coaching. The dependent variables were the mother's implementation of dialogic reading strategies and the children's total expressed words during shared book reading. The mother-child dyads, originally from Mexico, lived in settled migrant community in central Florida. The three children regularly attended a

local federally funded preschool and received services for speech and/or language. The results indicated that the mothers' implementation of dialogic reading increased after training and coaching and the children's expressed total vocabulary words also increased. Dyad's interests in the selected books, mother responsiveness during shared book reading, and duration of shared book reading may have impacted some of the variability in the results. Furthermore, mothers were unaware of the dialogic reading strategies prior to the intervention and reported positive feedback and a desire to learn more ways to help their children at home. Implications for research and practice include the need for parent education to support caretakers of young children with speech and/or language delays, involvement of parents in the intervention planning process including coaching options, adaptation of intervention to expand upon parent's funds of knowledge, complexity of code-switching and language differences, and greater collaboration between school and home.

To Patrick, Isabel and Mac with love.

You are my anchors.

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I thank the families who participated in this study in Indian River County, Florida. I appreciate your willingness to participate and welcoming me into your homes. I learned invaluable lessons

in humility, perseverance, eagerness to learn, commitment and affection towards your children …I learned more from you than you from me…

To my parents Isabel Campuzano and Walter McKinnon Dopson, I owe my accomplishments to your many sacrifices and endless support, patience, humor and love throughout my life. You have always been there for me when I needed you the most. Thank you. I feel truly blessed.

To Patrick Meson, you will always be my "Amorcito Corazon." I thank God for our love.

"Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world." Paolo Freire

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CHAPTER I: INTRODUCTION

The Hispanic population in the United States is the fastest growing cultural group in the nation. It is predicted to triple between 2008 and 2050, from 46.7 million to 132.8 million, with estimates that nearly one in three people in the U.S. will be Hispanic (US Census Bureau, 2008). Children comprise 22% of Hispanics. Over half of the 16 million children were born in the US but have an immigrant parent from primarily Mexico, Central America, or South America (Fry & Passel, 2009). Seven percent of these children are considered unauthorized immigrants. As more and more Hispanic children enter school, they face several challenges which impede their academic progress including issues related to immigration or migration, poverty, language barriers, and lack of home early literacy experiences (Ballantyne, Sanderman, D'Emilio, & McLaughlin, 2008). Particularly, young children who attend federally funded preschools serving low-income families identified as having speech and/or language delays are at risk of having reading difficulties in kindergarten (Hammer, Farkas, & Maczuga, 2010). Thus, teachers and schools must be prepared to better serve these students and their families from culturally and linguistically diverse backgrounds (CLD). Yet, early childhood teachers are not prepared to teach children from CLD backgrounds and institutions of higher education are not preparing teachers to meet the needs of all children (Lim & Able-Boone, 2005). The purpose of this chapter is to introduce the challenges faced by Hispanic children, including migrants, and some of the evidence-based practices which provide hope for young Hispanic children with developmental delays. Further, the statement of the problem, purpose of the study, procedures and proposed limitations will also be introduced in this chapter.

Children from Hispanic migrant families who move from season to season in the agriculture industry across the US face even more barriers that impact their development in school including high mobility rates, social isolation, poverty and lack of early literacy experiences necessary for reading later in school (DiCerbo, 2001; Sutton 1972). In the 1960s the US Department of Education Office of Migrant Education was established to serve migrant students. Over 600,000 migrant children are served through this program (Title I Migrant Education State Performance Reports [TIMESPR], 1997; DiCerbo 2001). However some migrant families are able to stay put into settled migrant communities throughout the United States and thus reduce their mobility rates and increase their opportunities for education in one stable location. Regardless, many Hispanic children from low-income families continue to struggle in school (Ballantyne et al., 2008).

Many Hispanic children live in poverty. Nationally, 39% of Hispanic children live in low-income families, where the family income is less than twice the federal poverty level (Ballantyne et al., 2008; Mather & Foxen, 2010). Hispanics from low-income homes enter school with many challenges including: (a) their parents are less likely to have graduated from high school, (b) they are less likely to have access to the full gamut of health care services in the critical earliest years of life, and (c) they are less likely than other children living in poverty to attend preschool. It is well established that preschool attendance has more of a beneficial effect for Spanish-speaking dual language learners than for any other comparable demographic group.

Another challenge is the language barrier. Most US school instruction is in English and many children speak other languages at home. According to the National Clearinghouse on English Language Acquisition (NCELA), Spanish-speakers make up an estimated 76.9% of Dual Language Learners (DLL) (children learning two languages at once) in Kindergarten-12th grade

public schools in the United States (Ballantyne, et al., 2008). In addition, one in three of the 900,000 young children who participate in the Headstart preschool program serving low-income families, speak another language other than English at home (Iruka & Carver, 2006). An estimated 10% of these young children have developmental delays.

Moreover, often parents from low-income homes do not practice the early literacy skills that will help young children prior to reading in school (Ballantyne et al., 2008; Hammer, Farkas, & Maczuga, 2010). Particularly, "in families where one or both parents do not speak English, parents are less likely to read to their children regularly than in families where both parents speak English" (O'Donnell, 2008 in Ballantyne et al., 2008, p.17). Thus, many Hispanic parents are not reading to their children at home even in their native language. Even though sufficient evidence exists that supports the development of literacy skills in the native language will transfer to the second language (Collier & Thomas, 2004). Furthermore, many Hispanic families have fewer books and literacy resources in their homes and communities (Goldenberg & Reese, 2008). Children's language development experiences and interaction within their homes differ greatly between low-income, middle-class and wealthy families (Adams, 1990; Hart & Risley, 1995). Children from middle-class homes enter school with more than 1000 hours of shared book reading; while children from low-income, diverse backgrounds enter with only 25 hours (Adams, 1990). Not only do many Hispanic children encounter the hardships of poverty, but lack the early literacy supports at home that would help better prepare them for kindergarten.

Even with these challenges, several effective practices have shown to be beneficial for young children with developmental delays including shared book reading, particularly dialogic reading. Yet, little is known regarding literacy practices within the homes of Hispanics (Billings, 2009; Hammer & Miccio, 2006).

Quality preschool services and family literacy programs support young children's development (Ballantyne et al., 2008; Hoff, 2006; Wasik, 2004). Even though quality preschool is supposed to help with young children's language development, Hispanic children have limited access to services. Even when young Hispanic children attend preschool, the services may not meet their needs (Beltran, 2010). The National Council of La Raza (NCLR), the largest civil rights organization for Hispanics, conducted research arguing that state -appointed advisory councils on early childhood need to improve their policies towards young children from Hispanic and immigrant backgrounds (Beltran, 2010). These policies include: providing cultural competency professional development for personnel, ensuring that people with expertise in English language acquisition serve on the state advisory council teams, develop early learning standards addressing the needs of Dual Language Learners and align with K-12 standards, provide pathways for personnel from diverse backgrounds to get credentials, increase wages for early childhood teachers, increase technical support efforts, and develop partnerships with institutions of higher education.

In the 1970's family literacy programs developed to support parents in addressing the early literacy development needs of their children at home. However, for the best results, family literacy programs needed to consider the background of the families, language of preference, and cultural relevancy (Edwards, 1995; Gadsen, 2004; Reese & Goldenberg 2008; Mattox & Rich, 1977; Vernon-Feagans, Head-Reeves, & Kainz, 2004;). Though young Hispanic children with developmental delays from low-income homes face many challenges, early intervention and collaboration with parents provides the hope for a better future.

Statement of the Problem

Many Hispanic children face various challenges including poverty, lack of parent education, limited early literacy experiences in the home, limited access to preschool, and enter kindergarten with higher risk factors which impedes their academic and emotional development (NCES, 2003; Sheely-Moore & Ceballos, 2011). There is an urgent need to provide parents with early literacy supports in the home that are culturally relevant, meaningful and practical in order to better prepare young Hispanic children with developmental delays for kindergarten (Ballantyne, et al., 2008; Sandall, Hemmeter, Smith, & McLean,2005). Dialogic reading during shared book reading is an evidence- based practice for young children with developmental delays because of the benefits in increasing language development, strengthening the child's first language which helps transfer to the second language and building early literacy skills needed for later academic success (*Language is the Key* ,2003; National Early Literacy Panel [NELP], 2008; WWC, 2010). However, shared book reading practices within the home of Hispanic families has not been sufficiently studied (Hammer & Miccio, 2004; Hammer & Miccio, 2006). Some of the dialogic reading and shared book reading studies conducted included children with developmental delays but did not specify whether the sample included Hispanics, and some studies that did include Hispanic children who were at -risk for delays but not with diagnosed developmental delays (Dale et al., 1988; NELP, 2008; WWC, 2010).

Purpose of the Study

The purpose of this study was to investigate whether training and coaching of Hispanic mothers in dialogic reading strategies impacted their implementation of the strategies and the total words expressed of their young children with developmental delays during shared book reading. In addition, the mother's perception of shared book reading strategies was also explored. The following research questions were posed.

Research Questions

1. Does parent implementation of *Comment, Ask Questions* and *Respond with More* (*CAR)* reading strategies during shared book reading have an effect on the child's total oral vocabulary?
2. To what extent does training and coaching impact Hispanic mother's implementation of *CAR* reading strategies?
3. What is the rate of mother implementation of each individual *CAR* strategy per shared book reading session?
4. What are the views of Hispanic mothers towards shared book reading strategies?

Overview of Procedures

This researcher conducted a multiple baseline across three mother-child dyads design. When the study was approved by the UCF-IRB, the researcher collected baseline data and provided parent training and coaching during intervention. Two weeks after the intervention, the researcher returned to each dyad's home to determine if the parent had maintained the implementation of the *CAR* strategies as coached by the researcher. At the conclusion of the study, the researcher used a questionnaire to determine the mother's perception of targeted strategies. Every effort was made to ensure the confidentiality of participants. All shared book reading sessions were video-recorded by the researcher within each dyad's home.

Summary

In summary, there is a need for more research of early literacy practices within Hispanic homes and for family literacy programs to be tailored to the needs of Hispanic families (Delgado-Gaitan & Trueba, 1991; Hammer & Miccio, 2006; Janes & Kermani, 2001; Vernon-Feagans, Hammer, Miccio, & Manlove, 2001). Therefore, this investigation explored if parent

training and coaching on dialogic reading strategies in Spanish, impacted the mother's implementation of strategies and the oral vocabulary development of their young children with developmental delays during shared book reading at home. The researcher selected Hispanic participants from a settled migrant community in central Florida. The researcher chose multiple-baseline across participants because it allowed this researcher to: (a) determine whether changes in outcomes were closely linked to changes in treatment (Slavin, 2007); (b) provided a visual analysis of the data to determine effectiveness of the treatment and; (c) was appropriate for literacy, early childhood, and special education research (Neuman & McCormick, 1995).

Projected Limitations

One of the projected limitations of the investigation is the recruitment of mother participants who meet participation criteria and have the time to participate. Many mothers have limited time due to job obligations or other responsibilities. For example, some parents work full-time at various jobs, even on the week-ends. Some parents may be single-parents and/or full-time students with limited time to dedicate to participation in the study. A second projected limitation is the small sample size. A third projected limitation is the challenge of data collection within the home environment, because unexpected things may occur such as unexpected visitors. The following definitions were included as a result of the literature review and were included as key terms to help the reader better understand the topics. The definitions are in alphabetical order and will be referred to throughout subsequent chapters.

Definitions

CAR:C: *Comentar y Esperar* [Comment and wait 1-5 seconds]; *A*: *Averiguar con Preguntas* [Ask questions and wait 1-5 seconds]*; R: Responder Agregando un Poco Mas* [Respond by adding some more] (*Language is the Key*, 2003).

CAR cycle: All three CAR steps occur during a dialogue/back and forth between parent and child during shared book reading.

Code-switching: "A strategy used by second language learners has been to employ the alternation of two languages (e.g., code switching) as a bridge between the two languages they are learning (Faltis, 1989)" (Brice & Rosa-Lugo, 2000, p.1).

Dialogic Reading: Strategies developed by Grover Whitehurst (1988) and his colleagues involving dialogic reading which gradually shifs the storytelling role from the adult reader to the child through various techniques (e.g., open-ended questions, repetition, modeling) (Ezell & Justice, 2005, p.5).

Dual-language Learners: Children who are 3, 4, 5 and 6 years old are still in the process of acquiring their first language, even as they are also acquiring their second…young children who are learning a second language while still acquiring their first as dual language learners (Ballantyne, 2008 et al., p.4)

Early Literacy: (a) Print Concepts: Environmental print, concepts about print; (b) Alphabetic Code: Alphabetic knowledge, phonological /phonemic awareness, invented spelling and;

(a) Oral Language Vocabulary: oral vocabulary language and listening comprehension (National Early Literacy Panel, 2009).

English Language Learners (ELLs): Is a broader term used to describe any K–12 student for whom English is not a first language and who requires language support in the classroom in order to access instructional content. Other researchers may also use terms such as linguistic minority students (LMS), or describe these children as culturally and linguistically diverse (CLD) (Ballantyne et al., 2008 p.4).

Family Literacy: (a) age appropriate education, (b) parent-child activities, (c) education for self sufficiency and financial literacy, and (d) parents as first teachers (National Headstart Family Literacy Center, 2010). Another definition of *Family Literacy:* "(1) Home-school partnership programs, (2) intergenerational literacy programs, and (3) research that explores uses of literacy within families. Home-school partnerships include programs designed to involve parents in literacy activities and events that support school-based goals. Intergenerational literacy programs are designed explicitly to improve the literacy development of both adults and children. Research that explores uses of literacy within families that involves the observation and description of literacy events that occur in the routine of daily lives. This research often does not have deliberate or explicit connections to the school curriculum or the school-based goals. Rather, it focuses on how families use literacy to mediate their social and community lives. In contrast to the first two categories, which describe programs where the focus is on helping parents and children learn from and about schooling, efforts that fall into this third category tend to focus on what educators can learn from and about families" (Morrow, Paratore, Gaber, Harrison, & Tracey, 1993, pp. 196-197).

Limited English Proficient (LEP): Defined in Title III of the *Elementary and Secondary Education Act (ESEA)*, refers to those students who have not yet achieved English language proficiency (ELP), and are hence eligible for Language Instruction Educational Programs supported by the U.S. Department of Education, Office of English Language Acquisition.

Migrant children: Children and youth of school age whose families migrate to find work in the agricultural or fishing industries (DiCerbo, 2001).

Shared book reading: The active involvement and engagement of both the child and the adult in a shared interaction focusing on a book's words, pictures, and story (Ezell & Justice,

2005). Other terms for shared book reading: shared reading, interactive reading, book sharing, and picture book reading.

Settled: to place as so to stay, to establish in residence (Merriam-Webster Dictionary, 2011).

Total expressive vocabulary: The total number of words the child expressed orally during the parent- child shared- book reading session in English and Spanish. Words consisted of nouns, verbs and other words.

CHAPTER II: LITERATURE REVIEW

The sections within this chapter include the theoretical framework of social development theory, ecology of human development and eco-cultural perspective on literacy followed by the experiences of migrant children, language acquisition process and some of the factors that impact language development including poverty and family interactions at home. Next, some evidence-based practices such as dialogic reading during shared book reading will be presented. Lastly, the importance of family literacy programs will be explored.

Social Development Theory

In the early 1900s, the Russian psychologist, L.S. Vygotsky believed that language was learned via social interactions. Principle tenets of Vygotsky's work included More Knowledgeable Other (MKO) and Zone of Proximal Development (ZPD) (Vygotsky, 1962). MKO were the persons with higher levels of abilities and understanding of concepts or tasks (such as teachers, peers, adults, coaches, even a computer) that guide a learner towards understanding. The ZPD consisted of the actual distance from when a child was guided to learn by the MKO to the point of mastery and understanding of the concepts and task requirements independently. Therefore, different learners took more time to reach the ZPD compared to others. Some learners required more guidance and social interactions to figure things out. In addition, Vygotsky placed heavy importance on the social and cultural factors that may have impacted a child's development of language and other skills. Vygotsky believed that children began to use internal thinking and self-talk prior to communication and became motivated to learn how to speak because of the benefits of social interactions (Vygotsky, 1962).

Ecology of Human Development

In the mid 1900s the Russian American Psychologist and the co-founder of Headstart Preschool programs for disadvantaged children, Urie Bronfenbrenner, believed that children's healthy development was impacted by their surroundings and the multiple layers of support encountered throughout the course of life. Bronfenbrenner developed the term 'ecological systems' of human development (Bronfenbrenner, 1979). The Ecological systems contained several layers: the *micro-system, exo-system,* and *macro-system.* The ecological system encompassed the immediate and more global or general layers that influence a child's development. The most immediate contact, the *Micro-system* was composed of a child's family/caretakers, classroom, peers, and religious settings. The following layer, the *Exo-system* contained the school, community, health agencies, and mass media. Then, the *Macro-system* involved the larger picture to the child: society, economics, political systems, culture, and nationality. The relationships within and between these layers also shaped a child's learning. For example, Bronfenbrenner (1979) argued that often schools failed to acknowledge the significant roles that families played in a child's development and lacked partnerships with families. In addition, researchers conducted research in clinical settings and failed to investigate family dynamics within the natural setting of the home. Brofenbrenner (1979) continued to emphasize that the school culture greatly differed from the home culture. This disconnection resulted in significant repercussions and failures such as dropouts and ultimately affected a child's overall learning progression and healthy human development. Furthermore, Bronfenbrenner advocated for more family-focused approaches which considered the needs of the most disadvantaged in society such as families who live in poverty.

Ultimately, Bronfenbrenner (1979) supported the healthy development of children via supporting family ecological systems of supports and providing opportunities for reciprocity of learning between home and school (similar to Vygostky's relationships between the child and the guide). Thus, language development is greatly influenced by a child's immediate and extended environments, relationships and supports within and between the different layers.

Eco-cultural Perspective on Early Literacy

Vernon-Feagans, Head-Reeves, and Kainz (2004) advocated for researchers and practitioners to incorporate an eco-cultural perspective to early literacy. The eco-cultural perspective integrates many of the concepts outlined above and forms the basis for research in understanding the cultural influences and the learning process within the social groups from low-income homes (Vernon-Feagans, Head-Reeves, & Kainz, 2004). The researchers argued that literacy practices and characteristics of the home (such as access to books and print-rich environments) explain academic and literacy achievement better than family socio-economic status. However, more research is needed in exploring cultural and family literacy practices within the home.

Vernon-Feagans and colleagues (2004) have examined family literacy through the eco-cultural perspective by exploring how a child's macro-system influences language development, literacy and ultimately school achievement. Specifically, Vernon-Feagans and colleagues (2004) found that professionals should examine common myths, "including those of individual competition and hard work, disadvantage and differences, dysfunctional parenting and families, lack of ability and skill, and poor motivation—that appear most relevant in the development of literacy interventions for nonmainstream families and their children (p.399)." Thus, once researchers and practitioners explore and reflect upon the myths of nonmainstream families and

their own personal beliefs, they are better able to collaborate and develop literacy programs that meet the unique needs of families. Vernon-Feagans and colleagues (2004) argued that education is the key to helping nonmainstream families find hope for the future and that teachers are key players to unlocking children's true abilities and potential in school.

The social learning theory, ecological model and eco-cultural perspective are valuable frameworks to understanding the complexity of human development and the critical roles of families and literacy. The mother participants from the presented study were from migrant backgrounds. Thus, the following section will present the migrant lifestyle and some of the factors that may affect healthy development in children.

From Migrants in the Fields to Children in the Classroom

The origin of the US was built by the hard work and intellectual capacity of people from the mainland and immigrants. This melting pot of nations is still present and united under one Constitution. However it is still divided by a mainstream and non-mainstream culture (Green, 2003; Vernon-Feagans et al., 2004). The mainstream culture, is composed of people who may actively participate in society and make the necessary changes to make differences in daily life. However, the non-mainstream culture has often been out-casted, silenced, not appreciated, devalued and not allowed or with limited access to participate in active civic life due to various obstacles which prevents them from moving forward and becoming active participants such as: not speaking English, lack of literacy skills such as not being able to read or write; limited education; different beliefs or values; poverty; racism; poor working conditions and wages; and undocumented legal status (Center for Mental Health in Schools at University of California Los Angeles [CMHS-UCLA], 2011; Green, 2003; Suarez-Orozco & Carhill, 2008; Tseng & Yoshikawa, 2008). Migrant farm-workers are considered to be the most marginalized within the

US society (DiCerbo, 2001). Most migrants are originally from Mexico and Central America and most speak Spanish (Fry & Passel, 2009). Migrants leave their native country in search of better opportunities for their families yet once in their new society, they often feel left out. Arguably, migrant's labor is crucial and contributes significantly towards billions of dollars of economic prosperity within the US agriculture industry, making low fruit and vegetable prices possible at the supermarkets, increased profits for companies, exports of food, yet their rights and work conditions are not protected or valued (Green, 2003).

There are an estimated 600,000 migrant children, who travel with their parents as the agriculture seasons change, throughout the Eastern, Midwestern, and Western streams of the United States (Florida Advisory Commission for the United States Commission on Civil Rights AC [FAC], 2007). Migrant workers are employed within the 49 states within the continental US. The children of migrants may go to several different schools within one academic school year. This mobility disrupts their ability to attain fundamental basic skills that build on each other sequentially across the academic subject areas, making it difficult for children to progress and learn more advanced skills (Sutton, 1972). At school, migrant children encounter different curriculums and resources which they have to adapt to. Often children's school records are lost. Children with delays may not be identified or get the explicit instruction or supports they need (Di Cerbo, 2001).

Not only do children encounter academic challenges, but also may experience that teachers do not care, alienation with non-immigrant peers, and social-emotional stress (CMHS-UCLA, 2011; Green, 2003; Suarez-Orozco & Carhill, 2008). Children's social-emotional development is also affected by the possibility of families being separated. For example, "roughly 5.5 million children live in the U.S. with unauthorized immigrant parents. Three-

quarters of these are U.S. born citizens. In a recent 10 year period, over 100,000 immigrant parents of U. S. citizen children were deported" (CMHS-UCLA, 2011, p.5). Thus, though migrants and their children are vital for the economic prosperity, they are deprived of rights to participate actively in society as legal citizens and their many hardships often stand in the way of progress in school.

Florida is the third state, after California and Texas with the most migrant children. The Florida Advisory Commission for the United States Commission on Civil Rights (FAC, 2007) conducted a study about the services offered to migrant children in schools and found:

> given the growing numbers of such children in this country there is a critical need to forthrightly examine whether the present level of resources and types of programs being provided are appropriate to provide an equal educational opportunity to migrant children. An achievement gap between migrant children and other children persists, and has persisted over decades despite additional resources and special initiatives. It may be time to consider other and different institutional and structural changes apart from what has been offered in the past in order to truly provide migrant children true equal education opportunity in our public schools (FAC, 2007, p.32).

This challenge provides a new opportunity for educators to search for and integrate the best practices to help children from migrant backgrounds succeed. More recently, migrants and their children have settled into communities throughout the US and as generations pass, their communities change. The community's language, social and cultural traditions adapt to their new culture and way of life. Yet, without the mobility, children have a better chance to stay in one place, attend one school, learn English and gain literacy skills.

Acculturation is referred to as the different stages people undergo to reach a full adaptation to their new land; as generations pass, often their cultural roots, traditions, languages, and other customs become forgotten (Burnam,Telles, Karno, Hough, & Escobar, 1987; Suarez-Orozco & Carhill, 2008). The acculturation process is different for every individual. In contrast, "enculturation… is defined as the process through which an individual is socialized to retain his or her original cultural roots (Davidson & Cardemil, 2009)" (in Perez Rivera & Dunsmore, 2011, p.327). Sometimes parent's acculturation and/or enculturation experiences vastly differ from the experiences of the teachers and school personnel (Correa & Tolbert, 1993; Suarez-Orozco & Carhill, 2008). Many parents may believe that the teachers are the experts and would never question the teacher's authority out of respect or other cultural reasons. Often, teachers and school personnel are from the mainstream culture yet the schools may serve students and families from the non-mainstream community. These differences may cause friction and barriers to effective communication and partnerships with families and schools.

The next sections will explore the language acquisition and early literacy development process, the risk factors for healthy language development and promising evidence-based practices for Hispanic children.

Language Acquisition

Children who acquire two languages at the same time may take from three to seven years to reach proficiency depending on the age they started to learn a new language (Conger, 2009; Cummins, 1984; Kenji, Butler, & Witt, 2000). Generally, younger children take less time than older children to acquire proficiency in their second language. Genesee (2007) and other researchers argued that young children who have well-developed skills in their native language helps with the development of the second language. Oral language proficiency and emergent or

early literacy skills in the native language were predictors for later reading success in English (Reese, Gamier, Gallimore, & Goldenberg, 2000). Moreover, young children with sentence or story recall, a large oral vocabulary, expressive lexical and expressive and receptive syntactic skills in their native language had more success with later reading (Snow, Burns & Griffin, 1998). In addition, Collier and Thomas (2004) presented research supporting that quality dual-language or bilingual education programs were the most beneficial for maintaining literacy in both languages. The language acquisition process may take more or less time depending on the individual, yet well developed language skills in the native language will help and not hurt the development of the second language.

Children who develop multiple languages at the same time may encounter mixing both languages to get their point across. Code-switching is referred to using words from both languages within one sentence and it is part of the development of various languages simultaneously (Brice & Rosa-Lugo, 2000; Harth, 2007; Hayes, Bahruth, & Kessler, 1998). Thus, teachers and other education professionals must be aware and patient with this developmental process and provide supports for children if needed.

The acquisition of two languages takes time and is different for every individual. Yet, it is critical to support and encourage young learners to become literate in their native language to help them acquire English. Lastly, a child's language development takes time and is influenced by various factors: genetics, socio-economic level, cultural background, parental education, interactions and language stimulation at home, and quality preschool experiences (Hoff, 2006).

Poverty, Effects of Mother Responsiveness, Language and Literacy Practices at Home

Since the 1960s, various studies have explored the influence of poverty on language and literacy development in young children. The two views included that the poverty environment

caused limited language or early literacy skills in children and the other perspective blamed a lack of home literacy experiences which prevents opportunities for language development (Bhattacharya, 2010; Feagans & Farran, 1982).

Huttenlocher, Harght, Bruk, Seltzer, and Lyons (1991) found that during the first 24 months of life, children's acquisition of language was highly associated with their mothers' speech to them. By two years of age, children with mothers who spoke to them frequently and responsively had vocabularies that were eight times greater than those of children whose mothers spoke less frequently. Moreover, mothers from low-income homes provided less language stimulation and support at home compared to mothers from middle and upper class homes (Hart & Risley, 1995; Huttenlocher, Harght, Bruk, Seltzer, & Lyons, 1991; Vernon& Farran,1982). The mothers from middle and upper socioeconomic status exposed their children to higher rates of vocabulary within the home, had more conversations and expanded upon their child's language skills. In addition, middle-class mothers talked with their children while low-income mothers talked to their children (e.g., demanded things and gave orders). Mothers from low income backgrounds had more difficulty with child responsiveness whereas middle-class mothers were better able to enhance their children's higher-order thinking and language skills such as stimulate their abilities to synthesize, predict, reason, and use abstract thinking (Schachter, 1979; Tough, 1977 in Feagans & Farran, 1982). Besides the differences in mothers' home language stimulation and responsiveness, daily life stressors also impacted the healthy development of young children from low-income homes (Sheely-More & Ceballos, 2011).

The Development of Early Literacy Skills

The terms "emergent literacy" and "early literacy" have been used interchangeably to discuss the building block skills required to prepare young children for reading (Clay 1993; Ezell

& Justice 2005; Neuman & Dickinson, 2001). The National Early Literacy Panel (2008) identified various pre-cursor skills to reading. The early literacy skills that young children should have prior to reading include: (a) alphabet knowledge (AK), (b) phonological awareness (PA), (c) rapid automatic naming (RAN), (d) RAN of objects or colors, (e) writing or writing name and, (f) phonological memory. Additional skills include: (a) concepts about print (print conventions and concepts about book); (b) print knowledge (early decoding, concepts about print and alphabet knowledge);(c) reading readiness (combination of elements of alphabet knowledge, concepts about print and early decoding and; (d) oral language (including vocabulary and grammar).

Overall, from birth through age five the most significant areas that predicted later reading outcomes included oral language (listening comprehension, oral language vocabulary), the alphabetic code (alphabetic knowledge, phonological/phonemic awareness, invented spelling) and print knowledge/concepts (environmental print, concepts about print) (NELP, 2008). As a result, the five instructional strategies that helped with the development of these early literacy skills in young children included: code-focused interventions, shared-reading interventions, parent and home programs, pre-school and kindergarten programs. For the purpose of this study, shared-reading interventions and parent and home programs will be further explored.

The Development of Early Literacy and Implications for Hispanic Children

Although many Hispanic children and families face various social and economic challenges, schools can take steps to ensure that Hispanic children are given an opportunity to succeed. The National Task Force on Early Childhood Education for Hispanics (2007) recommended to: (a) increase Hispanic children's access to infant/toddler programs, pre-K programs, and summer programs during the early elementary years, giving high priority to Hispanic children from low socio-economic circumstances and who are English language learners in immigrant families; (b) increase the number of Spanish-speaking teachers and

language acquisition specialists; and (c) increase efforts to design, test, and evaluate infant/toddler, pre-K, and early elementary school language and literacy development for Hispanics, with emphasis on low socioeconomic Hispanics from Spanish-speaking homes. Other suggestions were to develop the literacy skills of children such as to (a) screen for reading problems and monitor progress, (b) provide intensive small-group reading interventions, (c) provide extensive and varied vocabulary instruction, and (d) develop academic English (Gersten, Baker, Shanahan, Linan-Thompson, Collins, & Scarcella, 2007).

Lastly, Watts Taffe, Blachowicz, and Fisher (2009) found that research on vocabulary instruction for English Language Learners was within its early stages. However, they supported the following strategies to help for English Language Learners (ELL): (a) build upon the foundation of prior knowledge, (b) teach sophisticated words, (c) provide scaffolding towards independence, and (d) engage in rich conversations.

The Development of Early Literacy and Implications for Young Children with Developmental Delays

As mentioned earlier, genetic and/or environmental factors may impact a young child's healthy development of language, social-emotional, physical, fine-motor and cognitive abilities. When young children do not reach typical developmental milestones they may have developmental delays. However, with the necessary supports at home and early intervention, young children with developmental delays have the opportunity to excel (Sandall, Hemmeter, Smitt, & McLean, 2005). A positive and supportive home and school environment that address a child's challenges are instrumental to the healthy development of young children with developmental delays.

Two national organizations are at the forefront of establishing the quality standards for young children with developmental delays. The National Association of Education for Young

Children (NAEYC) and Council for Exceptional Children Division Early Childhood (CEC-DEC) developed national instructional standards for the different domains of early childhood development including language and early literacy. However, since pre-school is not mandatory in the US, it is up to individual state voluntary pre-school programs within the public and private facilities serving children under the age of five to practice or enforce these standards. For children with developmental delays, the CEC-DEC has advocated for child-focused practices which promotes children's learning and development, interactions with the social and physical environment, and research-based practices that guide practitioners decisions related to organizing and influencing children's experiences (Sandall et al., 2005). In addition, family-centered practices including supporting parents with parent education was also encouraged. Furthermore, CEC-DEC supported the use of assistive technology whenever possible to support and adapt a young child's opportunity to learn skills and communicate effectively. Thus, quality standards within preschool, collaboration with families, and assistive-technology remained integral pieces to supporting young children with developmental delays.

One way to support families with young children with developmental delays was by teaming and coaching with parents. After reviewing the literature on effective coaching practices for parents with young children with developmental delays, Sheldon and Rush (2010) suggested for education professionals to engage parents in joint planning, observation, action practice, reflection and feedback. The researchers argued that joint planning actively involved parents in the coaching sessions. First, the education professional observed the parent interacting with their child. Next, the education professional provided coaching and modeled for the parent. While modeling, the education professional pointed out the differences or similarities to what the parent naturally did during observations. During action/practice parents implemented the

strategies learned from the modeling and coaching sessions during real life situations. Then, the education professional asked the parents to reflect on what went well and what did not during the coaching sessions. Lastly, after the parents reflected, the education professional acknowledged the parent's reflection and collaborated with them on the proceeding steps, ideas or actions. If needed, the education professional shared evidence-based practices or prior experiences to help the child accomplish their goals (Sheldon & Rush, 2010).

However, when education professionals and schools plan to collaborate with Hispanic parents and their young children with developmental delays, it is important to gather information about the families and develop culturally sensitive programs (Correa & Tulbert, 1993). In addition, school teachers and personnel need to be educated on the needs of Hispanic families in order to have more effective communication and meet the needs of the families.

Evidence based practices for children with Developmental Delays: Dialogic reading

In the 1980s Whitehurst and colleagues (1988) developed dialogic reading strategies during shared book reading to enhance parent's ability to effectively expand upon their young children's language development. Later, they also created parent training videos to teach parents of the language facilitation strategies. Many other studies related to shared book followed to include young children with language delays and children from at-risk environments. In 2010, after the review of research related to dialogic reading, the Institute of Education Sciences (IES) What Works Clearinghouse (WWC) considered dialogic reading as an effective research-based intervention for young children with developmental delays (USDOE, 2010). With dialogic reading, adults were trained to follow the child's lead and ask questions and expand upon responses in order to facilitate language development. The WWC criteria for effectiveness was based on the following factors: (a) the quality of the research design; (b) the statistical

significance of the findings; (c) the size of the difference between participants in the intervention and; (d) the comparison conditions, and the consistency in findings across studies for designs (USDOE, 2010, p.4). The IES WWC found two studies that met the quality design and effectiveness standards for having positive effects with dialogic reading. The two studies were by Crain-Thoreson and Dale (1999) and the Dale (1996) studies. According to Crain-Thoreson and Dale (1999) both parents and teachers benefitted from the instruction on dialogic reading intervention. According to the researchers, "Parents and staff became more responsive to children by slowing down, decreasing their verbatim reading and information statements, and increasing their questions and expansions of children's utterances" (Crain-Thoreson & Dale, p.28). Crain-Thoreson and Dale (1999) reported that the children in their study did not have significant gains in their overall standardized test scores of vocabulary before and after the intervention compared to previous dialogic reading studies by Whitehurst et al. (1994). However, the authors argued that a possible explanation related to the difference of sample make-up. The Whitehurst and colleagues (1994) study involved typically developing young children versus children with developmental/language delays. Furthermore, the Crain-Thoreson and Dale (1999) study did not include a separate control s group without treatment. Even though over 50 studies related to dialogic reading existed, only two met the WWC standards for effectiveness for young children. Therefore, clearly, there is a need for more well-designed studies to address the effectiveness and how the approach benefits children and families from culturally and linguistically diverse backgrounds.

Benefits of Shared Book Reading

Shared book reading refers to the interaction between an adult and child during reading a storybook (Justice & Ezell, 2005). This interaction between adult and child during storybook

reading has also been called interactive reading, book sharing, or shared book reading. Shared book reading has the opportunity to impact the child's early literacy development including receptive and expressive language, vocabulary, and grammar skills.

In order for shared book reading to be the most effective, various elements need to be considered such as adult reading style, qualities and expressions along with various supports. In addition, some children may need further redirection and support to grasp concepts and meanings. Morrow (1990) found questioning, scaffolding dialogue and responses, offering praise or positive reinforcement, giving or extending information, clarifying information, restating information, directing discussion, sharing personal reactions, and relating concepts to life experiences all impacted the quality of shared book reading experiences between adult and child. Furthermore, Bergin (2001) also highlighted the importance of adult enthusiasm, animation and modeling during shared book reading. Furthermore, parents should be provided with scripted activities to encourage vocabulary development and positive parent-child interactions. In addition, mothers of children with language delays do not appear to engage children in much inferencing during storybook sharing, even as the children's language skills improved over time (Van Kleeck & Vander Woude, 2003).

Parents and teachers can proactively participate in helping increase a child's vocabulary development and early literacy experiences via shared book reading. Shared book reading has shown to have positive results, particularly in improving later comprehension skills in reading (NELP, 2008; Senechal, 2006). During shared book reading, Van Kleek (2008) suggested for adults to (a) ask literal in addition to inferential questions, (b) embed scripted questions and "think aloud" responses into storybooks before sharing them, (c) use strategies that research has

shown enhance children's engagement in stories being told to them, and (d) take into account the children's world knowledge.

Furthermore, children should be highly engaged during shared book reading. For example, an experimental study conducted with parents aimed to increase their children's interest in shared book reading found that following the child's lead, getting the child actively involved, being enthusiastic and close with the child, using positive feedback, selecting stories of interest to the child, and not pushing the child if the child was not interested in reading were essential in the success of shared book reading (Ezell & Justice, 2005; Ortiz, Stowe, & Arnold, 2001).

Researchers in Finland compared children who were at-risk of developing reading problems to typically developing children and their families during shared book reading (Laakso, Poikkeus, Eklund, & Lyytinen, 2004). The researchers found that the at-risk children's growth rate in phonological awareness was predicted by the children's interest in the books and their ages (four through six). Furthermore, they found that children with a genetic risk for reading difficulties may need longer exposure to shared reading for the benefits to show and the effects may show more clearly in some domains of language development than in others. In addition, the researchers found that home environmental factors such as parent's education levels were predictive factors of children who may become struggling readers later on (Laakso et al., 2004). Furthermore, a recent meta-analysis, demonstrated that parents who implemented dialogic reading (e.g., parent and child engaged conversations while reading storybooks) had a higher overall mean effect size reflecting the success in increasing children's vocabulary compared to typical reading of a book without dialogic reading (Mol et al., 2008).

Shared Book Reading: Implications with Hispanic Families

There is limited research on well-designed studies that address shared book reading outcomes of children and parents of young children with developmental delays (USDOE, 2010). Limited research also exists related to shared book reading practices within the homes of Hispanic families (Hammer & Miccio, 2006). The following few studies that exist provide valuable considerations for the implementation of instruction and support of shared-book reading programs.

Perry, Mitchell Kay and Brown (2008) explored how low-income Hispanic immigrant families with preschool children incorporated early literacy practices within their home environments. The Hispanic families in this study participated in Title I Even Start Family Literacy program along with parent education classes prepared by early childhood teachers. Parents were provided with Literacy Bags to take home with early literacy activities using books and games. Researchers found that, "family literacy programs serving high percentages of Hispanic families may attain greater retention rates and more positive child outcomes by providing families with flexible home-based curricula materials that offer opportunities for pleasurable bilingual, literacy interactions in which multiple family members might participate" (Perry, Mitchell Kay & Brown, 2008, p. 111). Researchers suggested the implications for future research include purposefully adapting home-based literacy assignments to promote continuity between home-school literacy activities, how games/play facilitates emergent literacy skills, and parent needs assessment before and after literacy interventions.

Another study, Boyce (2004) and fellow researchers explored whether shared book reading with low-income Latina mothers and their preschool children impacted language skills. The mothers were mostly recent immigrants from Mexico. The researchers provided mothers

with two bags, one with 3 books and the other with developmentally appropriate toys and videotaped the mother-child dyads while engaged in shared book reading. Two hierarchical multiple regression models were used to see whether book sharing interactions impacted children's vocabulary. The results of the study indicated that mothers, "Enhanced their children's attention to the printed text, promoted interaction or conversation with their children about what was in the books and somewhat less often, used more complex literacy strategies such as elaborating on their children's ideas as they shared the books; similar to parents observed in other studies and similarly related to children's language development" (Boyce et al., 2004, p.379). The authors argued the need for researchers to find incentives or ways to motivate Latino parents to read more frequently, practice early literacy skills with their young children, and to develop culturally appropriate interventions. Latino parents were more inclined to follow-through with the intervention when there was an incentive. However, one of the limitations was the small sample size.

A third study, a dissertation by Harth (2007), specifically investigated whether low-income mothers from Hispanic migrant backgrounds could be trained to use a dialogic reading strategy in the home and the effects on the oral language development of their preschool children. Harth (2007) used multiple -baseline design across participants with four parent-child dyads. Overall, the results demonstrated that the implementation of dialogic reading techniques had a positive effect on the oral language skills of the children. However, the limitations included: a difference in duration of the book sharing among the different sessions, the increased number of books every week for each family, and the presence of the investigator during the investigation may have impacted the results. Harth (2007) recommended that future studies consider the following: find better ways of training parents to remember the intervention for a

longer period of time, extra coaching sessions as part of the parent-training component where the researchers offer constructive feedback of implementation of strategy, and videotaping of the sessions(she used audiotapes).

Another multiple baseline study was conducted by Rosa-Lugo and Kent-Walsh (2008). In their study, they trained Hispanic parents with young children with communication disorders who used augmentative and alternative speech to implement a specific strategy during shared book reading. The authors found that by training the parents to use a specific interaction strategy during shared book reading resulted in parent's meeting criterion of interaction strategies which was generalized in maintenance. Furthermore, children increased their communicative turns and expressive skills, particularly their semantic concepts.

A fifth preliminary study presented at an international conference by Correa, Miller, and Huber (2009) used a home literacy intervention with pre-school age children and families of Mexican heritage. The researchers prepared mothers by using an evidence-based dialogic reading book sharing strategy in Spanish called CARRO(*Commenting, Asking questions, Responding with more,* and *Repeating in native language),* from *Language is the Key* by Washington Learning Systems. Researchers used a video training in Spanish to educate parents on the strategies, model, and provided opportunities for parents to practice the strategies using bilingual books with their youngsters. The highlights of this study included: (a) the mothers' use of effective strategies, (c) parents eagerness to participate, (c) Spanish books were welcomed and enjoyed, and (c) families reinforced using native language skills. However, the implications for future research were that the home environment can be difficult for training and a need to improve implementation of intervention.

Evidence-based Family-Strengthening Programs

In the 1970s various researchers, including Rich and Mattox (1977) designed programs to build school, family and community partnerships (Rich, 1974). Later, the term 'family literacy' surfaced in 1983 by Taylor who investigated the home literacy supports, interactions and practices of family members that led to the enhanced development of their child. Family literacy scholars have focused on two lines of research: (a) exploring the child's literacy development and interactions that occur with other family members at home and (b) organizations, individuals, and/or schools that develop programs to support families with their literacy practices at home (Wasik & Hermann, 2004; Paratore, 2006). The National Headstart Family Literacy Center (NHFLC) defined family literacy as: (a) parents as first teachers (b) age appropriate education (c) education for self sufficiency and financial literacy and, (d) parent-child activities (NHFLC, 2010). Despite the variation in definitions, the term "family literacy" continues to involve the home literacy practices and interactions of family members and their influence on a child's language and literacy development

Wasik and Herrmann (2004) provided a timeline for significant initiatives related to family literacy. These include in 1989 the Even Start Family Literacy Program was authorized by the Elementary and Secondary Act, the Barbara Bush Foundation for Family Literacy in 1989, Congress passed the National Literacy Act (PL 102-73) in 1990, and the national Headstart preschool services program implemented a family literacy program of 1965. Some of these national organizations focused on supporting early literacy within the homes of low-income families, including Hispanics. These programs include *Early Headstart, Headstart, Title I Even Start Family Literacy, Reach Out and Read, Home Instruction for Parents of Preschool*

Youngsters (HIPPY), National Center for Family Literacy, and Reading is Fundamental (NAEYC, 2006).

According to the National Even Start Evaluation (St. Pierre et al., 2003) children who participated in the Even Start early childhood component and parents who participated intensively in parent education programs scored higher on standardized literacy measures than those who did not participate. However, some of these other literacy initiatives targeted children in kindergarten or older, involved healthcare providers to promote literacy, and may/or may not have taken into consideration the unique needs Hispanic families. Ultimately, there is a need for researchers to address to address to the support and services offered to families in order to foster optimal child development and outcomes (Turnbull et al., 2007).

Family Literacy Programs: Implications for Hispanics

Literacy–related practices in the homes of Hispanic children tend to differ from school practices. Often, Hispanics who participate in family literacy programs withdraw from programs because they felt that the programs do not take into consideration their specific child rearing practices and cultural beliefs (Delgado-Gaitan & Trueba, 1991; Janes & Kermani, 2001). Often educators lacked awareness of the Hispanic families 'funds of knowledge' (Moll, 1992) and understanding of Hispanic parent's beliefs related to literacy learning (Perry, Mitchell Kay, & Brown, 2008).

Based on the review of the literature on family literacy and recognizing cultural significance, Edwards, Paratore, and Roser (2009) found that schools needed to improve their ways of reaching out to parents and establishing parent-teacher collaboration. The researchers discovered three findings. First, parents and teachers needed to collaborate based on shared knowledge and provide multiple opportunities to exchange information such as home visits,

conferences, informational workshops, and collecting home literacy artifacts. Second, teachers needed to expand communication and understanding by answering important questions. For example, when teachers had a better understanding of family routines, responsibilities and literacy practices, this influenced their selection of homework assignments. Third, teachers needed to support parents with their ability to help their children's academic success. A suggestion was for teachers to provide parents with resources or develop supportive family literacy programs with explicit instructions. The researchers suggested for future research to focus on: understanding parent-teacher collaboration, exploring parent's sense of self-efficacy in improving child educational outcomes, and how schools can build on the diverse abilities and beliefs that children bring to school. In summary, Edwards, Paratore, and Roser (2009) suggested that in the past three decades there has been, "relatively little change in the routines schools enact to bring parents and teachers together to serve children better….Although there is much to learn on ways to bridge home and school literacy practices effectively, we know enough to do better than we are currently doing" (p.91).

Edwards (1995) conducted a study focusing on shared book reading with families from diverse and low-income backgrounds. The name of the family literacy program was *Parents as Partners in Reading* and professors trained parents on developing early literacy strategies including shared book reading at home. The purpose of the study was to meet the needs that parents wanted their children to be successful in school and the expectations that schools had of parents. The researcher found that the parent participants were unaware of the school's expectations of them. Yet, parent participants were receptive and appreciative of the professors explaining the school's expectations and explicit strategies of how to help their young children at home. After the completion of the study, Edwards reported that parents continued to desire to

learn more about how to help their children at home and went beyond such as speaking out in newspaper editorials about literacy issues. Edwards (1995) argued that teachers needed to learn more about the home literacy environment and practices within the homes and develop family literacy programs that are tailored to the families they serve.

Regardless of the family literacy program, certain components are critical for its success. Researchers from the Harvard Family Research Project (2006) found different ways to involve families such as parent workshops, parent-child trainings, counseling sessions, videos and home visiting. Researchers concluded that the most successful programs had a positive impact on four main parenting processes: family environment, parent–child relationships, parenting, and family involvement in learning in the home and at school (Caspe & Lopez, 2006). In addition, these programs improved child outcomes, allowed for parent–child bonding, focused on recruitment and retention, prepared staff to work with families, and implemented the program effectively. Furthermore, it is important to measure family participation, gather baseline information on families, and ask families to respond to satisfaction and needs surveys.

Programs serving Migrants

Since the 1960s, many programs were initiated to help educate and meet the needs of children from low-income homes including migrants and their families. These programs included the US Department of Education Office of Migrant Education, Headstart, Even Start, and national, state and local organizations related to literacy and families. In addition, there has also been education initiatives between the US and Mexican governments. In 1976 the US Department of Education Office of Migrant Education collaborated with the Mexican government on a Bi-national Migrant Education Initiative to increase understanding of the issues related to educating migrant children in both countries, which resulted in the Memorandums of

Understanding (MOU). In 2006, the latest MOU specified that the issues that Mexico and the US would benefit from mutual collaboration in special education, adult literacy and language acquisition. In 1983 the Migrant Interstate Council formed and continues to actively advocate for the needs of migrants in Congress.

States offered different programs to serve migrant children and families. For example, in Florida, the state's largest provider of childcare services for low-income migrant families who work in agriculture is the Redlands Christian Migrant Association (RCMA) (RCMA, 2010). This nonprofit organization is partially funded by the federal programs of Headstart, Early Headstart, and Migrant Headstart. Many of the families served by RCMA are Hispanic and many teachers are bilingual. Barbara Mainster, CEO, shared that they easily recruit students and families and often have waiting lists (personal communication, July 15, 2010). The teachers mostly come from the community and have similar cultural backgrounds as the students. In Spring 2011, RCMA partnered with the Helios Education Foundation and the University of South Florida to provide a program to better prepare preschool teachers in the area of early literacy (Jones, 2011). This is an example of how the community, school and home partnerships may collaborate to ensure that young children from migrant backgrounds receive the early literacy skills they need to be successful in kindergarten. These are the kind of partnerships and programs that are needed throughout the country in order to level the playing field and ensure that young children from migrant backgrounds have the foundation to reach their full potentials in school and beyond.

CHAPTER III: METHOD

Chapter 3 details the design, participants, setting, variables, and procedures of this study. The research questions posed were:

1. Does parent implementation of *Comment, Ask questions,* and *Respond with more* (CAR) reading strategies during shared book reading have an effect on the child's total oral vocabulary?
2. To what extent does training and coaching impact Hispanic mother's implementation of CAR reading strategies?
3. What is the rate of mother implementation of each individual CAR strategy per shared book reading session?
4. What are the views of Hispanic mothers towards shared book reading strategies?

Recruitment of Participants

This study was approved by the University of Central Florida Institutional Review Board (IRB). Once the IRB approval was obtained, the researcher proceeded to use purposive sampling and snowball chain method to select participants (Patton, 2002) (see Appendix A). The researcher contacted two Headstart early childhood development center (ECDC) directors via phone and in-person to ask for permission to recruit three to four families to participate in the study. The researcher provided the directors with the purpose and information about the study, including participant selection criteria, study recruitment flyers, and permission forms (see Appendix B). After the school directors approved the recruitment of families, they introduced the researcher to the preschool teachers, speech and language pathologists, curriculum specialist,

and family support specialists. These school professionals assisted this researcher to recruit potential participants for this study.

Within a few days of visiting the preschool and speaking with various teachers and other school personnel after school (when parents came to pick up their children after school on the playground), the researcher compiled a list of the identified families by the preschool teachers and personnel. The researcher visited the school and provided flyers with information about the study to the identified families during child pick-up time on an individual basis and exchanged contact information including phone number and address with parents (see Appendix B). The researcher called the parents by phone to further explain the study and inquire whether they were interested in participating. Within the next couple days, the researcher met with the potential parent candidates individually during pick-up time (after school) and provided copies of the parent permission forms. The researcher read over the parent permission forms with the parents and answered any questions about the study. Parents were informed that families who decided to participate would receive a free set of children's books at the conclusion of the study. The researcher informed parents that participation was voluntary and they could withdraw at any time during the study. At these meetings, two parents voluntarily signed the parent Permission Forms to participate immediately and the researcher asked questions from the Demographic questionnaire and administered the child assessments (see Assessment section below). Two other interested parents decided to take copies of the permission forms to think about it overnight. One of the parents was interested in participating but could not dedicate the time due to working overtime hours at the citrus packing house. The other parent returned the permission-form the following day and completed the Demographic questionnaire with the researcher (see Appendix C). The researcher administered the child assessments (see Assessment section

below). Therefore, a total of three mother-child dyads volunteered to participate in this study and met the study participant criteria.

Participants

The participants were three mother-child dyads who lived in a settled migrant citrus-growing community in central Florida (see Table 1). Prior to baseline data collection, the researcher asked mothers questions from the Demographic and Home Literacy Questionnaire (see Appendix C). The responses to the questionnaire appear below (see Table 1).

Dyad 1.

Mother 1 was born in the US, however her parents were Mexican. She reported that her parents were migrants and traveled with them between Mexico, Texas and Florida. Mother 1 completed 10th grade and then dropped out. Later, she went back to school and earned her General Education Diploma (GED) and health certifications. Mother 1 worked fulltime in retail and as a health assistant. Mother 1 was single and had five children. Mother 1 reported speaking both English and Spanish in the home, having less than six children's books in the home, and reading to her child randomly throughout the week.

Dyad 2.

Mother 2 was born in Mexico and arrived to the US when she was in high school. Mother 2 reported that her parents were migrants and she traveled between Mexico and Florida when she was young. Mother 2 completed 10th grade in high school and dropped out. Mother 2 was a fulltime home-maker. Mother 2 was married and her husband worked in the local citrus packing house. They had four children. Mother 2 reported speaking mostly Spanish in the home and her husband spoke mostly in English. Mother 2 reported to have less than six children's books in the home and that she did not read to her child.

Dyad 3.

Mother 3 was born in Mexico and arrived to the US in high school. Mother 3 reported that her parents were migrants and the family traveled between Alabama, Florida, and Mexico when she was younger. Mother 3 completed 7th grade and later earned her GED. Currently she was completing her Child Development Associates credential (CDA). Mother 3 worked fulltime as a preschool teacher. Mother 3 was married and her husband worked in landscaping. They had four children. Mother 3 reported speaking both English and Spanish in the home. She reported having 25 children's books in the home and read to her child on a random basis.

The three child participants regularly attended a full-day nonprofit partially funded by the Headstart federal preschool program serving low-income families. Child 2 and Child 3 attended the same preschool class and Child 1 was in a different class in a nearby preschool. These two schools were from the same nonprofit organization preschool system called Redlands Christian Migrant Association (RCMA). Teachers at the preschools had their Child Development Associates (CDA). The teachers implemented the High Scope curriculum which incorporates teaching practices for adult-child interaction, arranging classroom and materials and planning the daily routine (High Scope, 2011). In addition, assessment tools and trainings for teachers also form part of High Scope. The High Scope Curriculum, is built around teacher-and child-initiated learning activities in five main curriculum content areas: approaches to learning; language, literacy, & communication; social and emotional development; physical development, health, and well-being; and arts and sciences (High Scope, 2011).

Within both classrooms, teachers spoke primarily in English to the students, but each class had bilingual teacher assistants. The child from Dyad 1 attended the preschool since Fall 2006 and the other two children started preschool in Spring 2010. A Speech and Language

Therapist visited the preschools and provided services for three hours a week to each child in a small group setting. In order to participate in the study, the parent-child dyads were required to meet the following criteria: (a) be eligible to receive Headstart federally funded pre-kindergarten services for low-income families, (b) from Hispanic background, (c) mother can read pre-school level books in Spanish, (d) both children and mothers speak Spanish in the home based on feedback from Demographic Questionnaire (see Appendix C), and (e) sign the consent forms. In addition, the children must: (a) be a minimum of three and a maximum of five years old and (b) be eligible for developmental delays, speech and/or language services at school or home.

Table 1

Parent-Child Demographics and Home Literacy Practices

	Dyad 1	Dyad 2	Dyad 3
Age of mother	31	32	28
Age of child	4	3	5
Gender of child	Male	Female	Male
Ethnicity	Mexican	Mexican	Mexican
Mother's education level	11th grade, GED, Certification in health field	11th grade	7th grade, GED, Earning Child Development credential
Mother's number of years living in the US	Since birth	Since high school	Since middle school
Mother's parents were migrant	Yes	Yes	Yes
Mother occupation	Medical assistant and sales associate in retail	Fulltime home-maker	Preschool teacher since Fall 2010
Marital status	Single	Married	Married
Total # of children in home	5	4	4
Languages spoken by parents at home	Both-English/Spanish English 70% Spanish 30%	Both-English/Spanish English 50% Spanish 50%	Both- English/Spanish English 30% Spanish 70%
Language that child responds to parents	Both-English/Spanish	Both-English/Spanish	Both-English/Spanish
Number of children's books in the home	1-5	2-3	About 25
Child Pre-K attendance	Since Fall 2006	Since Spring 2010	Since Spring 2010
Speech/language services in school	Speech services since 2007	Speech and Language since summer 2010	Speech and Language since summer 2010
Do you read to your child? How often?	Yes, random, a couple times a week 10-15 minutes each time	No	Yes, random, a couple times a week 10-15 minutes each time

Setting

The study (including baseline, intervention, and maintenance) was conducted in the homes of the parent-child dyads in a central Florida community of settled migrants.

Dyad 1.

Dyad 1 lived in a four-bedroom home. The home was in a neighborhood with other working-class families. Beside the front door was an entryway and a dining room where the researcher set up the tripod with the camera. The back of the house had a kitchen, four bedrooms, bathrooms and family room. The walls were painted. The dining room table had a dark-colored wood color. The house was modestly furnished but the walls did not have pictures. The house was tidy. Mother 1 preferred to conduct the shared book reading sessions in the dining room table.

Dyad 2.

Dyad 2 lived in a three-bedroom home in a working-class neighborhood. Mother 2 lived there with her husband and four daughters. Mother 2 shared that they also frequently spent time at her mother's house which was nearby. Beside the front entrance was a living room and to the left were two bedrooms and one bathroom. The kitchen and master bedroom and bathroom were towards the back of the house. The walls were also painted. The living room had a plaid-covered couch, lounge chair, coffee table, and some furniture pieces with many family photos, ceramics and other small items. Fake flowers decorated the house. Wedding and family pictures of the daughters and Catholic images of saints and other relics hung on the walls. The house was

tidy. Mother 2 preferred to conduct the shared book reading sessions in the living room couch, thus the tripod with camera was set up there.

Dyad 3.

Dyad 3 lived in a four-bedroom trailer home in a working class neighborhood that consisted of both houses and trailer homes. Mother 3 lived there with her husband and four children and a male relative who rented out one of the bedrooms. The trailer home seemed somewhat cluttered with many things (such as piles of clothes). Beside the front entrance was a small living room which opened to the kitchen that did not have walls. Right next to the kitchen was a large dining room table with six wooden chairs. Behind the dining room were sliding glass doors that went to the backyard. To the right were several bedrooms and a bathroom. To the other side of the front entrance was the master bedroom and bathroom. Wedding pictures and family pictures hung on the walls along with images of Catholic saints and other relics. The mother and husband seemed to take turns sweeping and doing the many dishes in the sink. Mother 3 preferred to conduct the shared book reading sessions in the dining room table. The video-camera was set up with a tripod in the dining room right next to the participants.

Instruments and Materials

Assessment.

Before baseline phase, the researcher administered the Preschool Language Scale-4 (PLS-4) in Spanish and English. The PLS-4 is a normed-referenced instrument that measures a child's receptive and expressive oral language skills (Zimmerman, Steiner, & Pond, 2002). The instrument is used by clinicians to determine language disorders in young children from birth to age six. The instrument consists of the Auditory Comprehension and Expressive

Communication subtests and an overall Language score. In addition, this assessment, "targets receptive and expressive language skills in the areas of attention, play, gesture, vocal development, social communication, vocabulary, concepts, language structure, integrative language skills, and phonological awareness" (Zimmerman, Steiner, & Pond, 2009, p.1). The test-retest reliability coefficients ranged from .73 to .86 for the subscale scores and .80 to .89 for the Total Language scores (Zimmerman, et al., 2002). The validity of the instrument was reported acceptable based on internal structure. The values for most age groups for the Auditory Comprehension scores were .70 and above, and .80 and above for the Expressive Communication and Total Language scores.

Books.

This study required a set of 22 children's books for each dyad (see Appendix D). The books included in this study were selected using the criteria for book selection as found in Ezell and Justice (2005) Harth (2007) and Rosa-Lugo and Kent-Walsh (2008). The criteria consisted of: (a) a themed set of books with similar characters throughout and number of pages per book including at least 12 double-page spreads, (i.e., 22 pages) (b) text at a pre-school reading level, (c) written in Spanish and, (d) topics of interest to child participants (based on parent reports from Demographic Questionnaire see Appendix C). The set of books that met the book selection criteria were ordered online by the researcher from the *Nick Jr. Dora the Explorer* and *Go Diego Go* book series. The researcher ordered one set of books for each family.

Parent Training and other Materials.

The materials for this study consisted of the *Language is the Key* (2003) by Washington Learning Systems Spanish language version. *Language is the Key* (2003) offered parents simple

language facilitation strategies after a brief training. The *Language is the Key* package was comprised of a 25 minute parent- training video (DVD) and manual (pages 31-36). In addition to the *Language is the Key* materials several other training materials were used such as modified parent handouts, parent training script, a video-recording camera, tripod, and personal laptop computer to display video to parents (see Appendix E). Data collection tools included fidelity checklists, a parent training script, parent questionnaires, and a laptop computer with the Microsoft Excel program to record the data and display via graphs (see Appendices E-I) .

The *Language is the Key* program by Washington Learning Systems was selected because it was a dialogic reading program offered in Spanish by the National Headstart Family Literacy Center. Furthermore, *Language is the Key* "develop[s] language skills in young children with language disorder and/or children from minority backgrounds" (Cole, Maddox, Lim & Notari-Syverson, 2002). The curriculum developers reported that the curricula strengthens a child's first language while also supporting the development of English (Cole, Maddox, Lim & Notari-Syverson, 2002). Lastly, *Language is the Key* was selected because the training model addressed six major areas: Early language, literacy and play development, bilingual language development, family involvement, language facilitation, cultural relevance, and adult learning.

Design

The study was a multiple baseline across participants design. Kucera and Axelrod (1995) stated that multiple-baseline designs are, "particularly well-suited to literacy research" (p. 47). Thus, this experimental design was selected primarily because of its appropriateness of use with literacy research and young children with varying abilities and/or special needs (Barger-Anderson, Domaracki, Kearney-Vakulick, & Kubina, 2004; Neuman & McCormick, 1995;

Odom & Strain, 2002). In addition, multiple baseline across participants allowed for an in depth analysis of individual participant progress and changes in behaviors over time (Kazdin, 1982).

A unique characteristic of multiple baseline across participants allowed for each participant to act as his or own control (Neuman & McCormick, 1995). The "changes [in behavior or child outcomes] are compared with the student's own pre-intervention level of responding… and is accomplished by collecting baseline data" (Neuman & McCormick, 1995, p.5). This comparison allowed for the design to be considered experimental versus descriptive or correlational (Horner, Carr, Halle, McGee, Odom & Wolery, 2005). Further, multiple baseline across participants demonstrated a documentation of causal, functional, relationships between independent and dependent variables. Multiple baseline allowed for within and between subject comparisons to control for major threats to internal validity and systematic replication to enhance external validity (Martella, Nelson, & Marchand-Matella, 1999, Horner et al., 2005). Neuman and McCormick (1995) suggested that the best ways to attend to the issues of external validity include: (a) provide a rich and detailed description of the setting and the intervention, (b) detailing the measures, and (c) generalizing the results to a particular theory. In addition, Odom and Strain (2002) advocated for researchers to include clear evidence for maintenance, generalization and social validity of treatments.

The National Academy of Sciences (NAS) stated that single-subject research methodology meets the principles of scientific research: (a) conducting an empirical investigation, (b) linking findings to a theory of practice, (c) using methods that permit direct investigation, (d) providing a coherent chain of reasoning, and (e) replicating and generalizing across studies (Shavelson & Towne, 2002)" (Odom & Strain, 2002, p.151). Another benefit of multiple baseline was the appropriateness for application with a very specific group of young

children. It was difficult to find similar participants who met the participation criteria because of the variability in language, acculturation, customs, styles of interactions, immigration experience, socio-economic status of each potential participant. Thus, even with some variability in participants, the multiple baseline allowed each participant to be their own control (Herz & Gullone, 1999; Hyun, 2001; Kagitcibasi & Poortinga, 2000; Nauck, 2001; Stewart, Bond, Deeds, & Chung, 1999 in Huer & Saenz, 2003). Multiple baseline across participants provided the researcher with greater flexibility to account for these issues yet preserved experimental control.

The phases in this study included: baseline, followed by intervention which included a two hour parent training session with two shared book reading sessions and eight consecutive coaching sessions, and five maintenance sessions two weeks after intervention (see Table 2). The social validity of the study was also addressed by parents who answered questions from the Social Validity Questionnaire (Appendix I).

Independent Variable

The independent variable was the intervention which consisted of a two-three hour parent training (the *Language is the Key* parent training video, manual and parent handouts see Appendix E) and the researcher coached mothers on the use of the CAR Dialogic reading strategies during mother-child shared book reading sessions in intervention. For more details on the coaching methods see the following Procedures and Intervention section.

Dependent Variables

The dependent variables were (a) the rate of CAR steps during parent-child shared book reading sessions and (b) the rate per minute of words expressed by the child participants (expressive vocabulary) during a shared book reading session with their parent (both in English and Spanish).

Procedures

Table 2

Timeline per Parent-Child Dyad

Baseline	Intervention	Maintenance
(4-7 sessions)	First 2 sessions consisted of Parent Training with video feedback (2 sessions) Following sessions included parent coaching on an as needed basis provided by researcher (8 sessions)	without parent coaching (5 sessions)

Table 2 displays the three phases of the study that the three mother-child dyads participated in: baseline followed by the intervention and maintenance sessions (see Table 2).

Baseline.

All three mother-child dyads participated in baseline during Week 1. The researcher went to the homes of the three mother-child dyads and gave the mothers identical books for each session and asked them to, "Read to your child" (Lea a su hijo). The two books used in the parent training shared book reading sessions were *Dora Salva al Príncipe* and *La Caza de Tesoro de Dora*. The researcher videotaped all shared book reading sessions within the home. After each session, the researcher removed the books and brought a new book for the following sessions. The same books were used in each phase for each parent-child dyad and removed by the researcher after each session to preserve more experimental control and reduce extraneous variables from possibly influencing the results of the study.

The researcher video-recorded each session and recorded the data collection on Fidelity

checklists and the information was transferred and charted on the researcher's laptop computer. The graphs were visually analyzed and a stable baseline trend was determined when each participant had a minimum of four stable data points. The dyad with the lowest rate of vocabulary words expressed by the child during shared-book reading participated first in the Intervention phase while the other two parent–child dyads continued in baseline. Multiple probes were collected throughout baseline data collection for Dyad 3 (Horner & Baer, 1978).

Intervention.

Prior to Intervention the researcher verbally notified each mother participant via phone that their full undivided attention was needed during the intervention including the two parent training sessions and that during parent training parents would learn about the shared book reading strategies and practice the strategies with their children. This notification was important in order for parents to make arrangements for caretaking of other siblings during the time period when the researcher would be present at the homes (i.e. the mothers arranged for the child participant's siblings to play with toys or do homework in their rooms or the fathers took the children to play or eat outside the house).

The Intervention phase consisted of a Parent Training (see Table 3) including two shared book reading sessions with the dyads followed by eight parent coaching sessions by the researcher during mother-child shared book reading. The duration of the parent training took approximately 2-3 hours and was conducted in one day at each dyad's home. Once Dyad 1 completed the Parent Training and displayed an upward change in trend line between baseline and intervention, the second dyad with the lowest rate of vocabulary during baseline began the parent training followed by eight coaching sessions and continued to Maintenance phase. The third dyad was kept in baseline and once the second dyad displayed a change from baseline to

intervention, the third dyad started Parent Training.

Table 3

Intervention: Initial Two Hour Parent Training with Coaching

	Participants	Duration
1. Watch parent instructional video and ask questions about the movie	Parent and Researcher	25 -minute video and review the following 3 questions below (about 5-10 minutes)
2. Review the *Language is the Key* manual & handouts	Parent and Researcher	15-30 minutes
3. Review 2 practice books and practice with researcher	Parent and Researcher	5-10 minutes
4. Practice with child for two sessions	Parent and child; researcher videotapes session	20 minutes
5. Video feedback and coaching from researcher	Parent and researcher; (child plays with toys)	20-30 minutes
6. Parent takes quiz	Parent	10-15 minutes
7. Researcher scores the quiz	Researcher	1-5 minutes

Step 1 Watch Parent Instructional Video.

First, the parent in Dyad 1 watched the 25-minute parent instructional video on Dialogic reading using *Language is the Key* strategies in Spanish. After watching the video, the researcher asked the parent three questions and recorded responses (see Intervention Parent

Training script Appendix E1).

Step 2 Review Parent Handouts.

Next, the parent and researcher reviewed the Parent Handouts and went over the examples in the handouts (see Appendix E1-E3).

Step 3 Review of Books and Practice with Researcher.

In Step 3, the researcher and parent reviewed two pre-school level children's books to make sure parent could read the words and changed any unfamiliar words as necessary. For example, parents from different Spanish-speaking countries have different names for certain words. For example, some Hispanic parents may preferred to use the word "Changuito" instead of "mono" (monkey) depending on where they are from. The meaning of the word remains the same. Thus, the parent would write in the book the word that the parent prefers to use. Next, the researcher and parent reviewed the *CAR* Steps from the Parent Handout which was placed beside the parent (Appendices E2 and E3). At this time, the parent practiced the *CAR* steps with two children's books and the researcher pretended to be the child. If the mother struggled, the researcher modeled for the mother using examples from the Parent Handouts.

Step 4 & 5 Practice with Child and Video Feedback.

Next, the researcher and parent reviewed the parent handout in Spanish (see Appendices E4-E5) and the parent practiced implementing the *CAR* steps with their child during a shared book reading session. This session was videotaped and later displayed to parent via the laptop (child leaves and plays with toys nearby) and researcher provided feedback. Parent and researcher reviewed the video and the researcher and parent discussed which steps were implemented correctly and which steps needed more support. This practice session with video

feedback was repeated one more time using a different book.

Step 6 and 7 Parent Quiz.

After the two practice sessions, the parent completed a quiz to determine whether they understood the *CAR* strategies and provided examples of each step in Spanish (see Appendices E6-E7). The parent needed to score 83% (5/6) on this quiz to show mastery and complete Parent Training and continue the other sessions within Intervention with Parent Coaching. However, if the parent was not able to pass the quiz, the researcher provided more coaching and modeling as needed. The extra sessions could be videotaped and parent received feedback from the researcher. The parent could retake the parent quiz two additional times besides until reaching the criteria (total of three times taking the quiz). If the parent was unable to pass the quiz on the third attempt a separate practice session would be necessary, following the same procedure as mentioned above. In this study, the three mothers completed and passed the parent quizzes within the first attempt. The three dyads continued the intervention phase with coaching in order to have high rates of correct parent implementation of the *CAR* strategies.

Intervention with Parent Coaching.

Once Dyad 1 mother passed the parent quiz, the dyad moved to eight sessions where the researcher provided coaching if needed. The researcher continued to videotape each shared book reading session. The coaching consisted of two steps. First, the researcher provided the parent handout with the Sample *CAR* Strategies (see Appendices E8-E15) and reviewed the handout with the mother prior to the mother-child book sharing session. Second, the parent was instructed to implement a minimum of one *CAR* cycle per two page spread of the book (12 opportunities per book) during shared book reading with their child. The delivery of at least one *CAR* cycle per two-page spread was decided unanimously by the research committee prior to

data collection in order to have uniformity and a way to increase mother's fidelity of treatment. The mother was told that the researcher would prompt the mother if they missed one of the *CAR* steps during each first opportunity within each two-page spread. For example, if the mother implemented step C and step A, and forgot step R, the researcher would prompt the parent by verbally saying, "Responder agregando un poco mas" (Respond by adding some more) and then the mother would implement the missing step with their child in order to complete an entire CAR cycle for the two page spread. The researcher provided the parent with the following prompts during shared book reading: (a) C: *Comentar y esperar (*Comment and wait), (b) A: *Averiguar/hacer preguntas y esperar* (Ask questions and wait) and (c) *R: Responder, agregando un poco mas* (Respond by adding more). A full CAR cycle was counted when a back and forth dialogue occurred between the mother and child and all three CAR steps were covered during this opportunity. The following three examples would be counted as full CAR cycles during shared book reading:

1. The child makes a comment, then the mother asks a question, the child responds and mother expands on what the child said.
2. The mother makes a comment, the child asks a question, mother responds to question, child responds and mother adds more to child's response.
3. The mother comments, asks a question and responds by adding more to child response. Again, the researcher prompted only once during the first opportunity of each two page spread (12 opportunities per book and a total of 12 prompts if needed).

If the parents implemented the CAR cycle, the researcher did not intervene. Parents were asked to complete a minimum of one CAR cycle per two page spread but could do more if they desired to. The researcher assessed the fidelity of parent implementation of

the CAR strategies by completing a Fidelity checklist during each book sharing session (see Appendix F).

Maintenance.

Two weeks after the completion of the Intervention with Parent Coaching phase, five follow-up observations were conducted to determine maintenance of the CAR strategies but the parent and the children's rate of vocabulary per minute during a shared book reading session. Parents were instructed to read to their children, "Lea este libro a su hijo/a" (Read this book to your child). At this time, the researcher did not provide the parent with the parent handout or coaching. The researcher videotaped these sessions.

Analysis and Recording of Data

Each shared book reading session between mother-child dyads was videotaped by the researcher (Baseline, intervention and maintenance). During each book-sharing session the researcher observed the parent implementing the *CAR* strategies and completed the Fidelity Checklist (see Appendix F). After each session, the researcher reviewed the videos and recorded the frequency count of total vocabulary words expressed by the child per book-sharing session using the Fidelity Checklist. The researcher created graphs with EXCEL to facilitate visual analysis and to determine changes in the dependent variables (Kazdin, 1982). The Percentage of Nonoverlapping Data (PND) was calculated to determine the effects between baseline and intervention (Scruggs, & Mastropieri,1998). In addition, the completed Social Validity Questionnaires along with the videotapes of each dyad was reviewed by an alternate observer to corroborate the findings.

Ethical considerations

All videotapes and transcription records will be destroyed upon the completion of the study. Participants' identities were kept confidential. The researcher made every effort to prevent anyone not on the research team from knowing who provided information or the content of that information. For example, parent-child dyad participant's information was assigned a code number. The list connecting names to this number were kept in the researcher's office on a password-protected computer. When the study was completed and the data analyzed, the list will be destroyed. Participants' names or any other identifiers are not included in the study write-up.

Inter-Observer Agreement

The researcher trained two bilingual graduate-students in Exceptional Student Education from the University of Central Florida on the *CAR* strategies, how to review the videotapes, complete the Fidelity Checklist and analyze the data (see Appendices E2, E3, F,G, H). During the training, the researcher met with each graduate student individually and provided handouts about the *CAR* strategies and the Fidelity Checklist and reviewed them. To practice fidelity of implementation, both researchers watched two videos displayed from the researcher's laptop with a child-parent dyad during shared book reading sessions. The two researchers calculated the number of correct *CAR* cycles and frequency count of the child's total number of words expressed and compared Fidelity checklist. Both of the researcher checklists were compared to reach point-by-point agreement. The total number of agreements divided by the total number of agreements plus disagreements was multiplied by 100 in order to establish Inter-rater agreement for training procedure reliability (Kazdin, 1982). The two graduate students watched two more practice videos for a total of four practice videos. The two trained bilingual graduate student researchers were provided with randomly selected (up to 20 percent) of the videotapes for each parent-child dyad to analyze and ensure the integrity and consistency of data recording (Kazdin,

1982; Neuman & McCormick, 1995; Rosa-Lugo & Kent-Walsh, 2008). These inter-observer agreement videotapes were gathered throughout the baseline, intervention and maintenance phases.

Treatment Integrity

The researcher completed Fidelity Checklists for each parent-child shared book reading session throughout the study. In addition, a portion of the sessions were observed by Inter-rater observers who also completed the Fidelity Checklists (see Appendices F-H).

Social Validity

After maintenance, the researcher asked parents questions from the Social Validity Questionnaire (see Appendix I). The researcher was interested whether parents found the *CAR* shared-book reading strategies useful, practical, and whether they planned on implementing the *CAR* strategies with their children in the future. According to Wolf, (1978) social validity questions should be explored before and after the intervention to address the intervention acceptability goals, procedures, and outcomes from the participant point of view.

CHAPTER IV: RESULTS

The purpose of this study was to determine the effects of training and coaching Hispanic mothers on the implementation of dialogic reading strategies during shared book reading in the home. Specifically, this study advanced the following research questions:

1. Does parent implementation of *Comment, Ask Questions* and *Respond with More* (*CAR*) reading strategies during shared book reading have an effect on the child's total oral vocabulary?
2. To what extent does training and coaching impact Hispanic mother's implementation of *CAR* reading strategies?
3. What is the rate of mother implementation of each individual *CAR* strategy per shared book reading session?
4. What are the views of Hispanic mothers towards shared book reading strategies?

Three parent-child dyad participants were selected from two Headstart preschools located in an agricultural community in central Florida. The community was made up of primarily settled migrant families from Mexico who worked in the citrus industry. The researcher implemented a multiple- baseline across three parent-child dyads. The phases of this study were baseline, intervention including a 2-3 hour parent training session and subsequent coaching and maintenance.

Every shared book reading session was video-recorded by the researcher at each dyad's home. Throughout baseline, intervention and maintenance, and prior to each shared book reading session, the researcher provided each parent-child dyad with a different preschool level book in Spanish from the *Nick Jr Dora the Explorer and Diego* series. Each book was 22 pages and had 12 two-page spreads including the book cover. However, the two books used in the first

two intervention parent training sessions were shorter, at 10 pages each with six two- page spreads including the book cover.

During intervention, the researcher trained and coached Hispanic parents in dialogic reading strategies during shared book reading using *Language is the Key* by Washington Learning Systems. The dialogic reading strategies consisted of:

1. ***C****omment and wait up to 5 seconds for child to respond.*
2. ***A****sk questions and wait up to 5 seconds for child to respond.*
3. ***R****espond by adding some more to what the child says.*
4. *Optional-Repeat what the child says in English to the home language-Spanish.*

The first two sessions within intervention were part of the parent training conducted by the researcher at each dyad's home. During the parent training, the mother and researcher watched a 25 minute parent -training video from *Language is the Key* by Washington Learning Systems, discussed the video and read the parent handouts. Next, the researcher instructed for mothers to implement at least one *CAR* cycle per two -page spread and practiced implementing the *CAR* strategies (six *CAR* cycles for the two parent training shared book reading sessions). In addition, two mother-child shared book reading sessions were video-recorded and then projected on the researcher's laptop for the mother and researcher to review and discuss mother's accuracy of delivery of *CAR* cycles (see Appendix E1). Lastly, each mother took a quiz to demonstrate their knowledge and understanding of the *CAR* strategies. Once the mothers passed the quiz with a minimum score of 83%, each dyad participated in eight intervention sessions and the researcher used coaching prompts as needed. If the mother missed a *CAR* step, the researcher prompted the mother only once per two page spread. Coaching consisted of verbal prompts in Spanish: *Comentar y esperar, Hacer pregunta y responder agregando un poco mas.* If the mother missed

a *CAR* strategy, the researcher reminded the mother of the missing step, this was done in order for mother to maintain a high fidelity of treatment. If the mother implemented the *CAR* cycle, then coaching was not offered (for further details on coaching procedures see Chapter 3 Intervention section).

The independent variable was the intervention package of: *Language is the Key* by Washington Learning Systems parent training video and manual, parent handouts, and researcher providing parent video feedback and coaching throughout intervention. The dependent variables included parent implementation of the *CAR* strategies with the child and the child's total oral vocabulary words per shared-book reading sessions.

This chapter will present the results for each parent-child dyad for baseline, intervention, and maintenance. Results of the inter-observer agreement, treatment integrity and social validity will also be discussed. The following Tables with the results of the data across dyads will used to support the results.

Table 4

Total Vocabulary Words Expressed by Child per Shared Book Reading Sessions

	Child 1	Child 2	Child 3
	M	*M*	*M*
Baseline			
M Words	16	23.16	31.71
Range of Words	(10-21)	(16-33)	(19-69)
M Rate words per minute	2.8	5.51	6.06
M Duration of sessions in Minutes	6:01	5:14	5:29
Intervention			
M Words	89.9	137	223
Range of Words	(62-133)	(38-137)	(52-384)
M Rate words per minute	21.77	14.11	19.28
M Duration of sessions in Minutes	4:59	9:59	12:52
Maintenance			
M Words	68.2	170.4	301.8
Range of Words	(31-93)	(120-292)	(165-507)
M rate words per minute	17.02	20.42	16.19
M Duration of sessions in Minutes	4:00	10:36	18:33

Table 5

Mean Rate per Minute of Total Parent–Child CAR Cycles and Mother Implementation of Individual C-A-R During Shared Book Reading

	Dyad 1	Dyad 2	Dyad 3
	M	*M*	*M*
Baseline			
CAR Cycle	0	0	0
Comments	0	0	0.44
Ask questions	0.04	0.58	0.34
Responding with more	0.04	0.36	0.44
Duration of sessions in minutes	6:01	5:14	5:29
Intervention			
CAR Cycle	2.64	1.68	1.45
Comments	2.58	1.62	1.55
Ask questions	2.78	3.73	1.74
Responding with more	2.79	2.93	3.37
Researcher coaching prompts	0.72	0.27	0.10
Duration of sessions in minutes	4:59	9:59	12:52
Maintenance			
CAR Cycle	1.96	1.33	0.82
Comments	2.63	1.53	0.91
Ask questions	2.36	4.52	1.65
Responding with more	2.29	3.63	2.94
Duration of sessions in minutes	4:00	10:36	18:33

Table 6 PLS-4

Assessment Data

	Child 1	Child 2	Child 3
Age of Child	4-3	3-5	5-0
Spanish version PLS-4 Standard Score	95	75	82
Spanish Auditory Comprehension/ Expressive Communication	90/100	86/71	83/85
English version PLS-4 Standard Score	98	67	69
English Auditory Comprehension/ Expressive Communication	104/92	71/70	73/71

Dyad 1

Mother 1 was 28 years old and went up to 11th grade in high school, later completed a General Education Development (GED) and some technical school in the health field. Mother 1's parents were migrant farm-workers from Mexico but she was born in the US and now lived in a settled migrant community in central Florida. Mother 1 worked fulltime as a health assistant and in a retail store. Mother reported that both English and Spanish were spoken in the home (see Table 1) and the family owned five children's books. Child 1 was a four year- three month old male who lived with his single mother and four older siblings. Child 1's father lived in another state. Child 1 attended preschool since 2007 and received speech services in school. Child 1 enjoyed books about animals and cars. Once Child 1's mother signed the study permission forms, the Preschool Language Scale-4th Edition in English and Spanish were administered to the child prior to data collection in order to determine oral language abilities. Child 1's Total language score on the PLS-4 were within the Average range both in English and Spanish. Child 1's Auditory Comprehension score was higher in English than Spanish and his Expressive Communication score was higher in Spanish (see Table 6).

Dyad 1: Baseline.

During all phases of the study, the researcher video-recorded each shared book reading session at Dyad 1's home. At this time, the researcher recorded the total vocabulary words expressed by the child and the parent implementation of the CAR cycles during shared book reading. The baseline data consisted of four sessions that exhibited a stable trend (see Figure 1 below). The mean duration of shared book reading for Dyad 1 during baseline was six minutes and 1 second (6:01).

Total expressive vocabulary.

During baseline, the child's mean rate of vocabulary words expressed per minute during shared book reading was 2.8 words per minute (see Table 4 and Figure 1).

CAR.

Dyad 1 had a mean rate of zero CAR cycles per minute and mother 1 implemented 0 Comments per minute, 0.04 Ask Questions and 0.04 Responding with more (see Table 5 and Figure 2-3).

Dyad 1: Intervention.

Intervention consisted of parent training with two shared book reading sessions followed by eight sessions where the researcher provided coaching prompts to the mother as needed during shared book reading. After the parent training, mother 1 scored 100% on the parent quiz for knowledge of *CAR* strategies (see Appendices E4 and E5). The mean duration of the shared book reading sessions during intervention was four minutes and 59 seconds (4:59). The Percent of Nonoverlapping Data (PND) was calculated to determine the effect that the intervention of training and coaching parents on the *CAR* strategies had on the child's expressed vocabulary and the mother's delivery of *CAR* strategies during shared book reading (Scruggs & Mastropieri, 1998). The PND is calculated by finding the highest data point in baseline and then calculating the percentage of data points that exceed the highest point in baseline. A calculation of ninety percent or above is considered a highly effective intervention, 70 to 90 percent as effective, 50 to 70 as low effective, and below 50 percent as an ineffective intervention.

Total expressive vocabulary.

In intervention, Child 1 had a mean rate of 21.77 expressed words per minute during shared book reading. The PND for Child 1 was 100 percent of the data points, which were above the highest baseline point, resulting in high effectiveness.

CAR.

Dyad 1's mean rate was 2.64 *CAR* cycles per minute, mother 1 implemented 2.58 *Comments* per minute, 2.78 *Asking questions* per minute, and 2.79 *Responding with more* per minute. The mean rate of researcher coaching prompts during shared book reading session was 0.72 prompts per minute. Dyad 1's data points of *CAR* cycles during intervention were 100 percent above the highest point in baseline, resulting in high effectiveness. Mother 1's PND data points of *Comments, Asking questions* and *Responding with more* were 100 percent higher than the highest data point in baseline, resulting in strong effectiveness.

Dyad 1: Maintenance.

Two weeks after the completion of intervention, the researcher went back to Dyad 1's home and videotaped five more consecutive parent-child shared book reading sessions. This time, the researcher asked the parent to, "Read this book to your child" (Lea este libro a su hijo). The mother did not receive any parent handouts or coaching at this time. The mean duration of shared book reading sessions for Dyad 1 was four minutes (4:00).

Total expressive vocabulary.

During Maintenance, Child 1's mean rate of words expressed during shared book reading was 17.02 words per minute.

CAR.

Dyad 1's mean rate of *CAR* cycles were 1.96 per minute including with 2.63 *Comments* per minute, 2.36 *Asking questions* per minute, and 2.29 *Respond with more* per minute.

Dyad 2

Child 2 was the youngest of the three participants at three years five months old. Child 2's mother was 32 years old and a married fulltime homemaker with Child 2 and three older children. Mother 2 reported that her husband worked at the citrus packing industry for many hours at a time and returned home late on a daily basis. Mother 2 attended high school up to 11th grade. Mother 2's parents were migrants from Mexico and she lived with her family in a settled migrant community in central Florida. Mother reported that both English and Spanish were spoken in the home. Child 2 has been attending preschool since spring 2010 and received speech and language services there. Mother 2 reported that the family owned three children's books and that Child 2 enjoyed books about princesses, *Dora the Explorer,* animals and pretty much everything else. Once Child 2's mother signed the study permission forms, the Preschool Language Scale-4th Edition in English and Spanish were administered to the child prior to data collection in order to determine oral language abilities. Child 2's PLS-4 total Language score in English and Spanish were within the low range. Particularly, Child 2's Auditory Comprehension score was within the low range in English but within the Below Average range in Spanish, thus suggesting that her receptive skills were stronger in Spanish than in English (see Table 6).

Dyad 2: Baseline.

During baseline, the researcher videotaped each shared book reading at Dyad 2's home. At this time, the researcher recorded the total vocabulary words expressed by the child and the parent implementation of the *CAR* cycles during shared book reading. The baseline data

consisted of four sessions that exhibited a stable trend and then two points slightly increased (see Figure 1). The mean duration of shared book reading for Dyad 2 during Baseline was five minutes and 14 seconds (5:14).

Child total expressive vocabulary.

During baseline, Child 2 had a mean rate per minute of 5.51 words expressed per minute during shared book reading (see Table 4 and Figure 1).

CAR.

During Baseline, Dyad 2's mean frequency of *CAR* cycles per shared book reading sessions was zero times. The rate per minute of *CAR* cycles for Dyad 2 was 0, with 0 *Comments* per minute, 0.58 *Asking questions* per minute, and 0.36 *Responding with more* per minute (see Table 4 and Figure 2-3).

Dyad 2: Intervention.

Intervention consisted of parent training with two shared book reading sessions followed by eight sessions where the researcher provided coaching prompts to the mother as needed during shared book reading. After the parent training, mother 1 scored 100% on the parent quiz for knowledge of *CAR* strategies. The mean duration of the shared book reading sessions during Intervention was nine minutes and 59 seconds (9:59). The Percent of Nonoverlapping Data (PND) was calculated to determine the effect that the intervention of training and coaching parents on the *CAR* strategies had on the child's expressed vocabulary and the mother's delivery of *CAR* strategies during shared book reading (Scruggs & Mastropieri, 1998). The PND is calculated by finding the highest data point in baseline and then calculating the percentage of data points that exceed the highest point in baseline. A calculation of ninety percent or above is

considered a highly effective intervention, 70 to 90 percent as effective, 50 to 70 as low effective, and below 50 percent as an ineffective intervention.

Child total expressive vocabulary.

During intervention, Child 2's mean rate per minute of words expressed during shared book reading was 14.11 words per minute. Child 2's data points during intervention were 90 percent above the highest data point in baseline, thus indicating effectiveness of PND.

CAR.

During Intervention, Dyad 2 had a mean rate of 1.68 *CAR* cycles per minute during shared book reading. Furthermore, Mother 2 implemented a mean rate of 1.62 *Comments* per minute, 3.73 *Asking questions* per minute and 2.93 *Responding with more* per minute. The mean rate of researcher coaching prompts was 0.27 per minute. The data points within intervention were 100% higher than the highest data point in baseline, resulting in strong effectiveness of PND. Mother 2's PND points within intervention of *Comments, Asking questions* and *Responding with more* were 100 percent above the highest point in baseline resulting in strong effectiveness.

Maintenance.

Two weeks after the completion of the Intervention phase, the researcher went back to Dyad 2's home and videotaped five more consecutive parent-child shared book reading sessions. The researcher asked the parent to, "Read this book to your child" (Lea este libro a su hijo). Parent 2 read a different book each session. The parent did not receive any parent coaching at this time. The mean duration of shared book reading for Dyad 2 during Maintenance was ten minutes and 36 seconds (10:36).

Child total expressive vocabulary.

Child 2 had a mean rate of 20.42 vocabulary words expressed per minute in Maintenance.

CAR.

During Maintenance, the rate per minute of *CAR* cycles was 1.33, with 1.53 *Comments* per minute, 4.52 *Asking questions* per minute, and 3.63 *Responding with more* per minute.

Dyad 3

Child 3 was five years old and the oldest of the three child participants. He lived with his parents and four siblings. Mother 3 completed the 7th grade and later earned her GED. Mother 3 worked as a preschool teacher and was earning her child development credential (CDA). Mother 3 grew up traveling between states because her parents were migrant farm workers from Mexico. However, now the family lived in a settled migrant community in central Florida. At times throughout data collection the researcher observed Mother 3's husband who returned from work in landscaping and helped the family by washing the dishes, providing food and playing with Child 3's siblings outside the home while dyad 3 engaged in shared book reading. Mother 3 reported that both English and Spanish were spoken in the home, but more Spanish. The family owned 25 children's books and the mother reported that Child 3 enjoyed books about animals and *Dora the Explorer* and *Diego*. Mother 3 reported that Child 3 entered preschool for the first time in Spring 2010 where he also received speech and language services. Once Child 3's mother signed the study permission forms, the Preschool Language Scale-4th Edition in English and Spanish were administered to the child prior to data collection in order to determine oral language abilities. Child 3's performance on the PLS-4 in Spanish in Total Language score was within the Below Average range in Spanish and Very Low in English (see Table 6). Child 3's

scores in Auditory Comprehension and Expressive Communication were Below Average in Spanish within the Low range in English. Thus, based on the results of the PLS-4-Child 3's language skills were stronger in Spanish than English.

Dyad 3: Baseline.

During baseline, the researcher videotaped Dyad 3 during shared book reading sessions at their home. At this time, the researcher recorded the total vocabulary words expressed by the child and the parent implementation of the *CAR* cycles during shared book reading. The baseline data consisted of seven sessions that exhibited a stable trend (see Figure 1). The mean duration of shared book reading for Dyad 3 during Baseline was 5 minutes and 29 seconds (5:29).

Child total expressive vocabulary.

The measurement of a child's total expressive vocabulary was a frequency count of the total number of verbs, nouns or other words expressed during a shared book reading session. Child 3's mean rate of vocabulary words expressed during shared book reading was 6.06 words per minute during baseline (see Table 4 and Figure 1).

CAR.

During Baseline, the rate per minute of *CAR* cycles was zero and Mother 3 delivered a mean rate of 0.44 *Comments* per minute, along with 0.34 *Asking questions* per minute, 0.44 *Responding with more* per minute (see Table 5 and Figure 2-3).

Dyad 3: Intervention.

Intervention consisted of parent training with two shared book reading sessions followed by eight sessions where the researcher provided coaching prompts to the mother as needed during shared book reading. After the parent training, Mother 1 passed the parent quiz with a

score of 83% for knowledge of *CAR* strategies (see Appendix H and I) (for further details on coaching procedures see Chapter 3 Intervention section). The mean duration of the shared book reading sessions during Intervention was 12 minutes and 52 seconds (12:52). The Percent of Nonoverlapping Data (PND) was calculated to determine the effect that the intervention of training and coaching parents on the *CAR* strategies had on the child's expressed vocabulary and the mother's delivery of *CAR* strategies during shared book reading (Scruggs & Mastropieri, 1998). The PND is calculated by finding the highest data point in baseline and then calculating the percentage of data points that exceed the highest point in baseline. A calculation of ninety percent or above is considered a highly effective intervention, 70 to 90 percent as effective, 50 to 70 as low effective, and below 50 percent as an ineffective intervention.

Child total expressive vocabulary.

In intervention, Child 3 had a mean rate of 19.28 vocabulary words expressed per minute. Child 3 had 100 percent of PND points within intervention higher than the highest data point in baseline resulting in strong effectiveness.

CAR.

During Intervention, the mean rate of *CAR* cycles was 1.45 cycles per minute, including 1.55 *Comments* per minute, 1.74 *Asking questions* per minute and 3.37 *Responding with more* per minute. The mean rate of researcher coaching prompts was 0.10 prompts per minute. Dyad 3 had 100 percent of the *CAR* Cycle data points above the highest data point in baseline resulting in strong effectiveness. In addition, *Comments* and *Responding with more* resulted in strong effectiveness as well. However, Mother 3's *Asking questions* PND points in intervention were 90 percent above the highest data point in baseline, resulting in effective.

Dyad 3: Maintenance.

Two weeks after the completion of the Intervention phase, the researcher went back to Dyad 3's home to videotape five more consecutive parent-child shared book reading sessions. This time, the researcher asked the parent to, "Read this book to your child" (Lea este libro a su hijo). Parent 3 read a different book each session. The mother did not receive any parent coaching at this time. The mean duration of a shared book reading sessions during Maintenance for Dyad 3 was 18 minutes and 33 seconds (18:33).

Child total expressive vocabulary.

The measurement of a child's total expressive vocabulary was a frequency count of the total number of verbs, nouns or other words expressed during a shared book reading session. In maintenance, Child 3's mean rate of vocabulary words expressed was 16.19 words per minute.

CAR.

During Maintenance, the mean rate of *CAR* cycles was 0.82 *CAR* cycles per minute, 0.91 *Comments* per minute, 1.65 *Asking questions* per minute and 2.94 *Responding with more* per minute.

Treatment Integrity

The researcher completed Treatment Fidelity Checklists (see Appendix F) and recorded the CAR cycles and individual CAR steps and child vocabulary words expressed by the child during every shared book reading session. Each shared book reading session was videotaped. In addition, two graduate students in Exceptional Student Education were trained on data collection procedures for the study and also completed Fidelity Checklists to corroborate the data collected by the principal researcher.

Inter-observer Agreement

The researcher used a point by point agreement formula to calculate the inter-observer agreements by totaling the agreements divided by the total agreements plus disagreements and then multiplied by 100 (Kazdin, 1982). The researcher randomly selected 20% of the videotaped shared book reading sessions and provided the videotapes to two bilingual graduate students in Exceptional Student Education at UCF. The inter-observer agreement for the total vocabulary words resulted in 92.5%, with a range of 83%-100%. The inter-observer agreement for the total *CAR* cycles resulted in 97.6% with a range of 84%-100%.

Social Validity

Once Maintenance sessions were completed, the researcher asked the mothers questions from a Social Validity Questionnaire (see Appendices E1 and E2) to address the intervention acceptability goals, procedures, and outcomes from the parent point of view (Wolf, 1978). An alternate observer reviewed the transcripts of the mother responses on the Social Validity Questionnaires and the videotapes of responses and corroborated the following findings.

Goals.

The mothers were asked if the goal to improve child expressive vocabulary was important and all three mothers agreed that increasing expressive vocabulary was important to them. Particularly, Mothers 1 and 3 shared that they wanted their children to improve their speech and language skills. Thus, all three mothers said yes, they agreed that the *CAR* strategies were necessary to help increase the vocabulary of their child.

Procedures.

Mother 1 and 2 shared that the CAR steps were easy to follow and implement. All three mothers found the CAR steps interesting and noticed that their children developed more vocabulary. Mother 1 and 3 said the CAR step that they struggled with the most with was the third step, *Responding with More* while Mother 2 expressed she did not struggle with any of the steps. The easiest CAR step was *Comment* (step1) according to Mothers 1 and 3 and Mother 2 believed *Ask questions* (step 2) was the easiest. The steps that mothers felt the most natural to implement were Step 1 *Comment* for Mother 3 and *Ask questions* (Step 2) for Mothers 1 and 2.

After watching the parent video from *Language is the Key by Washington Learning Systems* during parent training in intervention, the three mothers were asked three questions about the video. The questions consisted of (a) What did you think about the video?; (b) What did you learn?; (c) Do you have any questions about the video? (Appendix E1). The results indicated that all three mothers found the video interesting, learned from it, and did not have any questions about the video. Mothers provided the following comments: Mother 3, "El video me pareció bien, porque usualmente nosotros sabemos que los libros son para leer, pues usualmente no más le leíamos, pero no dejamos que los libros interactúen y preguntar qué es lo que está pasando en el libro o también aprendí que no mas es leer, si no preguntarle qué es lo que miran, que es lo que está pasando, tan solo en las fotos, y aprendí mucho." [The video was good, because usually we know that books are to read, we just read them, but we did not allow for interaction during reading, and to ask what is happening in the storybook or I also learned that you don't just read, you ask questions about what they (children) see in the photos/images, I learned a lot]. Likewise, Mother 2 shared, "Aprendí que en vez de leerle el libro y cerrarlo, los papas tenemos que preguntar más preguntas, como, 'que está haciendo el niño?' Hay que dejar

que los niños miren las imágenes de los libros y comentar con ellos que está pasando." [I learned that instead of reading the book and closing it afterwards, as parents we need to ask more questions such as, 'what is the child doing?' We need to allow for the children to look at the images in the books and comment with them what is happening]. Mother 1 shared, "I learned how to read to my son, I did not expect it to be like that…"

Outcomes.

All three mothers agreed that the best time to implement *CAR* strategies during shared book reading would be in the evening at bedtime, on a daily basis. The three mothers agreed that no changes are needed to improve *CAR* steps. Mother 1and 2 shared they needed to practice more. Mother 1 said, "I think the more I do them [*CAR* steps], the easier it is going to get. It is going to become natural, oh I got to do this one, now I have to do that one…"

Summary

Total Vocabulary.

The three children's total vocabulary words expressed during shared book reading displayed a difference in means from baseline to intervention and maintenance. Particularly, for Child 1 and 3, the mean rate of words expressed per minute per shared book reading session increased from baseline to intervention, and then dropped in maintenance. Child 2's mean rate of words expressed per minute continuously increased from baseline to intervention and maintenance (see Table 4 and Figure 1). Dyad 1's mean duration of shared book reading sessions was longer in baseline than in intervention or maintenance. Dyad 2's mean duration of shared book steadily increased and nearly doubling in Intervention and Maintenance. Dyad 3's mean duration of shared book reading sessions doubled in Intervention and surpassed three times

the mean length of shared book reading in Baseline. Thus, Dyad 2 and 3 increased the time spent between parent-child during shared book reading while Dyad 1 actually decreased the time spent during shared book reading.

CAR Cycles.

All three dyads increased the mean frequency and rate of *CAR* cycles from baseline to intervention. The researcher asked mothers to implement at least one *CAR* cycle during every two page spread, thus a goal of 12 *CAR* cycles per book (and six for the two parent training shared book reading sessions). During Intervention, Dyad 1's mean frequency of *CAR* cycles closely reached the goal with 11.8 cycles per book, and Dyad 2 and 3 exceeded this goal (see Table 5 and Figure 2) with 15.7 and 16.5. During Maintenance, Dyad's 2 and 3 still were able to maintain and exceed the goal with a mean frequency of 12.6 and 15.2 *CAR* cycles respectively per shared book reading session. In contrast, during maintenance Dyad 1's mean frequency of *CAR* cycles dropped to a mean of 7.8 *CAR* cycles per shared book reading session. During Intervention, Dyad 1 received the most prompts out of the three dyads with a mean rate of 0.72 researcher prompts per shared book reading session while Dyad 2 had a mean rate of 0.27 followed by Dyad 3 with a mean of 0.10 prompts.

C-A-R.

All three dyads increased the mean rate of individual *Comments*, *Asking questions,* and *Responding with more* per shared book sharing session between baseline and intervention and maintenance. During Intervention and Maintenance Dyad 1 mother's mean rate per minute of individual *CAR* steps delivered during shared book reading sessions was very similar. In contrast, Dyad 2's highest mean rate was *Asking questions* followed by *Responding with more*

and lastly *Comments.* Mother 3 highest mean rate delivered per shared book sharing session was *Responding with more,* followed by *Asking questions,* and *Comments* (see Table 5 and Figure 3).

Social Validity.

All three mothers shared that they were not aware of the *CAR* strategies to help their children with language development prior to the study. Mothers noticed an improvement in their children's vocabulary and continued to implement the *CAR* strategies even two weeks after the intervention. All three mothers agreed that they would continue implementing the *CAR* strategies during shared book reading in the future.

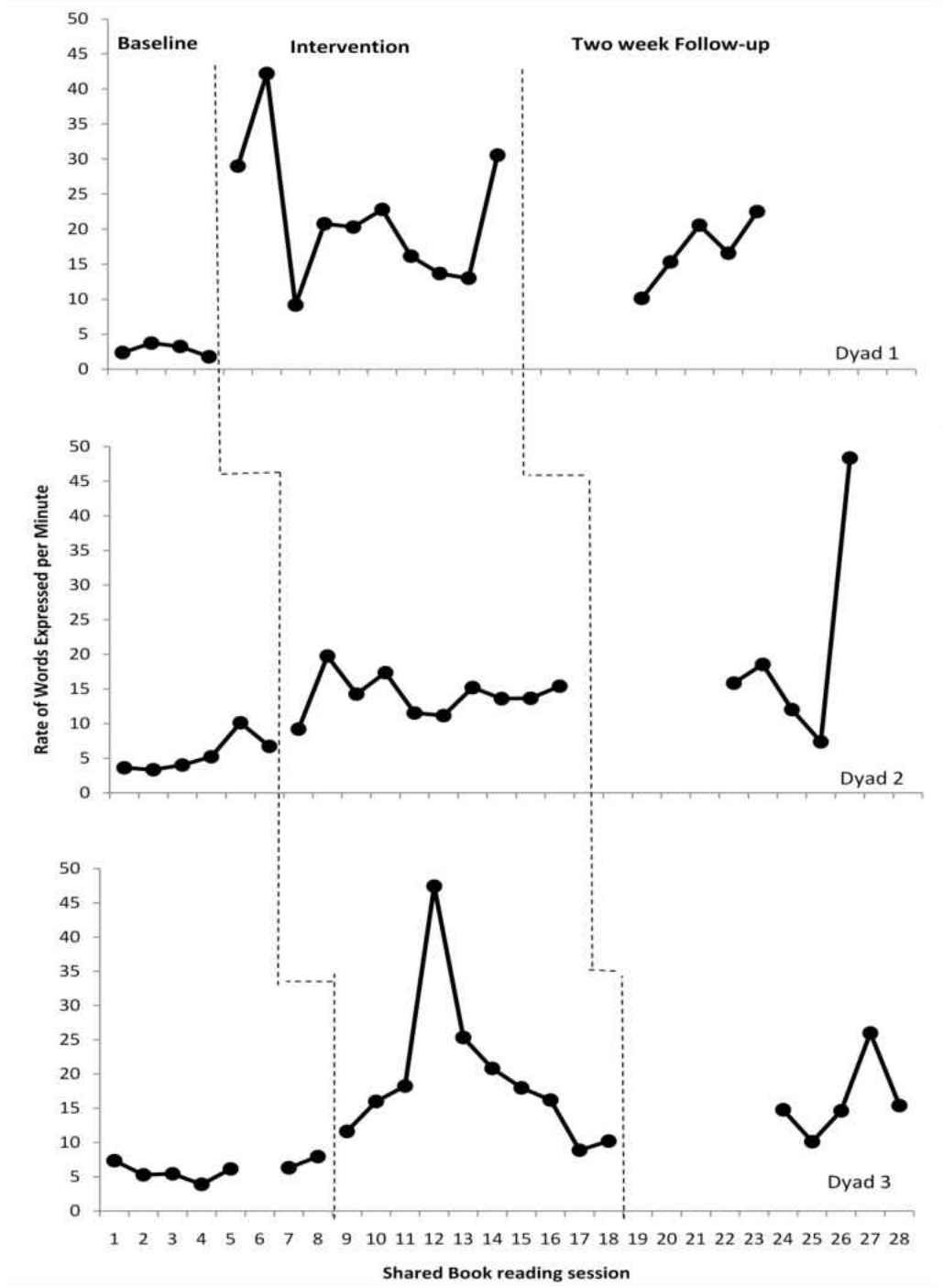

Figure 1

Rate of Vocabulary Words per Minute

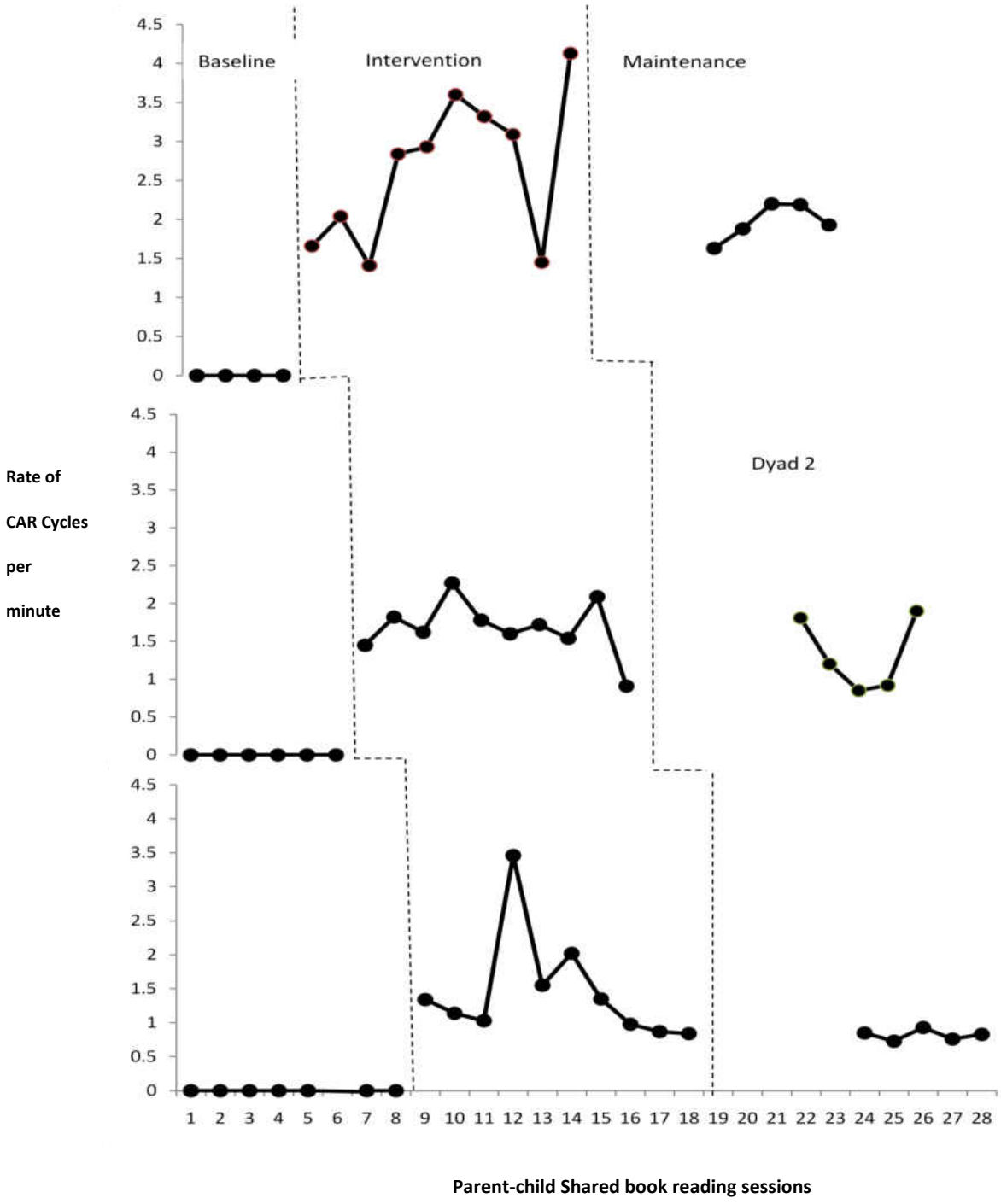

Figure 2

Rate of CAR Cycles per Minute During Shared Book Reading Sessions

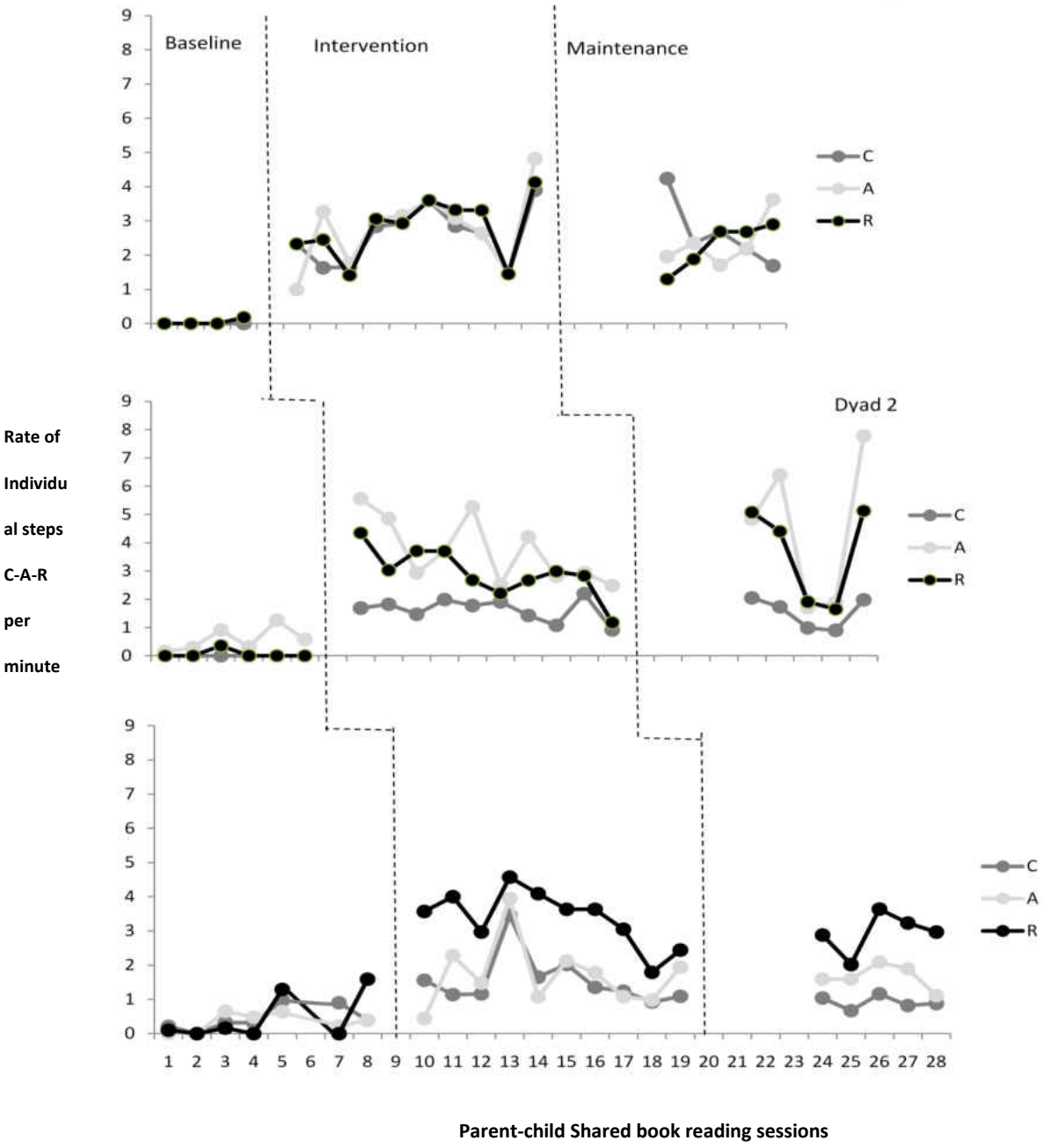

Figure 3

Rate of Individual C-A-R

CHAPTER V: DISCUSSION

The purpose of the study was to evaluate the effects of training and coaching Mexican mothers on dialogic reading strategies in Spanish during shared book reading with their young children with speech and/or language disorders within the home environment. Particularly, the researcher investigated the impact on mother fidelity implementation/delivery of the strategies and the child's total vocabulary during shared book reading. During the intervention, the researcher trained three mothers separately using materials from *Language is the Key* by Washington Research Institute (2003). The training and coaching included the presentation of dialogic reading strategies through a parent training video-Spanish version, modified parent handouts, two video-feedback sessions and immediate coaching of *CAR* dialogic reading strategies if mothers missed a strategy. During intervention, the researcher asked parents to implement at least one *CAR* cycle during every two page spread in order to maintain a high fidelity of implementation throughout the shared book reading sessions, thus a total of 12 *CAR* cycles per book (22 pages per book). The exception was that the two books used during the initial two parent training book sharing sessions had only 12 pages each (see Appendix D). The dialogic reading strategies were:

- ***C****omment and wait up to 5 seconds for child to respond*
- ***A****sk Questions and wait up to 5 seconds for child to respond*
- ***R****espond by adding some more to what the child says*
- *Optional-Repeat what the child says in English to the home language-Spanish*

The participants included three mother-child dyads. The children included two boys and one girl between the ages of three-five years old. Mothers 2 and 3 were born in Mexico and Mother 1 was born in the US but her parents were Mexican migrants. The three families lived within the

same central Florida community of settled migrant farm workers. The three children attended full-day federally funded preschool programs that served low-income families and each child received speech and/or language therapy on a regular basis at school (see Table 1). The language of instruction at school was English however bilingual teacher assistants were present in the classrooms. Mothers spoke both English and Spanish in the homes as reported on the Demographics questionnaire (see Table 1). The training and coaching were conducted in Spanish within the family homes in the evenings. Each shared book reading session was video-recorded by the researcher in each dyad's home at the dining room Table or living room sofa.

The design of the study was a multiple baseline across three mother-child dyads. During the intervention, the three mother participants implemented the CAR strategies with their young children with speech and/or language delays. Each mother-child dyad received a different book each session and books were taken away after each session by the researcher in order to maintain the same consistent opportunities of book viewing per dyad. Each mother-child participants were provided with 19-22 preschool level children's books in Spanish throughout the course of the study. The books selected were from the Nick Jr. *Dora the Explorer and Diego* preschool level book series in the Spanish language. The study included baseline, intervention and maintenance phases.

The research questions were:

1. Does parent implementation of *Comment, Ask questions* and *Responding with more* (CAR) reading strategies during shared book reading have an effect on the child's total oral vocabulary?
2. To what extent does training and coaching impact Hispanic mother's implementation of CAR reading strategies?

3. What is the rate of mother implementation of each individual *CAR* strategy per shared book reading session?
4. What are the views of Hispanic mothers towards shared book reading strategies?

This chapter will summarize the findings of the research results and link the findings with the theoretical foundation and the literature review. Furthermore, this chapter will present the social validity, limitations of the study, and conclude with the implications for research and practice.

Summary of Findings

Total Vocabulary.

The three children's mean rate of total words expressed during shared book reading increased from baseline to intervention. Particularly, for Child 1 and 3, the mean rate of words expressed per minute during shared book reading increased from baseline to intervention, and then dropped in maintenance. Child 2's mean rate of words expressed per minute continuously increased from baseline to intervention and maintenance (see Table 5). Child 2 gains could again be due to Mother 2 delivering a higher mean rate of asking questions and responding with more per shared book reading session. Dyads 2 and 3's mean duration of shared book reading was double that of Dyad 1. Therefore, Dyad 2 and 3 had more time spent during shared book reading which allowed for more opportunities for dialogue and vocabulary development.

There was some variability in data points within intervention and maintenance for the vocabulary words and CAR cycles, across dyads. One possible explanation is that child-mother interests of the book topics varied (some books talked about going to the beach versus another book that covered a trip to the jungle to save animals). Therefore, books that appealed more to certain children or mothers may have had a longer duration and opportunities to expand upon the

child's language development. Also, some books had more pictures that allowed for more language opportunities, such as counting the flowers on the page.

CAR Cycle.

All three mothers implemented at least 12 CAR cycles per shared book reading sessions during intervention. However, there was a slight drop of mean rates of CAR cycles from intervention to maintenance for all three dyads. A possible explanation for this was that parents received parent coaching during intervention and not in maintenance therefore they had extra support to maintain fidelity of implementation during the intervention phase. Mother 1 may have felt overburdened with the multiple responsibilities as a single parent with five children. Mother 1 shared that it was hard for her to balance two jobs, financial stress, and caretaking of five children by herself. Thus, it may have been more difficult for Mother 1 to concentrate on implementing the CAR cycles compared to mothers 2 and 3 who had the support of their husbands for the caretaking and financial responsibility of their children. In addition, Child 1 had some slight behavior issues and required redirection by the mother several times.

C-A-R.

All three dyads increased their mean rate of individual *Comments, Asking questions,* and *Responses by adding more* within shared book reading sessions between baseline and intervention and maintenance. Mother 1 delivered a relatively similar rate of *Comments, Asking questions* and *Responses with more* within each phase. In contrast, Mother 2 delivered a higher frequency of *Asking questions* and *Responses with more* compared to *Comments* within shared book reading in intervention and maintenance. A possible explanation may be that child 2 pointed and commented on the pictures in the book, thus the parent moved on to the second step

of asking questions at a higher rate. Mother 3 had a higher frequency of *Responding with more* followed by *Asking questions* and *Comments.* This may have been because Child 3 commented and frequently asked the mother many questions throughout shared book reading where the mother spent more time responding with more to the comments and questions of her son.

Social Validity.

The three mothers agreed that they never knew about the dialogic reading strategies (*CAR* steps) prior to intervention and found the strategies helpful in increasing their child's vocabulary and language development along with increasing one-on-one time with their child. Mothers also revealed that they planned to continue implementing the *CAR* dialogic reading strategies during shared book reading on a daily manner during bedtime with their children.

Discussion of Findings

The results of this study can be linked back to the ecological model of child development and social learning theory. Brofenbrenner (1979) proposed for researchers to not only view the child within the school context but to step into the child's world, the home environment. Researchers should observe the home interactions and how children's development is impacted by multiple layers that surround them. At the very center of the layers is the meso-system, where children learn from their most immediate first teachers, their parents. In addition, Vygotsky's (1962) social learning theory supported that children learn by social modeling and from the guidance and interaction with others who have already mastered certain skills.

The three child participants were able to expand their vocabulary and language development with their mothers as guides during a shared book reading experience. Mothers were able to implement the dialogic reading strategies, however, several common themes emerged within one or more dyad that may have impacted the results. These themes included

duration of reading, adult reading style, code-switching, building on background knowledge, expansion of child language, and the individual child's stage of language development.

Dyad 1

Child 1 was a four year old male who lived with his mother and four older siblings. All three child participants increased their mean total vocabulary words expressed during shared book reading from baseline to intervention and maintenance. Surprisingly, Child 1 had the least amount of vocabulary gains compared to the other two child participants even though Child 1's Total Language score on the PLS-4 was higher than the other two participants and was within the Average range (see Table 6). One would assume that since Child 1 started with a higher standard Total Language score, Child 1's vocabulary gains would be higher than the other two participants. This was not the case as Child 1's total vocabulary expressed was lower than the other two child participants throughout all phases of the study. Child 1's vocabulary gains may have been impacted by several factors.

Dyad 1's mean duration of shared book sharing sessions declined from baseline to maintenance. Dyad 1 spent about half of the time in shared book reading compared to Dyad 2 and Dyad 3 during intervention and maintenance. One possible explanation for the decline in duration of shared book reading was that during baseline Mother 1 read all the words in the text which took up more time. However, in intervention and maintenance Mother 1 hardly read any text and relied on pictures to tell the story but used a quick pace to implement a *CAR* cycle per two page spread. Mother 1 moved on to the next page without allowing sufficient time for the child to elaborate or expand his thoughts compared to the other two child dyads. Thus, during baseline, the duration of shared book reading took longer because the mother read the text but in the following phases Mother 1 implemented one *CAR* cycle and moved on to the next page

immediately. This is consistent with the findings that some children with delays may need a longer period of exposure to show more beneficial effects (Laakso et al., 2004).

As mentioned earlier, Mother's hurried pace may have been due to the fact that she was a single parent. For example, at times Child 1's siblings interrupted Mother 1 to ask questions about their chores such as doing the laundry or cleaning the dishes. Mother 1 reminded her children prior to shared book reading to not interrupt and she would check on their chores after shared book reading. In addition, Mother 1's phone rang multiple times during visits. Moreover, Mother 1 did not have the support of a spouse/partner who could take care of other matters while she was occupied. Therefore, Mother 1's time was very limited juggling the many duties as a single parent, two jobs and caretaking of five children. Even with these challenges, Mother 1 was able to implement *CAR* cycles during shared book reading. It was difficult for her to relax and dialogue for an extended period of time without being interrupted or worrying about multiple responsibilities as a single parent. These findings match those from the National Center for Education Statistics (NCES) that found single-mothers in poverty as a risk factor for children's emotional and academic development (NCES, 2003 in Sheely-Moore, & Ceballos, 2011).

According to Ezell and Justice (2005) several factors may influence a child's participation and progress during shared book reading including interest level, individual temperament, success with the activity, and adult's reading style. Child 1 demonstrated an interest in the books because he liked animals and adventure-themed books. In this case, adult reading style and child's temperament may have influenced Child 1's progress. Mother 1 did not read with as much enthusiasm and excitement compared to Mothers 2 and 3 during shared book reading. Mother 1 read in a monotone volume which may have influenced Child 1's experience

during shared book reading. Mother 1 had a flat affect and yet as the sessions progressed she eventually smiled and even laughed with her son on a few occasions. In addition, Child 1's temperament was more active and he demonstrated slight behavior issues. For example on several occasions, Child 1 told his mother "no" when she asked a question. Child 1 required frequent redirection and he attempted to get up to get a drink or gave other excuses to not participate. Parent enthusiasm, positive adult affect, and getting the child actively involved are important components of successful interactions and outcomes of shared book reading (Bergin, 2001; Ortiz, Stowe & Arnold, 2001).

Mother 1 was the only single mother and it may have been more difficult to focus on implementing the strategies without thinking about her other responsibilities. In addition, at first, Mother 1 seemed to have some resistance of researcher coaching prompts, with her facial gestures hinting that she did not want to be interrupted by the researcher. Sheldon and Rush (2010) suggested that parents and education professionals engage in joint planning of the coaching process. This lack of joint planning may have caused slight friction or resistance towards coaching. Perhaps it would have been beneficial to have involved the mothers in joint planning to determine the form of coaching or support that best met their needs.

Similar to previous literature findings, Child 1 frequently engaged in code-switching (Brice & Rosa-Lugo, 2000; Harth, 2007; Hayes, Bahruth, & Kessler, 1998). For example, "*Child: oh 'pulpo' [octopus], he has a big tale and he's driving it [the ice-cream truck] with a hat."* Interestingly, even though Mother 1 spoke in Spanish to Child 1, he preferred to respond in English and mixed Spanish words at times. The following is an example of the dialogue in both languages during shared book reading of the book *Dora La Hermana Mayor, "Mother: Dora va corriendo. Child: yeah, where them going? Mother: a la casita, van a la casita [to the*

house, they are going to the house]." The previous example demonstrated that Child 1 understood what his mother said in Spanish yet preferred to respond in English. Child 1 attended preschool since 2007 where he had more opportunities to speak in English and had a bilingual teacher thus he may have been more comfortable with English. In contrast, Child 2 and 3 started preschool in Spring 2010 and heard and spoke more Spanish at home.

Mother 1 spoke primarily in Spanish, yet at times without realizing, switched to English and then back to Spanish. For example, "Mom:¿Qué necesitamos para encontrarlo? Scissors, life jacket, bandaid books, umbrella [child pointed to objects while Mother 1 said the words]" or "Mom: Es un 'bat' que está dormido"[It is a bat who is sleeping]. These examples demonstrated how, "Code switching dialect is valued as a natural expression of the two worlds these learners straddle" (Hayes, Bahruth & Kessler, 1998, p.155).

Dyad 2

Child 2 was the youngest of the three participants. Child 2's mother was a married fulltime homemaker with four children. Mother 2 reported that her husband worked at the citrus packing house and worked long hours, so often he returned home very late. Child 2's PLS-4 total Language score in English and Spanish were within the low range. Child 2's Auditory Comprehension was within the low range in English but within the Low Average range in Spanish, thus suggesting that her receptive skills were stronger in Spanish than English. Child 2's mean rate of total vocabulary during shared book reading steadily increased throughout baseline to maintenance. This steady increase may have been due to the mean duration of time spent during shared book reading. The mean rate was double that of Dyad 1, therefore Child 2 had multiple opportunities for child-parent dialogue and vocabulary development.

Mother 2's reading style may have also influenced Child 2's progress and experience during shared book reading. During shared book reading, Mother 2 read with enthusiasm and her voice fluctuated to match what happened in the story. In addition, when Child 2 looked confused or did not understand what her mother asked, Mother 2 used hand gestures or repeated words in English to help the child figure out mother's requests. In addition, Mother 2's rate of *Asking Questions* and *Responding with more* was much higher than her rate of *Comments* throughout the study. The lower rate of *Comments* may have been because the Child 1 often pointed and commented, so the mother moved to step 2 and 3 of the *CAR* cycle. Mother's overall positive interactions, enthusiasm and ability to ask questions and expand upon them matched the positive effects from other studies (Bergin, 2001; Ortiz, Stowe & Arnold, 2001; Van Kleeck & Vander Woude, 2003).

It was noticed that Child 2's language skills evolved throughout the course of the study. In the first few sessions of intervention, Child 2's utterances were more unintelligible and language skills more delayed compared to the other two child participants. However Child 2 was able to repeat and model her mother's words and used one or two- word phrases. This may have been because Child 2 was still at the early stages of language development where she was not able to put more complex words together, express spontaneous speech, and/or acquiring two languages at the same time. In intervention, during the first few shared book reading sessions Child 2 had difficulty understanding some of her mother's requests but as the sessions progressed, she was better able to understand what her mother was asking.

Like Mother 1, Mother 2 consistently code -switched and repeated words in Spanish and English so her daughter could learn both terms. Mother 2's code-switching seemed to help Child 2 with comprehension, for example, in the book *Estrellita,* Child 2's mother asked, "¿De qué

color es la estrellita?" Child responded, "¡Grande!" Mother replied, "La estrellita es amarilla" (Mother asked, "What color is the star?" Child replied, "Big!" Mother responded: "The star is yellow"). In the previous example, clearly, the child did not understand that the mother was asking for a color not the size. However, on another occasion, Mother 2 asked, "¿De qué color son los zapatos de Dora, los 'shoes'?" Child 2 replied, "Black." When the mother code-switched to English the child developed a better understanding for the parent's request and was able to respond appropriately. Perhaps, since attending preschool where English was spoken primarily, Child 2 receptive English skills further developed and were becoming stronger than in Spanish. Again, the mixing of the two languages is a common practice with many Hispanics (Brice & Rosa-Lugo, 2000).

As the shared book reading sessions progressed, Child 2's language transformations became more evident, even though she was still producing many unintelligible utterances, she also was able to express spontaneous speech and more than 2 word phrases and not only point to pictures, but make comments. The shared book reading allowed her to build her receptive and expressive language skills (Ezell & Justice, 2005). Child 2's language progression may also have been due to several reasons. First, as the parent and child engaged in more shared book reading sessions they became more comfortable and increased dialogue occurred between the two. Child 2 was the youngest participant. Even with language delay challenges, Child 2 was able to overcome difficulties and increase her rate of total vocabulary during shared book reading throughout each phase of the study and Mother 2 was very proud of her progress.

Dyad 3

Child 3 was five years old and the oldest of the three child participants and lived with his parents and four siblings (see Table 1). Child 3's total Language Score within the PLS-4 in

Spanish was within the Low Average and Low range in English (see Table 6). Thus, Child 3's language skills were stronger in Spanish than English. Child 3 started regularly attending preschool in Spring 2010. Child 3 was the participant with the highest mean rate of total vocabulary words expressed during shared book reading throughout each phase of the study. Several reasons may have contributed to Child 3's higher vocabulary gains.

One possible explanation is that Dyad 3's mean duration of shared book reading sessions was double or almost three times longer than Dyad 1. Mother 3 had more opportunities to dialogue and expand upon Child 3's vocabulary.

Another explanation for the child's vocabulary gains was that during intervention and maintenance, Mother 3 implemented a higher rate of the third *CAR* step: *Responding by adding more.* In addition, during the *CAR* cycle Child 3 frequently asked his mother questions at a higher rate than Child 1 or Child 2. These factors may have helped Child 3 further develop his vocabulary skills. These findings match the findings of other studies that found when parents elaborated more on their children's ideas greater language gains occur (Boyce et al., 2004; Ezell & Justice, 2005; Van Kleeck, & Vander Woude, 2003; Whitehurst et al., 1988).

Like Mother 2, Mother 3 also read with enthusiasm and excitement matching her tone and speech to what happened in each picture within the book. Mother 3's affect and positive nurturing nature during shared book reading matched the qualities that demonstrate positive impacts on child development (Bergin, 2001; Boyce et. al, 2004; Ezell & Justice, 2005; Ortiz, Stowe, & Arnold, 2001; Van Kleeck & Vander Woude, 2003).

However, in contrast to Mother 1 and 2, Mother 3 seemed to integrate more background knowledge into the sessions, for example, in the book *Bailando al Rescate, "*Esto es una corona, 'crown', como cuando vamos *a Burger King* y te pones la corona" *[This is a crown, like when*

we go to Burger King and you put on the crown]. The mother tapped into the child's world knowledge in order to further his comprehension of vocabulary (Van Kleek 2008).

Not only did mother and child infuse background knowledge and personal experiences but Child 3 demonstrated some higher order thinking skills by asking questions such as, "Why are turtles green?" Mother 3 did her best to reply to Child 3's many questions. For example, during *Diego Rescata al Bebé Manatí* the following dialogue took place:

> Child: ¿Y a ti te gustan las 'turtles'? [Do you like turtles?]
>
> Mother: Sí, porque están chiquitas. [Yes, because they are small]
>
> Child: A que no. En mi escuela mañana miré una 'turtle' bien grandota [Oh no. In my school tomorrow I saw a turtle very big [He meant yesterday]
>
> Mother: ¡Huh! ¿En tu escuela miraste una ;turtle' grandota, grandota? ¿Y de qué color era? (Oh, in your school you saw a big big turtle? what color was it?]
>
> Child: se pareció como 'yellow' [It looked yellow]
>
> Mother: Se pareció como 'yellow,' amarillo, y aquí [Points to picture in book]- ¿de qué color es? [It looked yellow, 'amarillo,' and here, what color is this?]
>
> Child: Green
>
> Mother: 'Green,' ¿verde con qué? [Green, green with what?]
>
> Child: ¿Por qué ellos están 'green?' [Why are they green?]
>
> Mother: Porque ellos comen mucho zacate, y por eso están 'green' [Because they eat a lot of grass, that is why they are green.]
>
> Child: ¿Por qué? [Why?]
>
> Mother: Porque ellos no más pueden comer zacate, no pueden comer otra cosa, ellos no pueden comer carne porque no tienen dientes [They only can eat grass,

they cannot eat anything else, they cannot eat meat because they don't have any teeth.]

Child: ¿Y esos qué comen? [Referring to the manatees, pointing, And what do those eat?]

Mother: Ellos también comen este zacate [They also eat grass.]

As one can observe in the above passage, Mother and Child 3 engaged in a fruitful dialogue where they jointly asked questions and seemed genuinely interested in what each had to say. Child 3 linked what he saw in the pictures to what he learned at school when his teacher brought a turtle to the class. This is a clear example of the importance of connecting school and home in order to improve the learning process and using background knowledge to expand upon new knowledge (Moll, 1992; Van Kleek, 2008). In the words of Paolo Freire, "The relationship between parents as teachers and the school is not only critical but nurturing. Learning is endemic: Teachers cannot prevent a child from learning if the learning is tied to the experiences of a child's life and the child's learning contributes to a sense of self- worth. The school's world must be matched with the child's world" (Freire in Hayes, Bahruth, & Kessler, 1998, p.3).

When further inspecting the higher outlying data points for Child 3's vocabulary within intervention and maintenance, one might surmise that Child 3 found some books more interesting (see Figure 3). Children perform better when they are interested in the stories and not pushed if they are not interested (Ortiz, Stowe, & Arnold, 2001).

Social Validity

It is important to measure the acceptability of goals, procedures and outcomes of the intervention from the perspective of the participants (Wolf, 1978). An alternate observer

reviewed the mother responses from the Social Validity Questionnaire and corroborated the following findings.

Goals.

Overall, the three mothers agreed that the dialogic reading strategies were interesting, easy to implement and practical yet there was some variability in responses. Initially, the mothers thought that when parents read a book, the child's role was to listen. Mothers shared that prior to this intervention, they were not aware of the dialogic reading strategies. For example, Mother 2 shared, "Yo no sabía nada de esto. Mi hija empezó a hablar más con esto de la lectura. Antes ella nunca me traía un libro; ahora ella es la que me trae los libros para leer, y se enoja conmigo, ella quiere hablar primero" [I did not know any of this. My daughter started to talk more with the shared book reading. Before (the intervention) she never brought a book to be, now she is the one who brings me books to read, and she gets upset with me because she wants to be the first one talking.]. This is an example of a change whereas prior to intervention Mother 2 simply read the book and after parent training and coaching Mother 2 transformed her role to allow for her child to take the lead which is one of the goals of dialogic reading (Cole, Maddox, Lim, Notari-Syverson, 2002; Crain-Thoreson and Dale, 1999).

The three mothers agreed that the dialogic reading CAR strategies were helpful for their children. For example, Mother 1 found, "Like before [training and intervention] we weren't doing any questions we weren't getting too much [interaction] we would just read the book, now he is answering and responding and asking more questions." In addition, Mother 1 said that with practice it became easier to implement the CAR strategies. After the parent intervention, the three mothers found that it was important to ask questions, allow for the children to respond and ask questions, and have that back and forth dialogue in order to foster language development in

their young children. These findings of mothers expanding upon their children's language are similar to other studies (Boyce et al., 2004; Crain-Thoreson and Dale, 1999).

Procedures.

Two mothers agreed that the first step *Comentar/Comment* (step1) was the easiest and one mother found *Hacer preguntas/Ask questions* the easiest. Two mothers struggled with the third step *Responder qgregando Más/Respond with more*. One mother shared she did not struggle with any of the steps. One mother found *Comentar/Comment* the most natural to implement and two mothers found *Hacer preguntas/Ask questions* the most natural.

Outcomes.

All three mothers shared that they planned to continue implementing the *CAR* strategies once the researcher left. The best time to implement would be during bedtime. Two mothers shared that their children were bringing them books and requesting to read and that they were now reading on a daily basis. Mother 1 shared that they were reading multiple times throughout the day and with different family members (such as with older siblings). The mothers' positive reaction towards dialogic reading matched the experiences of other Hispanic mothers (Harth, 2007).

Lastly, mothers were eager to learn about more effective practices of how to help their children at home. For example, Mother 1 shared that she was unaware of the "strategies you showed me, I didn't know about those. I would be interested in more strategies, such as from speech therapist. She [The speech therapist] sends weekly progress reports but no activities to practice with him at home." Mother 2 added that she would be interested in "Unas clases, como poner más *'one -on –one'* con él, 'so he can get better with his speech/language.' Pero sé que

tengo que hablar mucho, usar 'open- ended questions' y leerle bastante" [Some classes on how to have one-on-one session sessions with him so he can get better with his speech/language. I know I have to talk a lot, use open-ended questions and read to him often]. Thus, mothers desired to learn more about how to help their children with their speech and/or language delays. Various programs have reached out to parents and offered early literacy support within the home, amongst them Even Start programs (Perry, Mitchell, Kay & Brown, 2008; St. Pierre et al., 2003).

Limitations

The researcher attempted to develop and implement experimental procedures although there were some limitations to this study. The limitations included recruitment challenges, unexpected interruptions, presence of the researcher and other factors related to data collection with diverse families. In addition, the researcher encountered a limited variety of assessments and materials for Hispanics along with IOA coaching prompts and functional relationship issues.

The first limitation was the challenge to recruit Hispanic families who dually met the participation criteria and had the time to participate. Many parents demonstrated initial interest yet did not have the time to dedicate to the study because of various responsibilities such as working at one or two jobs with inflexible schedules. Other potential participants had responsibilities as fulltime students, single-parents, which further restricted their availability to participate. In addition, the study time frame happened to coincide with the citrus season and parents worked overtime leaving little time or energy to volunteer in a study. Another obstacle in recruiting families was that some mothers did not return phone calls even though they displayed initial interest in participating in the study. Overall, since the Hispanic families from the low-income community often faced various obstacles and stress, recruitment of candidates

who met inclusion criteria and were available to participate was a challenging and time-consuming process (Ballantyne et al., 2008; Suarez-Orozco & Carhill, 2008).

A second limitation was the overall homogeneity of participants. Though the three child participants were linked by similar Mexican backgrounds, preschool ages, attended the same federally-funded preschool programs, lived with immediate families and came from the same settled migrant community in central Florida with families who originated from Mexico, there were differences across dyads. For example Child 2 and 3 received services for speech and language therapy within the preschool, and Child 1 only received speech services. Furthermore, Mothers 2 and 3 were married and had four children and Mother 1 was a single parent with five children. Thus, Mother 1 assumed a different family role, as sole caretaker, with a different set of family stressors, financial and emotional commitments and responsibility for the family's wellbeing than the married households. Another difference within participants was that Mother 1 and 3 worked fulltime while mother 2 was not employed. These children's interactions with different family members within their proximal system will impact their development in different ways (Brofenbrenner, 1979; Hoff, 2006). Overall, even with these differences the three dyads met the inclusion criteria for the study and even though the differences amongst dyads may have potentially impacted results, the single subject multiple baseline across multiple participants design allows for each participant to be their own control (Neuman & McCormick, 1995).

A third limitation consisted of challenges during data collection in the natural environment at the participant homes including unexpected visitors. Researchers who conduct studies within the home environments become vulnerable to not being able to control for the unexpected (Harth, 2007). Researchers encounter home environments that are controlled by individual families who may have different daily routines, customs and unexpected situations

which could interfere with data collection. The researcher must be mindful and respectful of boundaries and other cultural implications and acknowledge that some things are out of researcher control (Huer & Saenz, 2003; Huer, Parette, & Saenz, 2001; Suarez-Orozco & Carhill, 2008). For example, on a few occasions, the researcher stopped data collection because unexpected visitors came to the home such as friends or neighbors stopping by without prior notification to the family. At times visitors or the siblings of child participants distracted the dyads by asking questions or interrupting the session because they wanted to participate as well. For example, on one occasion during shared book reading the mother asked a question to the child -participant and the child's sibling replied to the mother's question from across the room. In addition, since the shared book reading sessions were conducted in the dining room or the living room sofa, other family members passed by which could potentially distract participants. Every effort was made prior to video recording for the mothers to remind the other siblings to please keep quiet and play in their rooms. Regardless, conducting research in the natural environment within participant homes presents challenges. In the end these are regular life situations encountered by the families within their day-to-day dynamic. This limitation was also found in previous research when investigating similar participants (Brofenbrenner, 1979; Harth, 2007).

A fourth limitation was the presence of the researcher and the video-recording camera and equipment at the home during data collection which may have influenced the natural parent-child dynamic that occurs during shared-book reading.

A fifth limitation was the challenge to access appropriate materials such as preschool level books and assessments in Spanish that met the criteria. Many local bookstores did not carry a wide selection of Spanish-language book sets for young children. After visiting several local

bookstores without success, the researcher was able to purchase a preschool book series in Spanish the *Barnes and Nobles* online bookstore. The limited selection of books in Spanish provided less options for the individual interests and needs of the child-participants. In addition to limited book options, another limitation was a lack of appropriate assessments in Spanish to measure child progress. Most of the standardized tests with Spanish versions were designed for eligibility determination purposes for identifying young children with speech and/or language delays and not designed to sensitively asses and progress monitor a child's vocabulary development throughout the intervention with considerations for cultural and language variations (Hayes, Bahruth, & Kessler, 1998).

Another limitation was from baseline to intervention all three dyads demonstrated a change in child outcomes which is the purpose of the single subject research design (Neuman & Mcormick, 1995). Within the first two sessions of intervention which consisted of parent training sessions with video-feedback, child expressed vocabulary outcomes improved. On the third session, video-feedback stopped and the researcher coaching prompts continued as needed along with parent handouts during shared book reading sessions throughout intervention. The coaching continued as part of the intervention package as previous research suggested that migrant parents may benefit with longer and more intensive coaching sessions (Harth, 2007). Thus a functional relationship between the data and the independent variable (the intervention) may have been due to either the parent training sessions, coaching or both. Thus, even though the three dyads demonstrated improved effects, it was uncertain whether the effectiveness was due to the entire intervention package or certain components within intervention (such as the parent video versus the researcher coaching).

Inter-observer agreement (IOA) on the delivery of coaching prompts by the researcher during the intervention phase was not collected. A reason for not collecting the IOA coaching prompts was that the sound quality of the researcher's voice on the other side of the table or sofa was not clear on the recording of the shared book reading sessions.

The last limitation is the uncertainty of whether dyads practiced the *CAR* strategies when the researcher was not present. For example, dyads may have practiced with other family members or friends which may have impacted the results.

Implications for Research

The researcher conducting the study was bilingual and bicultural which helped with the access of Hispanic families and establishing rapport with the participants. In addition, the researcher had over 10 years of experience in the field of education, particularly serving children and families from culturally and linguistically diverse backgrounds, many from settled migrant communities in central Florida. This background provided the researcher with a deeper understanding and ability to reflect upon the family as a whole and the many layers and elements which impacted child development and parent interaction (Suarez-Orozco & Carhill, 2008). Thus in future research, it is critical to have an ecological approach to conducting research with families from culturally and linguistically diverse backgrounds along with other methodological considerations, careful selection of participants, expand research questions to address more developed language skills, and a need to collect data not only in the home but in the school as well.

One of the most important considerations for future research related to early literacy within the homes of Hispanic families, particularly because of the scarcity of research which is currently improving, is to implement a mixed-methods design (Goldenberg, Gallimore, & Reese,

2001; Hammer & Miccio, 2006). Future research, involving participants from immigrant and diverse families, should consider the following methodological issues related to data collection and analysis: longitudinal perspectives, comparison samples, triangulation of data, culturally sensitive tools, etic and emic perspectives and interdisciplinary collaboration (Suarez-Orozco & Carhill, 2008). Etic (outsider) and emic (insider) perspectives refer to collaboration efforts between researchers who are from or have experiences within the community being researched and those who are not. Thus, selecting research designs that are appropriate for this population is not an easy task and must be heavily considered. Single-subject design is an appropriate choice that can be used along with further qualitative components in order to further explore the cultural contexts and impacts on behavior and learning (Kazdin, 1982; Neuman & McCormick, 1995).

Another implication for future research is for researchers to carefully select participants who are similar in order to gather a more homogeneous sample. As mentioned previously, within Hispanics, families vary significantly based on their education level, literacy levels, socioeconomic status, years in the US and Spanish and English language abilities or dialects. The three mothers who participated in the study attended middle or high school in the United States and two of the mothers had GED's and were comfortable with reading or speaking in English. However, the mothers in this study were probably more educated than other mothers who typically reside in the settled migrant community. For example, the books selected for the study were from the *Nick Jr Dora the Explorer and Diego* series which contained some words in English therefore, participants needed to be able to read those words. This may not be the case with other Hispanic mothers, particularly recent immigrants who may only speak and read Spanish. Therefore it is important to consider parent's education, language of preference and reading ability level prior to the selection of books or interventions. Researchers should gather

as much information about the participants as possible in order to get the most homogeneous sample. Researchers can use Demographic and home language practices and history questionnaires, observations, informal interviews, along with adult and child assessments. In addition, researchers and the parent/caretaker participants should carefully review the book selection to ensure the books are appropriate for the children and that the parents feel comfortable reading and using the book during shared book reading. In sum, researchers need to be aware of the different education, dialectal and language levels that exist within Hispanic families in order to find the participants that best meet the needs of the study. For example, if the researcher knows ahead of time that the books are bilingual, the research needs to make sure the parents can read both languages.

Along with careful participant selection, another future implication for research is to include more family members in the study and to assess adult-child reading style and responsiveness. Many young children spend a considerable amount of time with other relatives such as older siblings, grandparents, fathers, neighbors, and they should also be involved in future studies to expand the literature on shared book reading practices within Hispanic homes. Ezell and Justice (2005) argue an adults' reading style may impact a child's response and acceptance of shared book reading and the child's overall experience and desire for more interactions. Therefore, it is important for future studies to measure the adult-child interactions of different caretakers and their responsiveness during shared book reading to determine whether quality experiences occurred for young children.

Next, future studies must also keep in mind that the recruitment of Hispanic families from low-income homes can be a time consuming process. Parents may need to be contacted and visited several times prior to participation. For example, a few weeks prior to parents signing the

Parent Permission forms, the researcher met with teachers and school staff to help identify potential family participants during afterschool child pick-up times. The researcher's effort to be present and visible to parents was important in order to gain access of parents and to build the trust of parents from culturally and linguistically diverse backgrounds (Huer & Saenz, 2003; Huer, Parette, & Saenz, 2001).

Within this study data was collected within the home environment, therefore future studies should also observe and collect data within the preschools to gather a fuller picture of child's interactions with education professionals and early language development experiences and the child's expressed vocabulary in the preschool program. Parents, teachers and therapists could fill out daily reading logs, to document the child's early literacy experiences including shared book reading in both settings: home and school.

Particularly because the children had speech and/or language delays, future studies could integrate certain speech or language goals and use shared book reading as an opportunity to develop more specific goal. For example, Rosa-Lugo and Kent-Walsh (2008) study used augmentative devices and focused on specific language goals with young children with language delays who were Hispanic during shared book reading. In addition, Ezell and Justice (2005) provided examples on how adults can assist young children with developing specific early literacy skills during shared book reading including print awareness skills, phonological awareness, and also how to reduce resistant behaviors and modify strategies for children with more severe language delays. Once again, future studies should involve parents in goal setting for the individual needs of the child.

Besides early literacy and language goals, higher-order thinking skills should also be promoted and encouraged by education professionals. For example, in the study with families in

the settled migrant community, it was noticed that throughout the session Child 3 developed more higher-order thinking questions such as, "Mamá, ¿por qué ellos [Las tortugas] están verdes?" [Mommy, why are turtles green?]. Therefore, it would also be interesting to measure child higher-order thinking and analytical skills which immerged from the conversations during shared book reading. Mothers from low socio-economic status talk to their children versus with them therefore children have less opportunities to develop higher order thinking skills including predicting, synthesizing, reasoning, and abstracting (Schachter, 1979 & Tough1977 in Feagans & Farran, 1982, p.37). Thus, in future studies education professionals should encourage and measure the development of higher-order thinking skills throughout shared book reading, which would build comprehension skills as well.

Implications for Practice

With the changing population within schools and home, educators and education professionals are faced with the challenge to effectively reach and meet the needs of young Hispanic students and their families who may come from economically disadvantaged backgrounds. In addition, children do not have the early literacy or vocabulary skills necessary to be successful in kindergarten. Thus, it is time to turn to the eco-cultural model of literacy as a foundation to find solutions to the challenges presented. The eco-cultural model was developed by Vernon-Feagans, Head-Reeves, and Kainz (2004) and took its form as a result of years of research conducted investigating the early literacy practices within the homes of families from diverse backgrounds, living in poverty, and with limited resources. The authors argued that these families often are not part of mainstream culture and not valued within school systems. The researchers found that education professionals had myths about the children and were not in tune with the children's real family dynamics and life situations at home.

The eco-cultural perspective is infused with various theories such as Brofenbrenner's (1979) ecological model. Similar to Brofenbernner's, the heart of the eco-cultural perspective is within the mesosystem of the family and the child's development is impacted by interactions with family members and their environment. In addition, the perspective offers the importance of fostering early literacy experiences of young children and placing value on their strengths and where they come from, along with the social contexts that impact their development. In addition, the perspective encourages partnerships between the home and school. Ultimately, the intention for the eco-cultural model of early literacy is to:

> Encourage reflective introspection about the nature and content of our own belief system and the role these beliefs play in our understanding and interpretation of the contexts that influence children's literacy development. Those truly interested in helping all children experience success with literacy consider it imperative to remove the filters of societal myths from their eyes in order to comprehend clearly the issues important in promoting children's literacy (Vernon-Feagans, Head-Reeves, and Kainz, in Wasik 2004, p.445).

Vernon-Feagans and colleagues challenge educators of the 21st century to unveil the myths, reflect upon their practices, and move towards more holistic approaches that value the child and family above all else, regardless from where they come from.

As a result of conducting this study about the implementation of dialogic reading during shared book reading practices with Hispanic mothers and their young children with speech and/or language delays, several implications for practice include: a need for family literacy programs that address (a) access to books and early literacy resources within the homes and community of Hispanics; (b) parent/caretaker education to support with the language

development of young children with speech/and or language delays in the home; (c) collaboration with parents in the intervention planning process including coaching options; (d) further adaptations of interventions to expand upon family background knowledge; (e) complexity of code-switching and language differences; and (f) greater partnerships between school, home and community.

Many low-income families are not able to purchase books for their children because of competing expenses such as paying for basic survival necessities such as rent and food. In addition, communities inhabited by a higher percentage of Hispanics have less access to literacy resources and magazines than more affluent and English-speaking communities (Goldenberg & Reese, 2008). The limited access to books within homes and at bookstores places Hispanic children at a disadvantage prior to entering kindergarten where they will be expected to have certain vocabulary, early literacy and language skills in order to succeed in later reading skills. Therefore, the implication for future practice is that there is a need to provide Hispanic children and families with access to books in English and Spanish, early literacy resources and family literacy programs that are culturally relevant and address the needs of Hispanic parents.

Even though for the purpose of this study, the three parents effectively implemented the dialogic reading strategies, the coaching prompts seemed somewhat intrusive. For future practice it would be beneficial to ask parents what type of coaching they preferred in order for parents to feel comfortable and not feel intruded upon by the "coach." In addition, it would help reduce interference on the natural child-parent dynamic during shared book reading. Parents could select from a wide selection of coaching options such as the ones from this study which included parent handouts, video feedback, and verbal prompts by a coach. Other options such as modeling and bug-in the ear technology where the "coach" could whisper suggestions to parents

during intervention without being seen by the child might be less intrusive and more acceptable to the parent. The collaborative planning of the intervention and coaching options with the parent is particularly important when developing interventions for young children with developmental delays (Sandall et al., 2005; Sheldon & Rush, 2010 in McWilliam, 2010).

Another implication for practice is that not only should families be involved in planning for the coaching process, but parents and/or caretakers should also be involved in the selection of specific targeted language and early literacy development goals (not just vocabulary) (Ezell & Justice, 2005). In addition, practitioners should progress monitor child developmental outcomes and parent child interactions throughout the intervention with culturally sensitive assessments and materials. It is also critical for practitioners to consider the needs of single mothers or caretakers who may have further challenges which interfere with their ability to fully participate in the coaching or intervention sessions (Sheely-Moore & Ceballos, 2011). This is particularly important for Hispanic children who prior to entering kindergarten face higher risk factors which impede academic and emotional development compared to white peers (Sheely-Moore & Ceballos, 2011).

Another implication for practice is for education professionals to be aware of the language complexities that exist within Hispanic communities. For the purpose of this study a children's total language was measured, however future studies could look at the differences in language development in English and Spanish. Even though the three mothers spoke to their children in Spanish all three mothers code-switched at times. They used one language to clarify the meaning of a word in the other language. Interestingly, Child 1 preferred to respond to his mother in English and said a few words in Spanish. Child 2 used both languages, and the Child 3 spoke mostly Spanish with a few English words. In essence, it is important for professionals to

acknowledge this variability and be patient as children develop two languages simultaneously as they may get confused and code-switch from English to Spanish or the reverse.

More language complexities arise depending on the Spanish-speaking country and/or region they come from. Young children learn words, expressions, and slang passed down to them from their parents. The families from this study used some terms that were unfamiliar to the researcher, words which were originally indigenous and still used in certain parts of Mexico, such as 'zacate' for grass instead of the correct Spanish words, 'hierba' or 'pasto.' It is important for professionals to be aware of these terms and ask parents of word meanings they are uncertain of. Sometimes, the dialects and unique cultural terms may not be included in the Spanish-version of books or assessment scoring sheets (the Spanish-language word translations may vary based on the Spanish-speaking country). Thus, it is important for education professionals to be aware of these language and dialectal differences prior to selecting books, assessments and other materials in order to prevent children's true abilities and understanding to not become misrepresented or lost in translation.

The final implication for practice is for parent education and family literacy programs to integrate the family's background knowledge, strengths and adapt interventions to meet the family needs. The dialogic reading strategies presented in the study were based in principles of language development, social learning theory, and early childhood (*Language is the Key,* 2003). Most importantly, the dialogic reading practices promoted adults to follow the child's lead and that children learn from listening, interacting and having conversations with their first teachers, their parents. Though dialogic reading has shown many benefits, it is important to select the dialogic reading programs that promote and place value on children's home language as well as the second language. In the case of Hispanic families, there needs to be more of an emphasis to

encourage parents to not only use open-ended questions but link what they read to their cultural backgrounds and personal experiences to make the shared book reading experience more meaningful and relevant to their child's lives.

Summary

The purpose of the study was to determine the impact of training and coaching of Hispanic mothers on the mother's delivery of dialogic reading strategies and total vocabulary words expressed by their young children with speech and/or language delays during shared book reading. In addition, another purpose was to learn about the Hispanic mother's perspectives towards shared book reading. These mothers were able to increase their rate of delivery of the dialogic reading strategies and their children's expressive total vocabulary during and after the intervention. Prior to the study the mothers engaged in shared book reading, from zero to a couple times a week and after the study mothers reported engaging in shared book reading on a daily basis up to multiple times a day. This increase in frequency of early literacy experiences at home will have beneficial effects for young children's language development. As a result of the intervention, the researcher influenced the mother-child's immediate or most proximal layer of development, the meso-system. Dialogic reading provided the families with an opportunity to develop their language skills in both English and Spanish, provided opportunities to expand upon their background knowledge and life experiences to the world of books.

Future studies should focus more on the adult-interaction and responsiveness of caretakers during shared book reading, explore the quality of early literacy experiences including the social and home contexts, expand upon parent and children's background knowledge, complexity of language and code-switching, and collaboration between home and school.

Now more than ever, schools, homes and the community must form alliances to find the resources necessary to bridge the gap that prevents young children from low-income Hispanic homes from being prepared for kindergarten. Local communities can collaborate with bookstores, public libraries, schools, businesses, to foster an early literacy climate where all children have access to books that match and reflect the languages spoken in the communities they live in. In addition, family literacy programs should include all family members and be a place where education professionals can learn about family strengths, cultural and linguistic richness and family members can learn how to build upon their child's early literacy skills and enter a genuine partnership where the child's best interest is at the core.

APPENDIX A:
INSTITUTIONAL REVIEW BOARD LETTER

University of Central Florida

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Natalie Dopson**

Date: **March 10, 2010**

Dear Researcher:

On 3/10/2010, the IRB approved the following modifications/human participant research until 3/9/2011 inclusive:

Type of Review:	UCF Initial Review Submission Form
Project Title:	Supporting Hispanic Families with Young Children with Developmental Delays via Dialogic Reading and Coaching within the Home
Investigator:	Natalie Dopson
IRB Number:	SBE-10-06799
Funding Agency:	
Grant Title:	
Research ID:	N/A

The Continuing Review Application must be submitted 30days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at https://iris.research.ucf.edu .

If continuing review approval is not granted before the expiration date of 3/9/2011, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 03/10/2010 11:00:49 AM EST

Joanne Muratori

IRB Coordinator

APPENDIX B:
RECRUITMENT FLIER

Invitación para familias con niños de edad pre-escolar para participar en una investigación sobre la manera en que los padres pueden ayudar a sus hijos a desarrollar su lenguaje y vocabulario en español a través de sesiones de lectura interactiva en casa. Si están interesados, pueden comunicarse con su directora de centro para más información o llamar al teléfono (407) 823-2598 y preguntar por Natalie Dopson.

[Spanish-speaking parents are invited to participate in a study on how parents can help their children develop language and early literacy skills in the home. If you are interested please contact the center director for further information or contact Natalie Dopson at (407) 823-2598].

APPENDIX C1:
PARENT DEMOGRAPHIC & LITERACY QUESTIONNAIRE (English)

Please answer the following questions about your son or daughter and yourself.
Name of the Child:_____
Date of Birth of child:_____
Country of Birth:_____
Does your child have a disability?:_____
What is the disability?_____
Does your child participate in therapy?
What kind of therapy?
For how many years?_____
Name of the mother/father:_____
Job of mother/father:_____
Place of birth of mother:_____
How many years have you lived in the US?_____
Name of the child's school: _____
How many years has your child been in school?_____
Has your child atended other schools besides this one?)_____
What is the name of the other school?)_____
How many Years was he/she there?_____

Circle the following the answers that best fits your situation:

What is your education level?
A. Primary
B. High School
C. Technical school
D. College

What language do you speak to your child at home?
A. Spanish
B. English
C. English and Spanish
D. Other_____

Your child responds in what language?
A. Spanish
B. English
C. English and Spanish
D. Other_____

How many times do you read to your child?(magazines, storybooks, newspaper)
A. 0 minutes
B. 1-5 minutes a day
C. 6-10 minutes a day
D. 11-15 minutes a day
E. 16-30 minutes a day
F. More than 30 minutes a day

How many days a week do you read to your child?
A. 0
B. Once a week
C. Twice a week

D. Three times a week or more

How many children's picture books do you have in the home?

A. 0
B. 1-5
C. 6-10
D. 11-20
E. More than 20 books

More extensive Questions:

1. Where did you attend school? What country/city? (Donde fuiste a la escuela? Que país/ciudad?)
2. How was your experience in school relating to literacy? (Como fue tu experiencia con la lectura en la escuela?)
3. How was your home experience related to literacy? (Como fue tu experiencia con la lectura en su casa?
4. Do you have memories of your family reading to you? What were these experiences like? (Tienes memorias de su familia leyéndole? Como fueron estas experiencias?
5. Did your family tell stories verbally instead of with books? What kind of stories? (Usted tiene algún recuerdo sobre su familia contándole cuentos verbalmente en vez de con libros? Qué tipo de libros? What do you read to them? (Que le lees a sus hijos?)
6. What is your child interested in?(topics, such as bugs, etc)What kind of books does your child enjoy/ have an interest in? (Que tipo de libros le gusta a su hijo/que tipo de intereses?
7. Do you think it is important for you to read to your child? (Crees que es importante leerle a su hijo?)Why? (Porque?)
8. What are some barriers for you to read to your child more often? (Que tipo de barreras existen que impiden que le leas más a menudo a su hijo?)
9. What do you think would help you read/interact more to your child? (Que crees que le ayudaría para que usted le leyera más a su hijo/que tengan mas interacción?
10. What kind of support do you feel you need with having a child with a language/development delay related to pre- literacy? (Que tipo de apoyos cree que necesita usted con su hijo con un impedimento de lenguaje/problemas del habla/ desarrollo relacionados a la lectura temprana?)

APPENDIX C2:
PARENT DEMOGRAPHIC & LITERACY QUESTIONNAIRE (Spanish)

Instrucciones: Por favor, responda a las siguientes preguntas sobre usted y su hijo o hija.

Nombre del niño/a:_____
Fecha de nacimiento:_____
País de nacimiento:_____
¿Tiene una discapacidad?_____
En caso de haber respondido *sí* a la pregunta previa, ¿Cuál es la discapacidad?_____
¿Participa en terapias?_____
Indique las terapias_____
¿Cuántos años lleva su hijo/a en terapia? _____
Nombre de la mamá/papá:_____
Ocupación de los padres:_____
País de nacimiento de la mamá:_____
¿Cuánto tiempo lleva viviendo en Estados Unidos?_____
Nombre de la escuela del niño/a: _____
¿Cuánto tiempo lleva su niño/a en esta escuela?_____
¿Asistió a otra escuela pre-escolar antes de ingresar a esta escuela?_____
En caso de haber respondido *sí* a la pregunta previa, ¿cuál es el nombre de la otra escuela?_____
¿Cuánto tiempo permaneció en esa escuela?
_____

Circule la letra que mejor describa su situación:
¿Cuál es su nivel de educación?

A. Primaria
B. Secundaria
C. Preparatoria
D. Escuela Técnica
E. Universidad
F. Posgrado

¿Qué idioma le habla a su niño/a en la casa?

A. Español
B. Inglés
C. Español e inglés
D. Otro

¿En qué idioma le responde su niño/a?

A. Español
B. Inglés
C. Español y inglés
D. Otro

¿Cuánto tiempo le lee (libros, revistas, libros con solo imágenes) a su niño/a al día?

A. 0 minutos
B. 1-5 minutos
C. 6-10 minutos
D. 11-15 minutos
E. 15-30 minutos

F.30 minutos o más

¿Cuántas veces le lee a su hijo por semana?

A. Todos los días
B. 1 día a la semana
C. 2 días a la semana
D. 3 o más días a la semana

¿Cuántos libros tiene usted en su casa?

A. 0
B. 1-5
C. 6-10
D. 11-20
E. Más de 20

More Extensive Questions:

1. Where did you attend school? What country/city? (¿Dónde fuiste a la escuela? ¿En qué país/ciudad?)
2. How was your experience in school relating to literacy? (¿Cuál fue tu experiencia con la lectura en la escuela?)
3. How was your home experience related to literacy? (¿Cuál fue su experiencia con la lectura en casa?
4. Do you have memories of your family reading to you? What were these experiences like? (¿Su familia le leía a usted? ¿Cómo fueron estas experiencias?
5. Did your family tell stories verbally instead of with books? What kind of stories? (¿Su familia le leía libros o le narraba historias oralmente? ¿Qué tipo de libros? What do you read to them? (¿Qué le lees a sus hijos?)
6. What is your child interested in?(topics, such as bugs, etc)What kind of books does your child enjoy/ have an interest in? (¿Qué tipo de libros le gustan a tu hijo/ cuáles son sus intereses?
7. Do you think it is important for you to read to your child? (Crees que es importante leerle a su hijo?)Why? (¿Por qué?)
8. What are some barriers for you to read to your child more often? (¿Qué obstáculos le impiden leerle a su hijo más a menudo?)
9. What do you think would help you read/interact more to your child? (¿Qué le ayudaría a leer más a su hijo o intereactuar más a menudo con él?
10. What kind of support do you feel you need with having a child with a language/development delay related to pre- literacy? (¿Qué tipo de apoyos necesita para apoyar a un hijo con impedimento de lenguaje/problemas del habla/ desarrollo relacionado con la lectura temprana?)

APPENDIX D:
BOOK LIST DURING SHARED BOOK READING

Dyad 1	**Dyad 2**	**Dyad 3**
Presentamos a Diego	*Presentamos a Diego*	*Presentamos a Diego*
Feliz Cumpleaños, Mami!	*Feliz Cumpleaños, Mami!*	*Feliz Cumpleaños, Mami!*
La Mochila de Dora	*La Mochila de Dora*	*La Mochila de Dora*
Estrellita	*Estrellita*	*Estrellita*
**Dora Salva al Príncipe*	*Dora Salva el Principe*	*Dora Salva al Principe*
**La Caza de Tesoro de Dora*	*Buenas Noches Dora*	*Buenas Noches Dora*
**Di "aaaa" Dora va al medico!*	* Dora Salva al Príncipe*	*Caza de Tesoro*
**Diego Rescata al Bebé Manatí*	**La Caza de Tesoro de Dora*	**Dora Salva al Príncipe*
**A Nadar, Boots!*	**Di "aaaa" Dora va al Medico!*	**La Caza de Tesoro de Dora*
**Quiero a mi Abuela!*	**Diego Rescata al Bebé Manatí*	**Di "aaaa" Dora va al Medico!*
**Bailando al Rescate*	**A Nadar, Boots!*	**Diego Rescata al Bebé Manatí*
**Dora, Hermana Mayor*	**Quiero a mi Abuela!*	**A Nadar, Boots!*
**Los Buenos Modales de Dora*	* Bailando al Rescate*	**Quiero a mi Abuela!*
**Dora Salva el Reino de Cristal*	* Dora, Hermana Mayor*	**Bailando al Rescate*
Estrellita	**Los Buenos Modales de Dora*	**Dora, Hermana Mayor*
La Mochila de Dora	**Dora Salva el Reino de Cristal*	**Los Buenos Modales de Dora*
Presentamos a Diego	*Estrellita*	**Dora Salva el Reino de Cristal*
Diego Rescata al Lobito	*La Mochila de Dora*	*Estrellita*
Diego y Papi al Rescate	*Presentamos a Diego*	*La Mochila de Dora*
	Diego Rescata al Lobito	*Presentamos a Diego*
	Diego y Papi al Rescate	*Diego Rescata al Lobito*
		Diego y Papi al Rescate

**Books in Intervention*

APPENDIX E1:
RESEARCHER'S INTERVENTION PARENT TRAINING SCRIPT

Step 1 Watch parent instructional video from *Language is the* Key by Washington Learning Systems video/DVD on laptop for 25minutes. After video, researcher asks:

Researcher Questions:

A. What did you think about the video? (¿Qué le pareció el video?)

B. What did you learn? (¿Qué aprendió del video?)

C. Do you have any questions about the video? (¿Tiene alguna pregunta sobre el video?)

Now we will review the steps in dialogic reading and you will be able to practice the strategies you just learned. (Ahora vamos a revisar los pasos de la lectura interactiva y practicar estas estrategias que acabas de aprender).

Step 2 Review *Language is the Key* materials
Researcher and parent will review *Language is the Key* manual (P.30-35) using the "Platicando y Leyendo con Niños Pequeños" and other Parent Instructional Program materials relating to the CAR steps with the parent (see Appendix 9 & 10).

C-Comentar y esperar (2-5 segundos) a fin de que el niño tenga tiempo de comentar.

A-Hacer preguntas y esperar (2-5 segundos) a fin de que el niño tenga tiempo de responder.

R-Responder agregando/añadiendo un poco más y esperar para que el niño tenga tiempo de comentar.

R-Repetir **O**-Otra vez en español (opcional)

Step 3-Review Books and Practice with Researcher-mother
The parent will review the book with the researcher to make sure that the parent is able to read all the words and clarify any uncertain word meanings. At this time, parent may alter the written words in the children's book to more familiar words and the researcher will write the word above the written word. For example, if the book uses "mono" for "monkey" yet, the parent prefers to use "changuito" the word "changuito" is written above the word "mono." Next, the researcher and parent review the CAR Steps and the Parent Handout is placed beside the parent (Appendix 9-10). At this time, the researcher asks parent to practice the CAR steps with a children's book, and pretend that the researcher is the child. If the mother struggles, the researcher models for the mother using examples from the Parent Handouts.

Step 4 Practice with Child:
Next,

(a) During the first 5-10 minutes parent and researcher will review the CAR three step dialogic reading strategies using the CAR sheets (see APPENDIX 9-10).
(b) Parent will implement the CAR strategies with their child using the storybooks, while the researcher videotapes (the book session will last approximately 10 minutes).
(c) Once the parent completes the book, the child will play with toys while the researcher and mother review the videotaped session and the researcher will provide feedback on parent implementation of the CAR strategies (will take approximately 10 -15 minutes).

This process will be done one more time with another practice book. Further sessions may be necessary if mother is not implementing the CAR strategy correctly.

Step 5 Video Feedback

The researcher and parent will play the video on the laptop and observe and point out the CAR steps that were implemented correctly and those that needed improvement.

Sample coaching/feedback phrases from researcher:

"Ms. Romero, you did well with asking questions and responding by adding more (step 2 and 3). Good job! However, you forgot to implement CAR step 1. Step 1 is **Comment and Wait 1-5** seconds (Comentar y esperar 5 segundos) for your child to respond to your comment. For example, you can say, 'Look, the fish is swimming!' (Mira el pescado esta nadando!) then wait up to 5 seconds. Make sure to provide positive praise for the steps that were implemented correctly and encourage the mother to keep improving the steps that were left out.

Step 6 Parent Quiz

The researcher will provide the parent with a quiz on the CAR strategies (See Appendix 5-6). If the parent passes the quiz with a 5/6 correct or 83% the parent is ready to start intervention phase. The parent may retake the quiz up to two times. If the parent does not pass the quiz the first time the researcher may repeat Steps 2-5.

APPENDIX E2:
INTERVENTION PARENT TRAINING HANDOUTS (English Version)

Acronyms	**Example**
C - Comment and Wait (count to 5) * Make a comment about what you see on the page.	**Adult:** I see lots of fun things in the baby's box. **Child:** There's a bunny. (Younger children may simply point.)
A - Ask questions and Wait (count to 5) * Ask questions that do not have a 'yes'/ 'no' or one word answer to them.	**Adult:** There is a bunny, what else do you see? **Child:** Ducky and book. Ask Open-ended questions, Open-ended questions tend to elicit full sentences or even several sentences. "What is the chicken doing?", "What's going to happen next?", or "Why did the girl need a new bicycle?" are examples of open-ended questions.
R - Respond by adding a little more to the child's response.	**Adult:** That's right, there is a duck and a book beside the baby's box.
RO (Optional)	Repeat if needed if child responds in English or English/Spanish blended, repeat again what the child said in Spanish. For example, if a child says, "Yo veo el shark." the parent or teacher would repeat the phrase entirely in Spanish: "Yo veo el tiburon." Repeating the phrase in Spanish helps build the child's vocabulary and language skills

Modified from: *www.vanderbiltchildrens.com/booksfrombirth* and *Language is the Key* from Washington Learning Systems

APPENDIX E3:
INTERVENTION PARENT TRAINING HANDOUT (Spanish)

	Ejemplo
C – Comentar y Esperar (cuente 5 segundos) para que el niño tenga tiempo para responder.	**Adulto:** Yo veo muchas cosas divertidas en la caja del bebé. **Niño (a):** Aquí está el conejito. (Niños más pequeños señalan a la imagen) Haz un comentario sobre lo que ves en la página.
A – Hacer preguntas. Averigüe y espere a que el niño tenga tiempo para responder (cuenta 5 segundos).	**Adulto:** Aquí está el conejito. ¿Qué más ves? **Niño/a:** Un patito y un libro. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases. "¿Qué está haciendo el pollo?" "¿Qué va pasar? "¿Por qué necesitaba una bicicleta nueva?"
R – Responda agregando un poco más, y espere a que el niño haga algún comentario.	**Adulto:** Tienes razón, hay un pato y un libro al lado de la caja del bebé.
RO (Opcional) Repita otra vez en español si el niño/a responde en inglés o mezcla los dos idiomas.	Si el niño/a dice "Yo veo el *shark,*" repita la frase entera en español: "Yo veo el tiburón." Cuando repites la palabra en español, estás aumentando el vocabulario de su hijo/a.

Modified from: *www.vanderbiltchildrens.com/booksfrombirth* and *Language is the Key* from Washington Learning

APPENDIX E4:
INTERVENTION PARENT TRAINING HANDOUT

Parent Training

Libro: *Dora Salva al Príncipe (Nick Jr. Dora la Exploradora)*
Autor: Valerie Walsh, Adaptado por: Alison Inches
Ilustrador: Brian McGee
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre qué ves en la página.	**Adulto:** ¡Mira! ¡Aquí está Dora en un bosque! **Niño (a):** ¡Sí, aquí está Dora un bosque!
A – Haz preguntas y espera (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Quién más está en el bosque? **Niño/a:** ¡La bruja, y Boots, el mono!
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** ¡Tienes razón, están todos en el bosque! ¡Pero mira, también esta el príncipe que esta en una torre de un castillo! **Niño:** Sí, el príncipe está en el castillo.
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *witch* en vez de *bruja.* **Adulto:** Sí, tienes razón, esta señora que esta escondida detrás del árbol es una *witch* en inglés, y *bruja* en español. **Niño:** ¡Sí, la *bruja!*

Modificado del programa Language is the Key de Washington Learning Systems y www.vanderbiltchildrens.com/booksfrombirth

APPENDIX E5:
INTERVENTION PARENT TRAINING HANDOUT

Parent Training

Libro: *La Caza del Tesoro de Dora* (*Nick Jr. Dora la Exploradora)*
Autor: Eric Weiner, Adaptado por: Alison Inches
Ilustrador: Susan Hall
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre que ves en la página.	**Adulto:** ¡Mira! ¡Aquí esta Dora con sus amigos en un barco! **Niño (a):** Sí, aquí está Dora en el barco!
A – Haz preguntas y espera (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Y a dónde crees que van? **Niño/a:** De paseo en el agua.
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** Tienes razón, Dora y sus amigos están de paseo, están navegando en un barco sobre el agua. ¡Pero mira, tienen que tener cuidado porque hay cocodrilos! ¡Qué miedo! **Niño:** ¡Sí, que miedo!
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *alligator* en vez de *caimán/cocodrilo* **Adulto:** Sí, tienes razón, estos se llaman *alligators/crocodiles* en inglés y *caimanes/cocodrilos* en español. **Niño:** ¡Sí, los cocodrilos!

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APPENDIX E6:
PARENT QUIZ (English)

Answer the following Questions
The acronym CAR reminds us the steps we must follow when we read a story to our children in a dialogical manner. Identify those steps.

There are three kinds of prompts we can utilize when we read to our children, CAR. Identify the prompts and give an example of each.

1. C
Example:

2. A
Example:

3. R
Example:

Score /6

APPENDIX E7:
PARENT QUIZ (Spanish Version)

Conteste las siguientes preguntas
Las siglas C.A.R. nos recuerdan los pasos que debemos seguir cuando le leemos un cuento a nuestros hijos de una manera interactiva. Identifique los pasos.

1. **C:**
   Ejemplo:

2. **A:**
   Ejemplo:

3. **R:**
   Ejemplo:

Score /6

APPENDIX E8:
INTERVENTION PARENT HANDOUT

Libro: *Di "aaaa" Dora Va al Médico (Nickelodeon Dora la Exploradora)*
Autor: Phoebe Beinstein
Ilustrador: A& J Studios
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre lo que ves en la página.	**Adulto:** ¡Mira! ¡Aquí está Dora en la oficina del médico! **Niño (a):** Sí, aquí está Dora con el médico.
A – Haz preguntas y espera (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Por qué van los niños al médico? **Niño /a:** Cuando están malitos y les duele la panza.
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** Tienes razón, cuando la gente se pone enferma van al médico para ver cómo se pueden curar. Los médicos dan medicinas. **Niño:** Sí, a mi no me gustan las medicinas.
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *doctor's office* en vez de *consultorio* **Adulto:** Sí, tienes razón, están en la oficina del doctor. *Doctor's office* en inglés consultorio y *oficina del doctor* en español. **Niño:** Sí, están en la oficina del doctor.

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APPENDIX E9:
INTERVENTION PARENT HANDOUT

Libro: *Diego Rescata al Bebé Manatí (Nick Jr. Go Diego Go)*
Autor: Sheila Sweeny Higginson Ilustrador: Warner McGee
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre que ves en la página.	**Adulto:** ¡Mira! Aquí está Diego en la selva! **Niño (a):** Sí, selva.
A – Haz preguntas y espera (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Qué tipo de animales hay? ¿Cómo se llaman? **Niño/a:** ¡Mira mami, serpiente (culebra), rana, cocodrilo, mono!
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** Tienes razón, muchos animales, y también está el manatí, murciélagos, oso hormiguero, y un cachorro de león. ¡Qué bonitos animales! **Niño:** ¡Sí, hay muchos animales!
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *frog* en vez de *rana* **Adulto:** Sí, tienes razón: *frog* en inglés y *rana* en español. **Niño:** Sí, rana

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APPENDIX E10:
INTERVENTION PARENT HANDOUT

Libro: ¡*A Nadar, Boots! (Nickolodeon Dora la Exploradora Series)*
Autor: Phoebe Beinstein
Ilustrador: Robert Roper
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre lo que ves en la página.	**Adulto:** ¡Mira! ¡Aquí está Dora en la playa! **Niño (a):** ¡Sí, aquí está Dora en la playa!
A – Haz preguntas y espera (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Quién más está en la playa? **Niño/a:** Las sirenitas, un pescado, y Boots el mono!
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** ¡Tienes razón, están todos en la playa, pero se te olvidó el cangrejo! ¡Parece que se están divirtiendo! **Niño:** Sí, ¡Todos se están divirtiendo!
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *beach* en vez de *Playa.* **Adulto:** Sí, tienes razón, están en la playa. *Beach* en inglés y *playa* en español. **Niño:** Sí, están en la playa.

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APPENDIX E11:
INTERVENTION PARENT HANDOUT

Libro: *¡Quiero a mi Abuela! (Dora la Exploradora Series)*
Autor: Christine Ricci
Ilustrador: Victoria Miller
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre lo que ves en la página.	**Adulto:** ¡Mira! ¡Aquí Dora está bailando con Boots! **Niño (a):** ¡Sí!
A – Haz preguntas y espera (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Por qué bailan? **Niño/a:** ¡Porque hay una fiesta!
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** Sí, están en una fiesta y bailan con sus amigos. ¡Mira, Dora tiene un vestido bonito de colores morado y naranja! **Niño:** Sí, es bonito.
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *dress* en vez de *vestido* **Adulto:** Sí, tienes razón: *dress* en inglés y *vestido* en español. **Niño:** Sí, vestido.

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APPENDIX E12:
INTERVENTION PARENT HANDOUT

Libro: *Bailando al Rescate (Nick Jr. Dora la Exploradora)*
Autor: Eric Weiner, Adaptado por: Laura Driscoll
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre lo que ves en la página.	**Adulto:** ¡Mira! ¡Aquí Dora está bailando con Boots! **Niño (a):** ¡Sí!
A – Haz preguntas y espera (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Por qué bailan? **Niño/a:** ¡Porque hay una fiesta!
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** Sí, están en una fiesta y bailan con sus amigos. ¡Mira, Dora tiene un vestido bonito de colores morado y naranja! **Niño:** Sí, es bonito.
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *dress* en vez de *vestido* **Adulto:** Sí, tienes razón: *dress* en inglés y *vestido* en español. **Niño:** Sí, vestido.

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APPENDIX E13:
INTERVENTION PARENT HANDOUT

Libro: *Dora, la Hermana Mayor(Nick Jr. Dora la Exploradora)*
Adaptado por: Alison Inches
Ilustrador: Dave Aikins
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre lo que ves en la página.	**Adulto:** ¡Mira! ¡Aquí esta Dora! **Niño (a):** ¡Sí!
A – Haz preguntas y espere (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Dónde crees que está? **Niño/a:** En un cuarto de bebé.
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** Sí, ¡muy bien! Dora está en un cuarto de bebé, con un biberón en la mano, y está al lado de una cuna blanca que tiene juguetitos de bebé. **Niño:** Sí, al lado de la cuna.
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *baby bottle* en vez de *biberón* **Adulto:** Sí, tienes razón: *bottle* en inglés y *biberón* en español.

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APPENDIX E14:
INTERVENTION PARENT HANDOUT

Libro: *Los Buenos Modales de Dora (Nick Jr. Dora la Exploradora)*
Autor: Christine Ricci; Ilustrador: Susan Hall
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre lo que ves en la página.	**Adulto:** ¡Mira! ¡Aquí está Dora! **Niño (a):** Sí, aquí está Dora.
A – Haz preguntas y espere (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Y qué hace? **Niño/a:** Se va a comer un helado.
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** Tienes razón, parece que se va a comer un cono de helado de sabor a fresa. ¡Qué rico! **Niño:** ¡Sí, que rico!
RO Repita Otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *ice-cream* en vez de *helado.* **Adulto:** Sí, tienes razón, es *ice-cream* en inglés y *helado* en español. **Niño:** Sí, ¡me encanta el *helado!*

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APPENDIX E15:
INTERVENTION PARENT HANDOUT

Libro: *Dora Salva el Reino de Cristal (Nickelodeon Dora la Exploradora)*
Autor: Chris Gifford Adaptado por: Molly Reisner
Ilustrador: Dave Aikins
Casa editorial: New York: Simon & Schuster Libros para Niños

Leyendo con su hijo/a:	**Ejemplo**
C – Comentar y Esperar (cuente 5 segundos) * Haz un comentario sobre lo que ves en la página.	**Adulto:** ¡Mira! ¡Aquí Dora esta volando por el aire! **Niño (a):** ¡Sí!
A – Haz preguntas y espera (cuenta 5 segundos). Haz preguntas que no tengan respuestas de "sí" o "no" o una respuesta de una palabra. Haz preguntas que fomenten respuestas más largas y complejas, o hasta varias frases.	**Adulto:** ¿Quién más está con ella, y para dónde crees que van? **Niño/a:** Boots y una princesa, van para el castillo, Mami.
R - Añada algo a la respuesta de su hijo/a.	**Adulto:** Sí, están Boots y la princesa, y parece que van para ese castillo blanco con joyas rojas. ¡Que bonito! **Niño:** Sí, ¡hay muchos animales!
RO Repita otra vez en español si es necesario; si el niño/a responde en inglés o mezcla los dos idiomas.	**Niño** dijo *princess* en vez de *princesa* **Adulto:** Sí, tienes razón: *princess* en inglés y *princesa* en español. **Niño:** ¡Sí, princesa!

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APPENDIX F:
FIDELITY CHECKLIST

Date: **Dyad:**
Session #: **Book:**
C: Comentar y esperar 1-5 seg.(Comment and Wait 1-5 seconds)
A: Averiguar/hacer preguntas y esperar 2-5 seg. (Ask questions and wait 1-5 seconds)
R: Responder con un poco mas (Respond by adding a little more)
Instructions: Parents must complete at least one CAR cycle per two -page spread.
Cross out the letter (C-A-R) (step). List the vocabulary words spoken by the child. During Intervention sessions, mark "NC" next to the CAR cycles that Natalie coached parents.

Page #	CAR Cycle	Extra Cycles per page	# of Vocabulary per page
Cover	C A R	C C C C C C A A A A A A R R R R R R	
1	C A R	C C C C C C A A A A A A R R R R R R	
2-3	C A R	C C C C C C A A A A A A R R R R R R	
4-5	C A R	C C C C C C A A A A A A R R R R R R	
6-7	C A R	C C C C C C A A A A A A R R R R R R	
8-9	C A R	C C C C C C A A A A A A R R R R R R	
10-11	C A R	C C C C C C A A A A A A R R R R R R	
12-13	C A R	C C C C C C A A A A A A R R R R R R	
14-15	C A R	C C C C C C A A A A A A R R R R R R	
16-17	C A R	C C C C C C A A A A A A R R R R R R	
18-19	C A R	C C C C C C A A A A A A R R R R R R	
20-21	C A R	C C C C C C A A A A A A R R R R R R	
22	C A R	C C C C C C A A A A A A R R R R R R	
Total Cycles:		Total extra cycles:	Total Vocabulary words spoken by child per book:

APPENDIX G:
INTEROBSERVER RELIABILITY TRAINING

Sample Dialogues during Parent-Child Dyad Intervention Phase

The following are examples of possible child-parent dialogues:
Repeating the word in the native language:
If the child says a word in English and the parent knows the word in Spanish, the parent will let the child know the word in Spanish.
For example:
Child: "Mami, ese camión es *red*!"
Parent: "Sí, es *red* en inglés, y *rojo* en español" (Yes, that is *red* in English and *rojo* in Spanish).
Responding to incorrect responses by the child:
If the child makes a mistake, such as:
Parent: ¡Mira qué bosque más bonito! (Look at this nice forest!)
Child: ¡Y la mariposa! (And the butterfly!)
Parent: "¿De qué color es la mariposa?" (And what color is the butterfly?)
Child: "¡Verde!" (Green) (However the butterfly is actually pink)
Parent: "¡La mariposa es rosa, tiene unos ojos azules muy grandes!" (The butterfly is pink and has big blue eyes!)
As you noticed in the above example, the Parent corrects the child and moves on to the third step. Therefore, this example would be counted as one CAR cycle.
If the child interrupts the mother with another question or comment in the middle of the cycle, the mother can respond to the child's request, thereby starting a new cycle, and later go back to her initial cycle.
Child interrupts parent in the middle of a CAR cycle:
Example:
Parent: ¡Mira las banderas! Waits 2-5 seconds, no response from child.
Parent: "¿Cuántas banderas hay?"
Child: Mira, Mami, ¡una montaña rusa! (Look Mommy, a rollercoaster!)
Parent: "Sí, eso es una Montaña Rusa." "¿Te gustaría subirte en una montaña rusa?"
Child: ¡Sí, sí!
Parent: "A mí también. Para tu cumpleaños vamos a subirnos en la montaña rusa en el festival de otoño!"
Parent: ¡Mira las banderas!
Child: :Sí, son bonitas"
Mother: "¿Cuántas banderas hay?"
Child: "una, dos, tres, cuatro y cinco; cinco, Mami!
Mother: "¡Qué bien cuentas las banderas. Sí son cinco banderas, y son de muchos colores muy bonitos!"
In the above example, as the mother questioned the child, the child interrupted and changed the topic, and commented something else on the page. At this point, the mother followed the child's lead and started a new CAR cycle, and later returned to her previous cycle/question to complete another cycle. Therefore, the mother completed 2 CAR cycles.
(Reviewing the Materials could take from 15-30 minutes).

APPENDIX H:
PROCEDURAL OBSERVATION OF INTERVENTION PARENT TRAINING CHECKLIST

Observer_____
Session #_____
Date_____
Check the boxes if the researcher implemented the following during Intervention: Parent Training:

- ❑ Researcher displayed the *Language is the Key* by Washington Learning Systems parent training video for mothers to watch (25 minutes)
- ❑ Following the video, the researcher asked the 3 questions listed on the Parent Training Script and documented them on the data collection form
- ❑ The researcher provided parents with parent handouts
- ❑ The researcher and parent read and reviewed the parent handouts and discussed any questions from the parent handouts (Appendix F & G)
- ❑ The parent reviewed the books and practiced the CAR strategies with the researcher
- ❑ The parent practiced the CAR strategies with their child
- ❑ The researcher video-recorded the two parent-child shared book reading sessions
- ❑ The researcher displayed the video-recorded two parent-child shared book reading sessions to the parent
- ❑ While watching the parent-child shared book reading videotaped sessions, the researcher and parent engaged in video feedback about which CAR strategies were properly implemented and which steps were missed
- ❑ Researcher provided parents with Parent Quiz (Appendix H & I)
- ❑ Parents completed Parent Quiz
- ❑ Researcher scored the parent quiz to determine if parents would need more training sessions

Comments:

APPENDIX I1:
SOCIAL VALIDITY CHECKLIST POST-INTERVENTION (English)

Read each statement carefully. Five possible choices as to your level of agreement and disagreement have been placed after each statement. For each of the statements, please circle the phrase that best describes your feelings about the statement. Circle only one phrase for each statement. Please be sure to answer every item.

Dyad:

Date:

1. A. What did you think about the CAR steps?
   B. Which step did you struggle with the most?
   C. Which was easier for you?
   D. Which step did you feel more natural to implement for you?

2. The goal for this intervention was to assist parents with implementing the CAR strategy in order help increase their child's vocabulary. Are these goals important to you? Why? Why not?

3. Do you think the CAR strategies are necessary to help increase the vocabulary of your child?

4. When do you see yourself implementing the CAR strategies? During the course of your home routines, when (what time of day) would you most likely be able to implement the CAR strategies within a shared- book reading experience with your child?

5. How likely are you to use the CAR strategies during shared book reading once this researcher leaves? (Daily, bi-weekly, monthly?)

6. How would the CAR steps be improved?

APPENDIX I2:
SOCIAL VALIDITY FORM POST-INTERVENTION (Spanish)

Formulario sobre la Utilidad de esta Investigación

Responda las siguientes preguntas.

Nombre:

Fecha:

1. A. ¿Qué le parecieron los pasos de CAR?
   B. ¿Cuál de los pasos le pareció más difícil?
   C. ¿Cuál de los pasos fue el más fácil de realizar?
   D. ¿Cuál de los pasos le pareció más natural?

2. La meta de estas sesiones es asistir a los padres en el desarrollo y práctica de las estrategias de CAR con el fin de incrementar el vocabulario de sus hijos ¿Considera usted que el desarrollo e incremento de vocabulario de su hijo o hija es importante? ¿Por qué sí o por qué no?

3. ¿Cree usted que las estrategias de CAR son necesarias para incrementar el vocabulario de su niño o niña?

4. ¿En qué momento del día podría usted practicar las estrategias de lectura interactiva con su niño o niña?

5. ¿Cuál es la probabilidad de que usted use las estrategias de CAR durante una sesión de lectura interactiva con su niño o niña? (Todos los días, dos veces por semana, unas cuantas veces al mes, etc.).

6. ¿Cómo podrían mejorarse las estrategias de CAR?

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