ENHANCING EARLY LITERACY TEACHING AND LEARNING IN HEAD START: THE IMPACT OF A REPEATED BOOK READING APPROACH

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Alina Mihai

ENHANCING EARLY LITERACY TEACHING AND LEARNING IN HEAD START: THE IMPACT OF A REPEATED BOOK READING APPROACH

Well-developed language and literacy skills are essential to ensure children's success with academics and beyond. The present study emanates from the premise that language and literacy development in preschool is enhanced by children's opportunities to actively engage in meaningful language interactions with adults. These opportunities are particularly valuable for children who are considered at-risk for future reading difficulties. This study examined the effectiveness of a repeated book reading approach and its impact on teacher language use, teacher-child language interactions, and children's early literacy development. Participants included four Head Start teachers from a rural Midwestern Head Start program and the children in their classrooms.

To allow for an exploration of the effects of the intervention on children's outcomes along with an in-depth examination of how repeated book reading influences teacher-child language interactions an embedded mixed-methods design was employed. A pretest-posttest quasi-experimental group design measured the efficacy of the intervention as a way to enhance children's vocabulary and discourse abilities. Qualitative methods provided a fine-grained description of how repeated book reading influenced teacher-child language interactions, particularly teacher interactions with children who have disabilities.

Findings indicated that using the repeated approach to book reading and strategies to support vocabulary development and inferential language skills assisted teachers in the intervention classroom in providing their children with book reading activities that enriched their language skills. As a result of the intervention, children in the two intervention classrooms

registered significant gains in their discourse ability scores compared to the children in the control condition. Further, they experienced significant growth in their vocabulary compared to their scores at the beginning of the year, growth that was not evident in the control classrooms.

Findings from this research inform early childhood practice by providing a model through which preschool teachers can use repeated book reading to promote essential language skills that are seldom studied in preschool children. Further, this study provides suggestions for teacher professional development, particularly as it relates to providing high-quality instruction for children at-risk for reading difficulties.

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INTRODUCTION

"Perhaps the true path to literacy is the knowledge of content and the concept that underlies its foundation. In this case, our efforts would be to get the children to think, to grapple with ideas, to experience the "aha", the "flow" that comes when we achieve something meaningful against resistance. (Neuman, 2010, p. 302)

In today's technological society, well-developed language and literacy skills are essential to ensure children's success with academics and beyond. More than ever before, American schools are concerned with providing instruction that leads to well-developed language and literacy skills and enables children to critically think, understand, and learn by continuously seeking out and gaining new knowledge. These skills facilitate children's active participation in the social world (Dickinson, Darrow, Ngo, & D'Souza, 2009) and empower them to contribute as citizens in their communities.

Unfortunately, not all children easily develop literacy skills or consistently benefit from early literacy instruction despite the emphasis placed on their acquisition in the early years of schooling. It is under such circumstances that one third of fourth graders in our nation currently read below a basic level, with nearly half of the children from low-income families constituting this population (National Center for Education Statistics, 2011). As they advance through their schooling experience, poor readers lag further and further behind in their reading abilities and school achievement compared to more literate children (Whitehurst & Massetti, 2004). High numbers of children fail to complete high school each year (Fiester, 2010), thus limiting their professional opportunities, increasing the chances that they will experience poverty and

unemployment (McGee & Richgels, 2003), and limiting their potential to provide their own children with an enriching early literacy environment at home. The recurring cycle of poverty is repeated when successive generations of children fail to acquire literacy skills.

The relationship between poverty and disability is increasingly evident. Simply, poverty increases the risk of disability (Emmett, 2005). Inadequate access to healthcare, poor nutrition, and limited access to quality education are only some of the ways in which poverty can directly influence children's learning and development. It is therefore not surprising that the National Center for Children in Poverty identifies poverty as "the single greatest threat to children's well-being" (National Center for Children in Poverty, n.d.). Young children under the age of 6 appear to be particularly vulnerable to poverty, since 49% are currently living in low-income families, 25% of whom live in poor families (Addy, Engelhardt, & Skinner, 2013). On a national level, this is particularly disconcerting considering that children constitute about 24% of the U.S. population, but more than a third of the people living in poverty (Addy et al., 2013). Further, among adults with disabilities, close to 30% currently live in poverty, compared to only about 12% of Americans without a disability (DeNavas-Walt & Proctor, 2014). These data highlight the vicious circle between poverty and disability and raise a flag about the enduring consequences of child poverty. From both an economic perspective (McGee & Richgels, 2003) and an equity stance (Dickinson, McCabe, & Essex, 2006), closing the achievement gap between children from low-income families and their more affluent peers has been an issue of utmost importance for decades. It has become increasingly apparent that accomplishing this goal must be addressed at least partially by improving the language and literacy skills of the nation's most vulnerable children.

In the past decades, a deeper understanding of the concept of poverty has been established to include impoverishment in education, particularly literacy. Factors that place children at-risk for reading difficulties portray poverty as the context in which poor outcomes are actualized by predictors such as low parental education levels, a first language other than English, limited resources, and limited opportunities within the family to engage in the type of discourse that fosters the acquisition of language and literacy skills (Dickinson et al., 2006; Hart & Risley, 1995). As they begin schooling, children in low-income families have difficulties accessing high quality early care and education programs and then continue their schooling experience in impoverished schools, with limited resources to address their needs. Children who fail to acquire critical early literacy skills are ultimately often placed in special education classrooms (Venn & Jahn, 2004). In the area of literacy development, children with identified disabilities may be placed at further risk by the absence of a comprehensive curriculum and specialized instruction in reading (Bursuk & Damer, 2011).

Considering the importance of having access to quality early education, efforts to improve the well-being of vulnerable children have included the provision of high quality early care and learning experiences (Schmit, Matthews, Smith, & Robbins, 2013). Although various factors place children at-risk for reading difficulties, longitudinal studies indicate that children's early literacy skills improve when they are provided with high quality early education programs (e.g., Dickinson & Porche, 2011; Zill & Resnick, 2006; Zucker, Cabell, Justice, Pentimonti, & Kaderavek, 2012). Therefore, from the perspective of special education, it is critical to design early intervention programs that address differences early on for children who have difficulties acquiring literacy skills. The prevention model toward which the field of special education has moved in the past decades is particularly beneficial for children from low-income families, such

as children in Head Start. Under these circumstances, it behooves Special Education to deepen its understanding of children at-risk for reading difficulties and how early care and education programs can best support the acquisition of critical early literacy skills.

Early Literacy Development

In their development as readers, children begin to acquire critical precursory skills long before entering formal schooling (Duncan et al., 2007; Lonigan, Burgess, & Anthony, 2000; Wasik & Newman, 2009). Researchers describe two different but related sets of early literacy skills (Dickinson, Golinkoff, & Hirsh-Pasek, 2010; Paris, 2005), both of which experience significant growth in the preschool years. Code skills include alphabet knowledge, phonological awareness, and concepts about print. These are also referred to as constrained skills because they generally develop within a limited period of time (e.g., children generally learn the alphabet between 4 and 7 years) and they include a limited set of skills (e.g., 26 letters in the English alphabet; Paris, 2005; Paris, 2011). In contrast, meaning-focused skills include oral language, vocabulary, background knowledge, and inferential language skills (Dickinson et al., 2010; Lennox, 2013) and are referred to as unconstrained because of the unlimited opportunities learners have to continue to develop these abilities throughout their lives (Paris, 2005; Paris, 2011).

Code-related skills are essential in preparation for formal reading instruction. Children with well-developed code-related skills are able to recognize letters, associate them with sounds, and eventually decode words (Dickinson et al., 2010). It is important to note, however, that competence in alphabet knowledge (i.e., a constrained skill) which may serve to improve children's assessment scores at school-entry does not necessarily help children improve their performance on more important tasks, such as reading words in context (Denton & West, 2002;

Pearson & Hiebert, 2010). Therefore, instruction with a broader focus on language development, comprehension, and vocabulary development while children are building code-related skills is needed when aiming for long-term impact on early literacy, especially for at-risk children (Lennox, 2013). Such instruction that goes beyond a narrow focus on code skills and includes multiple opportunities and experiences for children to develop language through classroom interactions is what provides them with the tools to become good readers (Teale, Hoffman, & Paciga, 2010). In the early years, engaging with text by listening and discussing events that are removed from context (e.g., narratives) allows children to participate in decontextualized language which is foundational for literacy development (McKeown & Beck, 2006). A promising approach for supporting these skills is repeated book reading (McGee & Schickedanz, 2007; Trivette, Simkus, Dunst, & Hamby, 2012). Inferential language skills involve a higher level of cognitive demand compared to literal language skills and require children to move from using language to label, describe, or respond to information that can be readily perceived to using language to infer and reason about what they perceive (Blank, Rose, & Berlin, 1978a; Zucker, Justice, Piasta, & Kaderavek, 2010). Inferential language helps children develop listening and reading comprehension as they make inferences and analyze information from text (Snow, 1991).

Meaning-focused skills influence reading motivation and comprehension and become increasingly important as children move beyond learning to read toward reading to learn (Lennox, 2013; Neuman, 2010). In recent years, a narrow focus on code-related skills in early literacy instruction has been a cause of concern. As code-based skills are more malleable, they are easier to target through intervention in the early years (Dickinson et al., 2010). Although code-related skills are strong predictors of beginning reading and, therefore, enable

comprehension (Lennox, 2013), it has been argued that skills focused on meaning have more "staying-power" and thus should be given equal value and emphasis in early childhood classrooms, despite the fact that they are less responsive to short-term intervention (Dickinson et al., 2010; Neuman, 2010).

The National Early Literacy Panel examined the research literature to identify interventions and practices that promote early literacy development (NELP, 2008). Their findings have been criticized for emphasizing research on children's constrained skills (or code-focused; e.g., Dickinson et al., 2010; Neuman, 2010; Pearson & Hiebert, 2010). NELP panelists responded to this critique by pointing out the dearth of research on children's meaning focused skills (Lonigan & Shanahan, 2010). Indeed, many early literacy researchers agree that oral language and background knowledge are critical for enabling children to become strong readers, while the constrained skills needed for decoding are described as only a first step in reading acquisition (e.g., Dickinson et al., 2010; Teale, Hoffman, & Paciga, 2010). More research is needed to substantiate the positive impact of instruction for children's oral language skills.

If the ultimate purpose of reading is to enable learners to extract meaning from text, a balanced approach to early literacy instruction is essential. This may be especially true for children who need additional support with their early literacy development because they are at-risk for reading difficulties (Pearson & Hiebert, 2010). Classic research studies (e.g., Hart & Risley, 1995; Heath, 1983) demonstrate that the language and early literacy environments in the home play an important role in preparing children for schooling. For children from low-income families, the language environment in the home is less likely to support the meaning-focused skills important in school (Hart & Risley, 1995). Under these circumstances, preschool classrooms must assume a critical role by providing a comprehensive curriculum that emphasizes

the development of children's language, specifically listening comprehension and vocabulary in preparation for formal schooling (Lennox, 2013).

Head Start and Early Literacy

Head Start, the nation's flagship early intervention program has served preschool children and their families from low-income communities for nearly five decades. During this time, the program aimed to impact children's school readiness by providing comprehensive and culturally responsive services.

Head Start's history has included a number of threats to its continuance when the results of various research studies questioned its efficacy (Zigler & Muenchow, 1992; Zigler & Styfco, 2004). In an effort to respond to these threats, The Head Start Impact Study (HSIS) was mandated by Congress in the 1998 Reauthorization and sought to determine the program's influence on key developmental child outcomes (Puma et al., 2012). A nationally representative sample of nearly 5,000 children was randomly assigned to either Head Start services or a control group without access to Head Start and subsequently followed from program entry through the end of children's third grade year of school (Puma et al., 2012). Related to children's language and literacy outcomes, findings from the first year identified small to moderate effects on the pre-reading, pre-writing, and vocabulary skills of children in Head Start but no impact on children's oral comprehension and phonological awareness (Administration for Children and Families, 2005). Findings from subsequent years of the study demonstrated that, while Head Start had modest effects on children's language and literacy skills while the children were attending the program, the effects faded in elementary school. Only one significant impact remained at the end of third grade, a positive impact for the 4-year old cohort on a reading assessment and a negative impact for the 3-year old cohort on grade retention (Puma et al.,

2012). It is important to note that Head Start children's scores, although higher for the 4-year old cohort compared to the control group, remained lower than the average for the population.

Overall the HSIS conclusion was that the favorable impact of Head Start was insufficient to close the achievement gap between children in poverty and the rest of the population (Puma et al., 2012). These findings have been criticized by others, including Edward Zigler (2010) who pointed out that both groups in the study were ill-chosen and "badly contaminated" (p. 2). Zigler (2010) reminded us that over the years "scientists, policymakers and the public have developed unreasonable expectations" of Head Start (p. 3). Nevertheless the findings of the HSIS have served to emphasize the importance of quality for Head Start programs. Under the Obama administration, Head Start has reinvigorated its efforts to improve quality by emphasizing the importance of school readiness (Administration for Children and Families, 2010b).

One important finding from the HSIS particularly relevant here is that the children in the Head Start sample scored below the 50th percentile in oral comprehension (Administration for Children and Families, 2010a). The HSIS measures of oral comprehension assessed children's ability to "understand and make inferences from phrases and sentences spoken in English" (Administration for Children and Families, 2005, p. 4-5). Several authors have raised concerns that preschool classrooms may not be adequately supporting the development of inferential skills essential to children's ability to use language to think and understand (Lennox, 2013; van Kleeck, 2008).

The 2007 Reauthorization of Head Start clarified the program's mission to promote school readiness and support the development of age appropriate skills, including literacy, in order to build a foundation for later school success. The emphasis on school readiness is evident with a set of specific action recommendations that Head Start programs can take to improve

classroom activities such as “book reading, dramatic play, number games, music and more” (p. 1), which can be used to promote increased vocabulary and problem solving skills to help children start kindergarten ready to learn (Administration for Children and Families, 2010b). The importance of evidence-based practices is widely acknowledged in this effort to provide high-quality services as the Office of Head Start pledged to revise and strengthen Head Start’s Performance Standards and articulate the requirement for the use of evidence-based practice (Fuentes, 2010).

Introduction to the Study

Children’s early literacy development during the preschool years makes this a critical period for providing the foundation for future reading success. As such, continued emphasis on supporting young children’s early literacy skills during preschool has been evident for decades. Research demonstrated that through high-quality preschool experiences, children develop expressive and receptive language, cultivate appreciation of books, and make progress toward acquiring skills to support early literacy development.

Much research has focused on developing code-related skills essential for early reading while fewer studies have examined the development of meaning-focused skills in the early years. In particular, an essential aspect of children’s language and literacy development infrequently studied in preschool children is their ability to use inferential language. Being able to integrate existing and new information and talk about text helps children build meaning and supports the development of essential skills for later reading comprehension. Within preschool classrooms book reading activities are considered to be an optimal context to target these types of skills.

Most preschool classrooms read books to children (Dickinson, 2001b); however, while preschool children are able to make inferences about what is read (van Kleeck, 2008), these

skills are not consistently supported within preschool classrooms and children are too often engaged in little or no talk during book reading activities (Hindman, Connor, Jewkes, & Morrison, 2008). We concur with Hindman and her colleagues (2008) as in our work with Head Start teachers we found book reading to be inconsistently delivered, with teachers lacking intentionality in supporting specific early literacy skills during book reading (Mihai, Butera, & Friesen, 2012). In turn, children miss out on valuable learning opportunities. Developing an understanding of how teachers might effectively read books to children is essential for helping Head Start fulfill its mission to prepare children for school.

The purpose of this study was to examine the impact of a repeated approach to book reading on children's vocabulary and inferential language skills by examining the effectiveness of the intervention and its impact on: (a) teacher language, (2) children's early literacy development, and (3) teacher-child language interactions. Specifically, this intervention aimed to study teachers' targeted language use in the context of repeated book reading and to measure children's language outcomes. Examining how repeated book reading influences teacher-child discourse illuminates whether repeated reading is indeed an effective way to target children's vocabulary and inferential language skills.

Findings from this study will inform early childhood practice by contributing to the research base by providing evidence for effective practices supporting critical early literacy skills. The study intended to describe a model of supported book reading to promote preschoolers' early literacy development. In addition, the research leads to recommendations about teachers' professional development.

CHAPTER 2

REVIEW OF THE LITERATURE

"Learning how to take meaning from writing before one learns to read involves repeated practice in using and learning from language through appropriate participation in literacy events …" (Heath, 1982, p. 70)

Relevant research on the importance of high-quality preschool environments, the use of book reading to support early literacy environment, and the value of teacher-child interactions for children's language and literacy development were synthesized to inform this study. In the first section, the key role teachers play in supporting children's early literacy development is examined. Further, the early literacy framework outlined in this study is described along with previous work in which it has been used, leading to the present study. The second section examines the importance of book reading for children's development in general and children's early literacy development in particular. Focusing on the use of book reading in preschool classrooms, the third section explores teacher practices that support children's language and literacy development in the context of book reading. Studies providing evidence that inferential language skills can be effectively targeted in interactions with young children are examined. The final section examines the importance of providing rich language interactions and describes how a repeated book reading approach can be used to accomplish this goal.

Developing High-Quality Early Literacy Teaching in Preschool Classrooms

High-quality preschool environments are critical to children's school readiness (Dickinson, 2011; Lennox, 2013; van Kleeck, 2008) and teachers play an important role in providing instruction that addresses the full spectrum of code- and meaning-focused skills

children need to become good readers (Goldstein, 2011). However, there is evidence that preschool teachers do not always effectively promote early literacy development and key early literacy skills continue to be missing from many preschool classrooms (Hawken, Johnson, & McDonnell, 2005; Hindman & Wasik, 2008; Powell, Diamond, Bojczyk, & Gerde, 2009). Factors that may influence what activities teachers provide to children include teachers' knowledge of how children typically develop, their pedagogical skills, and their repertoire of teaching practices (Mihai, Butera, & Friesen, 2013). Compared to K-12 teachers, preschool teachers are less likely to hold specific teaching credentials and less likely to have earned a university degree (Shore, 2012). They may not have a good understanding of the components of early literacy or may not know how to support these skills in their classrooms. In addition, some preschool teachers hold strong beliefs about what constitutes developmentally appropriate practice for young children and do not take an active role in supporting early literacy (Mihai, Butera, & Friesen, 2012). Some teachers hold maturationist views about children's early development and believe that literacy will be acquired naturally as the children mature, despite evident limitations of this perspective (IRA & NAEYC, 1998; Powell et al., 2009).

The early literacy framework outlined in the present study was developed in the context of Children's School Success Plus project (CSS+), a three year multisite project funded by the Institute of Educational Science (IES). CSS+ builds on the work of CSS (Odom et al., 2003) by redesigning an evidence-based, integrated preschool curriculum for children at-risk due to poverty, status as an English language learner or disability (Horn, Palmer, Lieber, & Butera, 2010). The CSS+ curriculum incorporates Universal Design for Learning (UDL; Conn-Powers, Cross, Traub, & Hutter-Pishgahi, 2006; Horn & Banerjee, 2009) and instructional individualization and includes a daily set of five integrated activities focused on science, social

competence, math, and early literacy. CSS+ focused in particular on the effects of the curriculum for children with disabilities.

The CSS+ early literacy framework promotes a balanced approach toward early literacy instruction, including both code- and meaning-focused skills, and employs daily storybook reading as the foundation for early literacy activities. In most instances, books are read three times over multiple days to allow different aspects of the story to be emphasized and to promote extended comprehension and provide the opportunity to expand children's vocabulary and background knowledge related to the book's content. Adapting McGee and Schickedanz's (2007) framework for repeated book reading, a first reading is structured to introduce the main character(s), the central idea of the book, and new vocabulary. During the reading, the teacher makes comments about the story, modeling inferential thinking. After the story, she asks follow-up questions to build comprehension and also to model her own extended thinking about the story. In a second reading, the children are prompted to recall the character(s) and the problem of the story and the teacher continues to ask more questions to extend children's understanding of the characters' feelings, thoughts, and motivations using increasingly decontextualized talk. Finally, the third reading of a book is an opportunity for children to reconstruct the story as the teacher reads selected sections of the text. The teacher asks questions to prompt the children to make connections between the story and their personal lives and experiences.

Various strategies are used to continue to emphasize vocabulary throughout the second and the third reading (e.g., pointing to pictures, using facial expression and body language as relevant, and providing short definitions), encouraging children to use the new words in their responses to teacher questioning. Thus, the CSS+ repeated reading approach teaches vocabulary systematically and promotes inference making by building on children's increasing

understanding of the concepts and ideas introduced within the book. UDL is embedded within each repeated book reading with multiple means of representation and engagement emphasized as teachers introduce books or explain vocabulary in the first reading, and multiple means of expression increasingly evident as children take a more active role in the interactions in the second and third readings (see Table 1). Given the new conceptual knowledge, vocabulary, and diversity of genres a book may present, multiple exposures to the same book maximize children's opportunities to learn as they meaningfully engage with the text.

Emerging findings from our efficacy study of the CSS+ early literacy intervention demonstrated significant effects on children's code-based skills (e.g., letter knowledge, print awareness, phonological awareness), but only marginally positive effects on vocabulary development. It is of note that in both control and experimental classrooms there was modest evidence that teachers provided a positive discourse climate and opportunities for extended conversations. Further, findings from our qualitative study of teacher perspectives about the CSS+ intervention suggested some of the reasons why the study failed to achieve significant outcomes for children's meaning-focused skills, particularly as teachers had difficulties supporting meaning-related skills during book reading (Mihai, Butera, & Friesen, 2013). Overall, these findings indicate that while code-related skills improved significantly by the end of the CSS+ study, the intervention did not show significant differences for children's meaning-related skills. These findings may be explained in part by other research literature indicating that code-focused skills are more malleable and easier to target through intervention than meaning-focused skills (Dickinson et al., 2010; Neuman, 2010).

Table 1

Components of Repeated Book Reading

	First Reading	Second Reading	Third Reading
Before Reading	Make the problem explicit by introducing the main character and the main idea. Use the book covers and illustrations as needed. Explain key vocabulary [use multiple means of representation and engagement]	Remind children that they have read the book before and ask questions about the characters and the main problem [use multiple means of engagement and expression]	Invite the children to recall the title and identify the problem and the characters.
During Reading	Provide vocabulary support by pointing to illustrations, using gestures, or facial expressions as relevant, and giving simple definitions. Make analytical comments that reveal the main characters' thoughts and feelings and ask follow-up analytical questions based on these comments [use multiple means of representation, expression, and, engagement]	Provide vocabulary support by giving more verbal definitions. Continue to model analytic comments by asking more frequent questions to help children make additional inferences.	Integrate a guided reconstruction of the story. Read some of the text and have the children reconstruct parts of the story by showing illustrations and asking a few focused questions that elicit children's responses. (e.g., "What is happening here? What will happen next?"). Ask follow-up questions based on children's responses and encourage children to use new vocabulary words. [use multiple means of expression and engagement]
After Reading	Ask "why" questions to extend comprehension and use comments and follow-up questions to prompt answers (e.g., "I' thinking…). [use multiple means of expression and engagement]	Ask "why" questions that may extend beyond the story and connect events in the story to children's lives.	Ask "why" questions that may extend beyond the story (e.g., What would have happened if…?)

Note: Adapted from McGee and Schickedanz (2007)

Other studies of teachers' views about early literacy instruction support these findings. Preschool teachers appear to emphasize code-related skills rather than oral comprehension or vocabulary development even as they agree with the importance of supporting oral language

development and reading books to children (Hindman & Wasik, 2008). In a study about teachers' use of challenging questions in preschool classrooms for children from low-income communities, Massey and colleagues (2008) noted that management questions (e.g., "Are we ready?", "Have a seat, ok?", p. 349) were predominant during teacher-child interaction, although cognitive challenging questions (e.g., "What do you think this means?", "What do you think will happen next?", p. 349) occurred more often during book reading than during other activities. Researchers point out that alphabet knowledge is one of the most salient child outcome teachers emphasize in their classrooms (O'Leary, Cockburn, Powell, & Diamond, 2010; Powell et al., 2009), while the quality of language interactions children in at-risk preschool classrooms experience is less than optimal (e.g., Dickinson, 2001a).

Research has demonstrated that the most robust preschool classroom predictor for later literacy achievement is teacher support for extended discourse, which involves engaging children in rich conversations during book reading or other classroom activities (Dickinson et al., 2006). In particular, fostering language learning through extended conversations promotes conceptual knowledge and vocabulary growth as well as children' use of inferential language (Dickinson & Porche, 2011; Dickinson et al., 2009). Yet studies of teacher-child conversations revealed that teachers tend to dominate conversations rather than respond to children's comments and they miss out on opportunities to extend topics and encourage children to elaborate ideas (e.g., Dickinson, 2003; Dickinson, Freiberg, & Barnes, 2011). Dickinson and Porche's (2001) longitudinal study of the effects of teachers' language use on children's language learning found associations between preschool conversations and children literacy outcomes in fourth grade. As such, continued efforts to improve the quality of classroom discourse and enhance language interactions in preschool environments should be a priority in the early education of young

children, particularly children in Head Start. In the present study I investigated how repeated book reading can be used to create the rich language interactions between teachers and children that support children's the early literacy development, specifically children's vocabulary and inferential language skills.

Book Reading and Early Literacy Development

Reading books with children gives teachers the opportunity to provide them with rich language interactions. Book reading has been recognized as a valued activity in preschool for decades (Teale, 2003). Anderson and colleagues (1985) stated that "the single most important activity for building the knowledge required for eventual success in reading is reading aloud to children" (p. 23). Aside from book reading being a pleasant experience for both children and adults, children are introduced to advanced language structures, participate in extended conversations, learn new vocabulary, build conceptual knowledge, and develop print awareness (Lennox, 2013; Reese, 2013). Additionally, book reading provides other benefits for children's overall development. For example, by considering the thoughts, feelings, and motivations of characters in stories, children develop theory of mind and, by recalling events, develop their memory. Practicing recall in itself is an important skills for school success. Further, children's awareness of what they can and cannot recall from previous readings of a book lays the foundation for the development of metacognitive skills which are essential for later academic achievement (Reese, 2013).

For the past three decades, numerous studies have investigated the impact of book reading on children's language and literacy skills. Several meta-analyses assessed the overall effect of these studies (e.g., Mol, Bus, de Jong, & Smeets, 2008; NELP, 2008; Sénéchal & Young, 2008). Results indicated that shared reading has moderate effects on children's oral

language development and print knowledge. In addition, examining the added value of interactive shared reading, Mol and colleagues (2008) concluded that children experience gains in their language development as a result of active participation in quality shared reading activities.

An approach to book reading whose positive effects on children's early literacy development have been acknowledged since the 1980s is repeated book reading (e.g., Morrow, 1988). Based on the premise that repetition is valuable, repeated book reading offers children multiple opportunities to review and understand concepts, as well as engage in extended talk about the story problem and characters (McGee & Schickedanz, 2007; Trivette et al., 2012). As Trivette and colleagues (2012) demonstrated in their meta-analysis of repeated book reading studies, steady progress has been made toward documenting the benefits of this approach. Nevertheless, more effort is needed toward introducing repeated book reading in preschool classrooms as this is currently not a commonly encountered activity.

Book Reading in Preschool Classrooms

Preschool teachers generally agree with recommended practices for reading aloud with young children and acknowledge the varied benefits of this activity (Teale, 2003; Hindman & Wasik, 2008). Although they may differ in how they read and the types of books they select, most teachers choose to read books in their classrooms (Dickinson, 2001b).

However, simply reading books to young children or inviting them to talk about a book and acknowledging their responses is not sufficient in and of itself to foster their early literacy development (McGee & Schickedanz, 2007; McKeown & Beck, 2003). In fact, Zucker and colleagues' (2012) study of the longitudinal effects of shared reading revealed that frequency of reading is not a significant predictor of children's language and literacy skills. Rather, it is the

quality of adult-child interactions during book reading that enhances children's outcomes (Lennox, 2013). Researchers have pointed out that analytic talk about books helps children make predictions, inferences, and connections to personal experiences and prior knowledge (McGee & Schickedanz, 2007). In high-quality book readings, teachers model inferential thinking, ask open-ended questions, allow children to reflect, and are responsive to their answers (McKeown & Beck, 2003). In other words, children's early literacy skills are enhanced when teachers are intentional and purposeful in planning book reading activities that actively engage children. Repeated book reading extends the opportunity for high-quality teacher-child language interactions.

Well-planned book reading provides children with the opportunity to use cognitively challenging language including inferential language which requires a higher level of cognitive demand as opposed to literal language (Cochran-Smith, 1984; McGee & Schickedanz, 2007; McKeown & Beck, 2003; Zucker et al., 2010). Literal language is used in contexts where specific information to be discussed can be readily perceived. For example, a teacher might show a picture and ask the children what it represents. Inferential language extends beyond information that is directly provided and requires children to use their reasoning skills and background knowledge (van Kleeck, Woude, & Hammett, 2006). As an example, while reading a book, a teacher might ask the children to make predictions, infer characters' feelings, thoughts, or motivations, or make connections. Children's ability to make inferences is critical to reading comprehension and correlates with academic performance (Dickinson & Smith, 1994; Nation, 2005; Tompkins, Guo, & Justice, 2013; van Kleeck, 2008). Further, Reese (2013) argued that book reading discussions help children make interpretations and evaluate aspects of stories in ways that help them prepare for formal school settings. Book reading lends itself naturally to

extended discourse and may be an ideal activity to support the development of inferential language skills.

In discussing how children become readers, Cochran-Smith (1984) stated that effective teachers model the role of an ideal reader as they read-aloud to children. Thus, as they read a book, the teachers' role is much more complex than simply delivering the text. For example, teachers model how they are making meaning out of what they are reading by stopping to reflect, commenting, or making predictions about what might happen next (McGee & Schickedanz, 2007). By modeling this meaning-making process out-loud and eliciting children's participation, teachers provide children with the opportunity to engage in inferential language that promotes comprehension skills.

Although preschool teachers often read books to children, too often they do not make optimal use of the practice to develop children's language skills (Dickinson, 2001b; McKeown & Beck, 2003; Schneider & Gorsetman, 2009). They may read books in a didactic manner, without supporting extended discourse (Dickinson, 2001b), or they may use book reading simply as a transitional activity, failing to respond to children or provide feedback that promotes thinking and solidifies understanding (Friesen & Butera, 2012; Schickedanz & Collins, 2012). Professional development is needed to support teachers with delivering high quality language and literacy instruction in the context of book reading (Blamey, Beauchat, & Sweetman, 2012; Mihai, Butera, & Friesen, 2013).

A body of knowledge confirming the value of book reading for supporting inferential language skills is emerging (e.g., Hindman et al., 2012; van Kleeck, Gillam, Hamilton, & McGrath, 1997; van Kleeck et al., 2006; Zucker et al., 2010). Earlier studies focused on parents' reading behaviors, in particular mothers' interactions with their children during book reading.

In one such study, van Kleeck and colleagues (1997) examined the book reading interactions of 35 middle class parents and their preschool children. Mothers' and fathers' discussions during book reading were coded using a coding scheme adapted from the four levels of abstraction developed by Blank, Rose, and Berlin (1978a). The Preschool Language Assessment Instrument (Blank, Rose, & Berlin, 1978b), an assessment of language development on the same levels of abstraction, was used to determine children's language gains. Findings indicated that parental input at the four level of abstraction was positively and significantly correlated with children's gains. Further, parents' language input at both lower and higher levels of abstraction correlated with children's abstract language development, suggesting that discussion during book reading should provide opportunities to engage with both literal and inferential language. The authors suggested that input at lower, or literal levels, provides children with opportunities to experience success by focusing on skills the children have already mastered, while input at higher levels challenges emerging inferential skills and promotes learning. While the middle-class sample used in this study may be considered a limitation for understanding the relationship between parental book reading and children's abstract language development for children from low-income families, the researchers note that their sample was far from homogeneous and middle-class class parents in this study varied greatly in how they read to their children.

In a subsequent study, van Kleeck, Woude, and Hammett (2006) extended their work on fostering the development of literal and inferential language skills by focusing on preschool children in Head Start. Thirty preschool children with language impairment were randomly assigned to either a control or an intervention condition. Children in the treatment group participated in individual 15 minute book reading sessions twice a week for eight weeks with a

trained interventionist. Scripted questions were embedded in the books for adults to use as they shared books with the children. Approximately 70% of the questions were aimed at the literal levels and about 30% were at the inferential levels. Results indicated that after the intervention children in the treatment group experienced greater growth in their literal language as measured by receptive vocabulary with the Peabody Picture Vocabulary Test-Third Edition (PPVT-III; Dunn & Dunn, 1997) and literal and inferential language skills when assessed using the PLAI. Although these findings were encouraging, a limitation of this study when considering how all preschool children can be supported to develop inferential language skills may be the fact that van Kleeck and colleagues' (2006) study involved individual intervention that was implemented by trained researchers. The children were read to one-on-one, thus generalizing to small group or whole classroom book reading is problematic.

Zucker and colleagues' (2010) work begins to address this limitation as it examined preschool teachers' use of literal and inferential questions and children's responses during whole-class shared readings. However, this study is descriptive and correlational, examining only naturally occurring preschool classroom activities. Twenty-five preschool teachers and 159 children from various settings serving children at-risk (i.e., state-funded/Title 1, Head Start, and privately funded) participated in this study. Teachers implemented four whole group reading sessions for 30 weeks with minimal professional development as part of a larger study in which these classrooms served as a control group. Similar to findings of van Kleeck and colleagues (1997, 2006), the authors used a coding system with four levels of abstraction adapted from Blank et al. (1978a) to code teacher and child utterances during book reading. Using sequential analysis, the researchers identified significant associations between the level of teachers' questioning and children's responses, with literal questions eliciting more literal responses and

inferential questions eliciting inferential child responses. An additional finding from this study was that teachers' use of questioning was partially child driven as teachers asked more inferential questions in response to higher level child responses. This is an important finding, particularly when considering preschool programming for children at-risk for reading difficulties who may have below average language abilities.

In a recent study, Hindman and colleagues (2012) examined the role of discussions during book reading on preschooler's vocabulary learning. Specifically the authors analyzed the teachers' use of contextualized and decontextualized language during book reading and how it was linked to children's vocabulary development. Ten Head Start teachers and 153 children participated in this yearlong study. In the fall and spring researchers assessed children's vocabulary using the PPVT-III and videotaped book reading activities in each classroom. Videotapes were coded to capture the opportunities teachers' provided for children's engagement with contextualized and decontextualized language. Results indicated that children learned more words when teachers used more contextualized and decontextualized talk during book reading, leading the authors to conclude that Head Start teachers should use both types of extratextual language to support children's early literacy development.

Dunst and colleagues' (2012) meta-analysis examining the relationship between different types of inferential book strategies and children's language and literacy development summarized findings from other similar studies. Teaching strategies that were particularly effective included asking open-ended questions, providing or eliciting explanations about story events, relating events and characters in the story to children's personal experiences, and asking children to make predictions about a story. The researchers concluded that adults' use of

inferencing strategies had positive effects on young children's language and literacy development.

Overall, these studies provide evidence that inferential language skills can be targeted in interactions with preschool children and book reading appears to be a particularly suitable context. However, more research is needed in order to establish that book reading can effectively be used by early childhood teachers as a vehicle to improve meaning-focused early literacy skills, especially children's inferential language. This is particularly important as most research examining the effects of book reading on children's early literacy skills has focused on vocabulary development (Lonigan & Shanahan, 2010; Schickedanz & McGee, 2010). Developing a model to support teachers as they learn to use book reading to improve child outcomes is critical and to do so requires fine-grained descriptions of classroom language interactions. Such descriptions can provide insight into how teachers can incorporate well-planned repeated book reading activities into their daily classroom schedules. A critical gap in the literature is a close examination of the exact nature of teacher-child language interactions in the context of repeated book reading and the effects on children's early literacy. For this purpose, capturing as much detail as possible and analyzing interactions using methods that closely examine the use of language in context is essential. In previous research, such close examinations of language interactions were conducted using various research methods, such as coding of teacher and child language (e.g., Chen & de Groot, 2014; Dickinson, 2012), discourse analysis (e.g., Fiano, 2014; Rex & Schiller, 2010) and conversation analysis (e.g., Church, 2010; Cohrssen, Church, & Tayler, 2014; Margutti & Drew, 2014).

Teacher-Child Interactions and Early Literacy Development

According to Vygotsky (1978), an individual's learning and development take place through interactions with others and the environment. For young children, the opportunities they have both at the home and in the classroom to engage in meaningful social interaction are essential in supporting their language and literacy development. Vygotsky's theoretical frame about teaching and learning provides a developmental perspective on how young children acquire early literacy and how teachers might effectively emphasize these skills in their classrooms (Bodrova & Leong, 2006).

From a Vygotskian perspective, supporting language and literacy development in preschool depends on children's opportunities to actively engage in meaningful language interactions with adults (Kaderavek & Justice, 2002). Active participation in these interactions ensures high levels of engagement leading to children's language and literacy learning (Pianta, Hamre, & Allen, 2012). Further, Vygotsky's (1978) notion of the concept of the zone of proximal development and its application in classroom interactions describes how these interactions may support early literacy development. When teachers target their interactions within the child's zone of proximal development, toward the skills and competencies that children can develop with assistance from adults or more competent peers, learning occurs (Bodrova & Leong, 2006). Bruner (1975) used the term scaffolding to refer to this sort of support offered to children in order to help them achieve their developmental potential. Within preschool classrooms during book reading, teacher scaffolding is an essential aspect of early literacy teaching as it acts to enable children to eventually become independently competent (Henderson, Many, Wellborn, & Ward, 2002).

As they plan opportunities for children to actively engage in classroom activities, demonstrate their knowledge, and be supported in developing new competencies, teachers need to be aware of how instruction can be designed to allow all children to participate. UDL principles are an important resource for planning instruction in that UDL supports provide access for all children (Conn-Powers et al., 2006; Horn & Banerjee, 2009). Thus, early literacy activities should be planned to provide multiple means of representation, expression, and engagement. In this manner, learning opportunities are created to address different learning styles and levels of ability, ensuring that children are engaged, motivated, and provided with a variety of formats for demonstrating their learning. Further, to enable children to make meaningful connections over time, activities should allow for language and literacy learning to be integrated across the day and over the school year into an overarching curricular thematic framework to solidify learning.

A practical approach that applies the fundamental aspects of a social interactionist perspective on language development is McGee and Schickedanz's (2007) repeated interactive read-aloud framework which is adapted in the CSS+ framework. Repeated book reading actively engages children in answering and asking questions and allows teachers to systematically model and build more complex language skills. This type of scaffolding in which teachers systematically and deliberately target more complex language skills elicits child engagement and inferential language use (McGee& Schickedanz, 2007).

The repeated book reading approach places emphasis on the instruction that takes places before, during, and after a book is being read, particularly the teachers' decontextualized talk during these time periods and children's responses to it. These conversations are known to motivate children and promote comprehension (Wasik & Neuman, 2009). As such, before

reading, children benefit from making predictions, responding to questions that actualize their background knowledge, and learning key vocabulary that may be instrumental to understanding the book. During book readings, comprehension is extended through teachers' comments, modeling of analytic thinking, and questions asking children to make further inferences. After reading, additional open-ended questions engage children in extended analytic talk. Table 1 presents the components of repeated book reading activities (pp. 14-15).

Conclusion

The examined literature supports the idea that early literacy development is best supported when children are provided with high-quality preschool environments and ample opportunities for rich language interactions with adults. Improving child outcomes in language and literacy development is the focus of many early learning standards that include specific goals related to language and literacy development (Scott-Little, Kagen, & Frelow, 2006). For example, the recently revised Head Start Child Development and Early Learning Framework includes language development (i.e., receptive and expressive language) and literacy knowledge and skills (i.e., book appreciation and knowledge, phonological awareness, alphabet knowledge, print concepts and conventions, and early writing) (Administration for Children and Families, 2010c). The goal of defining the expectations of what children should learn is, in part, guided by the assumption that this will enable teachers to be intentional in how they plan and deliver instruction (Scott-Little et al., 2006). Nonetheless, the literature reviewed in this chapter suggests that teachers are not always intentional in planning instruction that supports essential early literacy skills. In particular, research indicates that teachers often miss out on opportunities to support children's inferential language skills. As these skills are critical for later reading comprehension, particularly for children with limited opportunities for practice outside of the

classroom, more studies are needed to examine how early educators can be supported in their efforts to embed these skills within preschool classroom activities.

It is well established that book reading is an effective tool for supporting vocabulary development in young children. However, more research is needed to substantiate the emerging evidence that book reading can be used to promote other language and literacy skills, such as children's use of inferential language. Considering the importance of teacher-child interactions as they relate to children's outcomes, the first question helps determine whether teachers' language use varies in complexity when using a repeated book reading approach rather than reading books "as usual." Our previous work in CSS+ and other studies on the language and literacy instruction of preschool teachers have demonstrated positive influences on the strategies they were using in their classrooms during book reading (e.g., Blamey et al., 2012; Milburn et al., 2013; Wasik & Bond, 2001; Wasik, Bond, & Hindman, 2006). In these studies the teachers were trained to use interactive reading strategies and ask more-open ended questions, explain vocabulary, and relate books to children's experiences. The researcher expected to find similar positive results in response to the first research question about the influence of the intervention on teachers' language use during repeated book reading.

The first research question also illuminated whether repeated book reading is indeed an effective instructional approach which systematically exposes children to increasingly complex discourse around specific story concepts. The researcher anticipated that teachers would use increasingly more complex strategies to engage children in repeated book reading. Although, to the researcher's knowledge, the impact of repeated reading on teachers' language use has not been studied in this context before, the researcher expected to observe differences in teachers' level of the questioning across multiple readings of the same book due to the structure of the

repeated reading approach. As such, in a first reading, it is anticipated that teachers would use more literal language and attend more closely to presenting the narrative, the characters, and the new vocabulary. In subsequent readings increased use of teacher-child talk was anticipated, with teachers making more inferential comments and asking more complex questions that prompted children to think about story related concepts.

The second question investigated whether there were significant effects on language and literacy development for children who participated in repeated book reading as opposed to those who engaged in book reading "as usual." The hypothesis was that repeated book reading is an effective tool for supporting children's vocabulary and discourse skills based on prior research findings documenting the positive effects of book reading on young children's language and literacy skills (e.g., Wasik & Bond, 2001; Wasik, Bond, & Hindman, 2006). The researcher expected the influence of the repeated book reading approach on teacher's language use (i.e., the first research questions) to positively impact children's discourse abilities. This hypothesis is based on previous studies such as Zucker and colleagues' work (2010), which identified significant associations between the level of teachers' questions and children's responses. Previous research also established that children from low-income families can improve their vocabulary with appropriate learning opportunities (e.g., Wasik & Bond, 2001; Wasik et al., 2006; Zucker et al., 2012) and repeated book reading has been described as an effective way to stimulate children's vocabulary (Trivette et al., 2012). Moreover, studies indicate that teachers' inferences are related to children's vocabulary growth (e.g., Hindman et al. 2008; Hindman, Wasik, & Erhart, 2012).

The final question addressed the need to provide fine-grained, qualitative analyses of classroom language discourse in an attempt to better understand teacher-child language

interactions. This question resulted in an in-depth description that provided insight into understanding discourse patterns in preschool classrooms serving children at-risk. The researcher anticipated that these research questions will inform current practice on effective ways to support essential early literacy skills in preschool classrooms, while also suggesting directions for teacher professional development.

Following the premise that book reading can be used as a vehicle to support the development of early literacy skills, this study examined how Head Start teachers used repeated book reading in their classrooms and the effect their use had on children's language and literacy skills. The following research questions provided focus to the inquiry:

1. Does Head Start teachers' use of language during book reading change when using a repeated book reading approach as compared to book reading in a control classroom?
2. What is the impact of the repeated book reading approach on children's vocabulary development and discourse skills?
3. How does the repeated book reading approach influence teacher-child language interactions? In particular, how does it influence teacher interactions with children who have disabilities?

CHAPTER 3

METHOD

"A mixed methods study seeks broader, deeper, and more comprehensive social understandings by using methods that tap into different facets or dimensions of the *same complex phenomenon.*" (Greene, 2007, p. 101)

Research Design

The aim of this study is to examine the effectiveness of repeated book reading and its impact on teacher language use, teacher-child language interactions, and children's early literacy development. To allow for an exploration of the effects of the intervention on children's outcomes along with an in-depth examination of how repeated book reading influences teacher-child discourse an embedded mixed methods design was used (Creswell, 2008; Greene, 2007). This design allowed for quantitative and qualitative data to be collected, analyzed, and reported within the same study (Creswell & Plano Clark, 2007).

A pretest-posttest quasi-experimental group design was used to collect data needed to address the first two research questions. Group comparison studies, a frequently employed methodology in special education research, seek to determine whether an intervention makes a difference in outcomes for participants (Creswell, 2008; Gersten et al., 2005; Odom et al., 2005). In the present study, this design enabled the researcher to interpret the effect of the repeated book reading intervention on the language and literacy outcomes of children who participated in the intervention compared to those who engaged in book reading "as usual." Further, this design allowed the researcher to investigate the influence of the intervention on teachers' language use during book reading by comparing teachers in the control and the experimental condition.

In response to the third research question, conversation analysis (CA) was applied to provide a fine-grained description of how repeated book reading influenced teacher-child language interactions. The need to specifically focus on teacher-child interactions is supported by the findings that the manner in which adults interact with children as they provide developmentally appropriate experiences is a central ingredient of classroom quality and contributes to the effects of preschool education (Pianta, Barnett, Burchinal, & Thornburg, 2009).

"Mixing" both research methods provides a more comprehensive understanding of how the repeated book reading approach influenced teachers' language use and teacher-child patterns of language interactions. As such, while the quantitative data provided opportunities for generalization, the qualitative data presented an in-depth description of how the intervention was implemented within the classrooms (Creswell, 2008). The use of different methods to investigate facets of the same intervention allowed the researcher to "elaborate, enhance, deepen, and broaden the overall interpretations from the study" (Greene, 2008, p. 101).

An important consideration when conducting mixed-methods studies is to determine how quantitative and qualitative data will be, collected, prioritized, and analyzed (Creswell, 2008). The present study used an embedded mixed methods design (Creswell, 2008; Greene, 2007) in which quantitative and qualitative data were collected simultaneously. While both methodologies played significant roles, emphasis was placed on the quantitative component, which determined the effects of the interventions on teachers' language use and children's outcomes. Qualitative data analyzed with CA played a supportive role in illuminating how the teachers and children experienced the intervention. The results from quantitative and qualitative data were initially analyzed separately as they addressed different research questions (Creswell,

2008) and subsequently integrated in a synthesis on findings. Greene's (2007) five phases of mixed methods data analysis were followed to analyze both types of data: (a) data cleaning, (b) data reduction, (c) data transformation, (d) data correlation and comparison, and (e) analyses for inquiry conclusions and inferences. A description of these phases is included in the Data Analysis section of this chapter.

CA emerged in the 1960s and early 1970s from sociology and developed as a methodology for studying talk-in-interaction, through the work of colleagues Harvey Sacks, Emmanuel Schegloff, and Gail Jefferson. In CA, talk is viewed as an activity through which speakers perform social actions in interactions (e.g., asking questions, offering responses) and can achieve communicative goals (Liddicoat, 2007). Conversation analysis researchers argue that, despite its name, CA is not a subfield of linguistics, but a social science (Sahlstrom, 2009; Schegloff, 1996). Therefore, while CA has contributed to linguistics, it should mainly be understood as a research discipline focused on the study of the organization of social interaction (Sahlstrom, 2009).

There are three basic assumptions about social interactions in CA: 1) interactions are structurally organized; 2) interactions are situated within a context; and 3) "no order of detail can be dismissed as disorderly, accidental, or irrelevant" (Heritage, 1984, p. 241; Psathas, 1995). The first assumption is that interactions are structurally organized and follow repeated patterns of orderliness, a feature which may be taken for granted by participants. This assumption affirms the existence of order in conversation and emphasizes that conversations are not random or unstructured, but constructed by participants in orderly ways (Liddicoat, 2007). For example, participants take turns in conversations. When a question is asked, a response is expected. The recipient may respond in different ways, such as uttering a response, responding with a gesture,

laughter, or a certain facial expression, or may ignore the question. The second assumption is that conversation is shaped by the context in which it unfolds and understanding this context in essential to understanding the interactions of participants. Lastly, CA places importance on interactional features such as pauses, breathing, intonation, and acknowledgements (e.g., "yeah", "ok") for their role in understanding the experience of participants in this sort of social interactions. Referring to the research purpose of CA, Sahlstrom (2009) stated:

> It is not about unveiling, uncovering, or showing, what "really" goes on, beneath presumably innocent exchanges of turn at talk. Conversation analysts do not claim to know better than the participants they study what they "actually" do, think, or know but aim at describing their embodied doing, thinking, and knowing. (p. 105)

Rather than being merely descriptive, CA aims to theorize about human action in a manner in which the complexities of social interactions are presented and understood from the perspective of the participants themselves (Sahlstrom, 2009).

CA is considered to be a suitable methodology for studying classroom interactions for several reasons (Walsh, 2011). First, CA precludes any attempts to "fit" the data to pre-established categories, thus constraining the researcher to focus on interaction patterns emerging from the data. The researcher recognizes that classroom talk, similar to talk in any institutional setting, is oriented toward achieving a goal (e.g., specific learning objectives). Notable in classrooms is the sequence teacher Initiation, student Response, and teacher Evaluation or Feedback (IRE/IRF), a common pattern of classroom discourse (Cazden, 2001; Koole, 2013).

In classroom research, CA has been specifically employed in studies of language acquisition. A body of literature using CA methodology in early childhood classrooms has emerged in the past few years. For example, CA has been employed in the study of young

children's interactions with peers (e.g., Theobald, 2011), the study of how children learn to estimate in mathematics activities (Forrester & Pike, 1998), and research about how teachers respond to children in interactions during storybook reading (Church, 2010) and during inquiry-based interactions (Bateman, 2013). In the present study, CA enabled the researcher to obtain an in-depth description of how teachers approached fostering children's language and literacy development in the context of the intervention, particularly for children with disabilities. Further, it enabled the researcher to better understand how teachers approach early literacy teaching in their classroom and how the intervention impacted teachers' interactions with children, providing an understanding of how feasible the intervention was.

Setting and Participants

This study was conducted in four classrooms in the Elm Park Head Start (EPHS) program. Pseudonyms are used for all names, including the names of teachers and children. The program provides services to children and families in five rural counties in Indiana. In 2012-2013, EPHS served over 450 children and their families. Children served in this program are mostly Caucasian and English speaking. Following the mission of Head Start to provide services to children who are most in need and to meet the requirement of at least 10% children with disabilities (National Head Start Association, 2009), EPHS consistently includes 10-20% children with disabilities in each classroom.

Four EPHS teachers and the children in their classrooms volunteered to participate in the study. Two teachers and their students constituted the intervention group and two teachers and the students in their classrooms represented the control group. In total, 63 children from the four classrooms participated in the study, 32 in the experimental and 31 in the control group. Across both conditions, children were mostly Caucasian (n = 59, 93.6%) and English language speakers.

A small percentage of children were biracial (n = 2, 3.2%) and Hispanic (n = 2, 3.2%). Children's age ranged from 39 to 61 months for children in the experimental classrooms (M = 53.71, SD = 5.44) and 39 to 63 months for children in control classrooms (M = 54.22; SD = 5.48). The experimental group included 19 males and 13 females and 4 (12.5%) children with identified disabilities, 2 (6.25%) with developmental delay and 2 (6.25%) with a speech and language impairment. In one of the two intervention classrooms, two children identified by the teachers as having difficulties in the area of speech and language development were evaluated and did not qualify to receive services as they were performing at a borderline range. For an additional child who did not qualify to receive services in the area of speech and language, the teacher and family agreed to initiate a new evaluation in the area of developmental delay in the following preschool year. In the second intervention classroom, a child of concern to the teacher because of significant articulation difficulties was not referred to receive speech and language services as the parents did not wish to initiate a disability identification process. Additionally, a child with selective mutism who talked at home was not receiving services. The control group included 11 males and 20 females and 7 (22.58%) children identified as having a speech and language impairment.

By the end of the school year, 5 children in the experimental group and 8 children in the control group left the classrooms and the study. A sixth child in the experimental group left during post-assessment and his completed evaluation for PPVT, which was completed before his departure, was considered in the analysis. In the experimental group, four children moved to a different town, one of them by the end of the first semester and three toward the end of the school year. One child moved to a home located too far for EPHS to change the bus route to accommodate his transportation and one child was removed from his home due to challenging

family circumstances and was unable to continue attending EPHS. In the control group, four children moved to a different town or state by the beginning of the second semester. One child returned to receiving home-based services and three children moved to a different classroom in the same center.

The two teachers in the experimental group work in the same center, while the two teachers in the control group are located at different Head Start centers. All four teachers are Caucasian and English language speakers. Demographic information for each of the four teachers is presented in Table 2. An initial classroom observation using the Early Language and Literacy Classroom Observation tool (ELLCO; Smith, Brady, & Anastasopoulos, 2008) provided an understanding of the early language and literacy environment in each of the four classrooms.

Ms. Vivian, one of the teachers in the experimental group, has 7 years of experience working with preschool children, 3 of which in the current classroom. Prior to joining the staff at EPHS, Ms. Vivian worked for a ministry daycare and was involved in an after school program. Her classroom meets each afternoon for 3.5 hours, from Tuesday to Friday. The ELLCO indicated that Ms. Vivian's classroom provided a basic discourse climate. Ms. Vivian made efforts to actively listen to children and acknowledged children's contributions. Opportunities for extended conversations were basic to inadequate as the teacher made some efforts to engage children in conversations, but management talk was very common. When observed, opportunities for building vocabulary were inadequate, with Ms. Vivian offering definitions that were either too easy or too complex for children to understand. While basic choices of books were provided, the library was not inviting, located in an undefined area of the classroom, which did not encourage children to explore books independently. An animated whole classroom book reading was observed, but discussion of the book was incidental.

Table 2

Teacher Demographic Information

Teacher	Age	Education	Preschool Teaching Experience
Ms. Vivian	28	Associate's Degree in Early Childhood Education	7 years
Mr. Steve	40	Bachelor's Degree in Elementary Education	16 years
Ms. Jane	31	Associate's Degree in Early Childhood Education	4 years
Ms. Lisa	36	Associate's Degree in Early Childhood Education Bachelor's Degree in Business Management	13 years

Mr. Steve, the second intervention teacher has been working with preschool children for 16 years, 9 in the current classroom. Prior to working as a classroom teacher, Mr. Steve was an early intervention provider in EPHS. His classroom meets for 3.5 hours each morning, from Tuesday to Friday. An initial observation in Mr. Steve's classroom indicated that he was providing a strong discourse climate in his classroom by creating opportunities to elicit children's opinions and ideas in conversations. Opportunities for extended conversations were basic, with many conversations including a balance of classroom management and talk focused on learning. Mr. Steve made some efforts to build vocabulary and introduce new words, particularly during meal time. However, the organization of the book area appeared inadequate, with insufficient books for the number of children in the classrooms. Books were also not used for learning in other areas of the classroom. One whole classroom book reading was observed in which Mr. Steve asked questions and acknowledged children's responses.

Ms. Jane, one of the two teachers in the control group, has 4 years of experience working with preschool children, 2 in the current classroom, and did not report other experiences working with young children. She teaches two groups of children from Tuesday to Friday. Each group meets for 3.5 hours, one in the morning and one in the afternoon. The classroom provided

children with a basic discourse climate as the teachers made attempts to engage children in conversations and elicit their opinions and ideas. Conversations were, however, less extended and teachers were often observed asking the same question of each child without consistent follow-up. Opportunities to build vocabulary did not appear to be emphasized in classroom activities or conversations. The organization of the book area provided a basic to strong environment for children to explore books and they were observed doing so during the day. During a whole classroom book reading activity, the teacher's expressiveness captured children's attention and children's contributions appeared to be valued and acknowledged.

Ms. Lisa, the second control teacher has 13 years of experience working with children 3-5 years of age, with 3 of these years in the current classroom. She reported having previous experience working in a day care program and in a before and after school program. The ELLCO suggested that Ms. Lisa's classroom provided a basic classroom discourse in which the teachers acknowledged children and were respectful of their contribution, but engaged in limited opportunities of eliciting children's thoughts or ideas. The classroom did appear to provide basic opportunities for extended conversations as the teachers often asked questions without following up on the children's responses. Efforts to build vocabulary were particularly limited and no efforts were observed from the teachers to introduce new words in classroom activities or conversations with the children. The book area appeared organized, although it was not distinct from the center time area. Children were observed picking up books to read or asking adults to read them a book, particularly in the morning, before transitioning to the large group activity. Discussion around the book during the whole class book reading is limited and did not appear to particularly engage children.

General Procedures

Approval for research involving human participants from the university Institutional Review Board was obtained prior to recruitment of participants. Using a recruitment script, the program director contacted potential teacher participants to ask for volunteers interested in participating in the study. The program director provided the researcher with the names of teachers who were willing to participate. The researcher visited the interested teachers and provided further information about the study through the Study Information Sheet. All the children and parents in the classrooms taught by these teachers had the opportunity to participate in the study. The staff sent the informed consent and recruitment script to potential participants through the typical school procedure, in the children's backpacks. Interested parents were asked to return the signed informed consent form to the center within two weeks. A second consent form was sent home to the parents who did not respond within the time frame. The informed consent documents provided participants with detailed information regarding the purpose of study, the number of people participating, and what their role will be if they agree to participate. Teachers and parents were informed of the efforts to keep their personal information confidential and the voluntary nature of the study. For their participation in the study, each of the four teachers received an honorarium of $300 per semester.

After obtaining informed consent from participants, a repeated book reading intervention was implemented in the experimental classrooms over a 7-month period. At the start of the study, teachers in the experimental group were trained in repeated read aloud strategies and strategies to support vocabulary development. Children with signed consent in both conditions were assessed pre- and post- using two early literacy measures: The Preschool Language Assessment Instrument 2 (PLAI 2; Blank, Rose, & Berlin, 2002), and The Peabody Picture

Vocabulary Test-Fourth Edition (PPVT-IV; Dunn & Dunn, 2007). Repeated book reading activities using the same book were videotaped in all four classrooms at the beginning and the end of the study. Two additional videotaping data points were scheduled in the intervention classrooms throughout the year. Classrooms observations were conducted on a weekly basis in the intervention classrooms. A schedule of activities related to data collection and intervention procedures is included in Appendix A.

Description of the Intervention

Teacher Training

The intervention included training the teachers to use the repeated book reading approach in one half-day of training designed to assist teachers with developing and practicing the knowledge, skills, and dispositions (NAYEC, 2009) required to implement this approach. Subsequently, additional training in the classroom and weekly coaching provided teachers with further support implementing the intervention.

The training day introduced the teachers to the repeated book reading approach so they understood the benefits of this activity for children's language and literacy development. Teachers were encouraged to discuss their own teaching practices as they related to book reading. Further, teachers were engaged in a discussion about the diversity of language and literacy experiences children bring to school and the key role preschool classrooms have in supporting children's early literacy development. To support this discussion vignettes or examples drawn from seminal works in the field (e.g., Hart & Risley, 1995; Heath, 1983) were used to illustrate differences in children's early language and literacy experiences. Teachers were introduced to specific strategies for repeated book reading: (a) supporting vocabulary development, and (b) modeling analytical comments and asking questions during reading. Each

lesson identified vocabulary words that may be emphasized and teachers were encouraged to select additional words suitable for the children in their classrooms. Teachers were trained to teach vocabulary systematically throughout the three readings by initially pointing to pictures, and using facial expression, body language and voice modulation to explain a word's meaning. In second readings teachers provided definitions, while in third readings they encouraged children to use new words in their responses to questions and discussions about the story.

Teachers were taught to model analytical thinking and to ask increasingly complex questions that help children make inferences across the repeated reading based on McGee and Schickedanz's (2007) use of book reading to accelerate children's early literacy development. The teachers were trained to model how a good reader would approach the text and stop three or four times during reading to reveal their thought processing. Teachers were encouraged to use expressions such as "I am thinking that…" and then follow up with analytical questions for the children. McGee and Schickedanz (2007) found that this approach is more likely to engage children in analytic thinking and use of inferential language. Examples of multiple book reading lessons that were used to introduce and demonstrate these teaching strategies are provided in Appendix B. During the trainings teachers were provided with opportunities to practice the new strategies with each other and then by reading to the children in the following days.

Additional team meetings between the teachers, the researcher, and her dissertation advisor supported the intervention. Four team meetings took place over the course of the project. The meetings presented an opportunity for the teachers to further reflect on their practice and engage in problem solving about their use of the repeated book reading strategies (Hsieh, et al, 2009). In these meetings, the teachers and the researcher also decided on the books to use in the following weeks. Based on the teachers' preference for specific curricular themes, both the

researcher and the teachers suggested books that could be used and a decision was ultimately made by team. A list of the books used in the intervention is included in Appendix C. Teachers in the control group were provided with the same books and were encouraged to read them to the children. No further guidance was provided.

Repeated Book Reading Intervention

The intervention was conducted over 28 weeks, from October until mid-May. The teachers were provided with 28 books and lesson plans with sample questions and comments for each book. Intervention teachers read a book three times each week. The books were selected in collaboration with the teachers to complement the curricular themes they were using in their classrooms and included a variety of genres (e.g., fiction, rhyming books, and counting books).

Teachers were observed implementing the repeated book reading strategy on a weekly basis. In the first few weeks, classroom visits followed a coaching cycle similar to a clinical supervision model (Krajewski, 1993; Showers & Joyce, 1996) which has been used successfully to coach teachers for emergent literacy instruction (e.g. Hsieh, Hemmeter, McCollum, & Ostrosky, 2009; McCollum, Hemmeter, & Hsieh, 2011). Each classroom visit included: (a) collaborative planning before teaching-observation; (b) practice and observation; (c) discussion and feedback; and (d) collaborative planning for the next visit. In the collaborative planning sequence before teaching and observation the teacher and the researcher had a brief conversation to reaffirm the focus of the observation and review information from the previous visit. As the teacher read the book, the researcher used a fidelity of implementation measure to gather data on the implementation of the intervention (Appendix D). Immediate feedback was provided after the observation and data collected during the observation was used to guide discussions. Before concluding the visit, the teacher and researcher planned for the next observation and set goals for

what the teacher could focus on next. This targeted coaching in which teachers are provided with feedback after observations in addition to initial training is more likely than traditional didactic training to help them acquire new strategies or strengthen the ones they already use (Hsieh et al., 2009).

After the first few weeks of intervention, this coaching model was adapted to more closely align to the needs of each teacher as they were implementing the intervention. After each observation, the teachers and the researcher continued to discuss the book reading activity. The researcher also continued to provide the teachers with feedback about the implementation of the intervention. However, the first and final step of the initial coaching model were modified to respond to the teachers' schedules and availability to meet for planning and debriefing. Oftentimes, the teachers continued with other classroom activities after the book reading and were not available to discuss until the end of the day or the following day. At times, briefly debriefing on the playground when the children were supervised by the teacher assistant was preferred by the teachers given their busy schedules. It had also become apparent after the first few weeks of intervention that planning and setting goals for the next observation was becoming a repetitive process. After the teachers had become familiar with the repeated book reading approach and the strategies for supporting children's vocabulary and extending conversations, the goal both teachers identified was continuing to practice using the repeated book reading approach. Lastly, the researcher adapted her approach to providing feedback to each teacher's level of comfort as they adopted and used the repeated book reading approach. Ms. Vivian benefited from more specific feedback and encouragement after each observation. She particularly appreciated knowing what she was doing well and was open to hearing how she could continue to improve her book reading activities. As a more experienced teacher, Mr. Steve

more quickly took ownership of the new reading approach and began extending discussions to individual children needs and how book reading and the strategies it emphasized could be applied to other classroom settings to support children's learning.

Data Collection

In this study two types of measures were used: (a) observational measures of teacher and child language and (b) standardized measures of child language and literacy outcomes.

Coding of Teacher Language

Six reading sessions were video recorded for each of the four teachers (i.e., a pre and post first, second, and third reading) at the beginning and the end of the intervention. In addition, teachers in the intervention classroom were videotaped two additional times throughout the year. Each of the 36 resulting videotapes was transcribed verbatim. A coding system adapted from Blank, Rose and Berlin's (1978; 2002) framework of levels of abstraction in preschoolers' discourse, which has been used and adapted by other researchers (e.g., Price, Bradley, & Smith, 2012; Tompkins, Zucker, Justice, & Binici; van Kleeck et al., 1997; Zucker et al., 2010), was used to code teacher language. The coding system included ten mutually exclusive categories: (a) references to print and book conventions (PR-B); (b) feedback and acknowledgement (FA); (c) managerial talk (MT); (d) interaction and turn taking (ITT); (e) alphabet knowledge (AK); (f) phonological awareness (PA); and utterances related to the content of the book, including four levels of abstraction: (g) Level 1 - matching perception, (h) Level 2 - selective analysis of perception, (i) Level 3 - reordering perception; and (j) Level 4 - reasoning about perception. Teacher questions and comments were coded according to the level of abstraction at which they fell. In levels I and II language is used to respond to experiences that are currently perceived or have been just perceived, while levels III and IV go beyond what can be readily perceived and

require that perceptions are reordered or restructured (Blank et al., 1978). Table 3 provides descriptions and examples for each of the coding categories.

Table 3

Descriptions and Examples of Coding categories for Teachers' Language Use

Teacher code	Code Description	Examples
Level I: Matching Perception (literal language)	Label objects or characters Locate objects or characters Notice or direct attention to objects or characters Rote counting Imitation/ repetition of utterance	"What are these?" "Can you find Chester at his school?" T: "*Can I hold it first?*" C: "Can I hold it first? T: "*'Can I?' said Sam.*" C: "*'Can I?' said Sam.*"
Level II: Selective Analysis of Perception (literal language)	Describe characteristics of objects or characters Describe story actions/ scenes Recall information previously mentioned Complete sentence	"What's he doing?" "What did Mrs. Raccoon do? Who remembers?" T: *"Rollo never made his…."* C: "Bed."
Level III: Reorder/ Infer about Perception (inferential language)	Make inferences Summarize information Define Provide point of view Identify similarities and differences Make judgments Generalize about events Text-to-life connection and/ or comparisons	"Look at the tip of his nose, it's red. What do you think that might mean?" "Why do you think he looks sad?" "Why do you think he stayed home when he was sick?" "What does illustrations mean?" "Now, does this little boy look like us?") "I want you guys to think about something that you wish you could do, but your parents or grownups, or big people have told you, 'No you need to be bigger.'"
Level IV: Reasoning about Perception (inferential language)	Predict Problem solve Explain	"What are some of the things we find in a zoo?" "So Amos, he has to ride bus number five. What would

		happen if we got on bus number four?" T: "If you were gonna fly a kite, where would you go?" C1: "I would go to the park." C2: "A park with no trees." T: "Go to a park where there's no trees. Why wouldn't you want any trees around?"
Print and book conventions	References to book conventions (e.g., author, illustrator, cover)	"The title is *The Kissing Hand* by Audrey Penn. Audrey Penn wrote the words."
Feedback and acknowledgement	Acknowledgement of a child's verbal or nonverbal contribution.	C: "That's an owl." T: "That's an owl, that's right."
Managerial talk	Management of child behavior.	"Sit on your bottom. Okay, turn your voices off so that you can hear this wonderful story called *The Kissing Hand."*
Interaction and turn taking	Management of turn taking between children and maintaining the flow of the activity.	"Ok… Alright, one more person, anybody else?"
Alphabet knowledge	References to letters of the alphabet.	"Ok, let's read some more." "It starts with the letter R, what we're working on this week, our letter R."
Phonological awareness	References to sounds.	"Lllynx."

Note: Coding system adapted from Blank et al. (1978a), Price et al. (2012), van Kleeck et al. (1997), and Zucker et al. (2010)

Inter-Rater Reliability

After the research assistants transcribed the videotapes, the transcriptions were examined for accuracy by the researcher. Agreement was calculated for coding procedures. All coding was completed by the researcher and reliability was determined by randomly selecting twenty percent of the transcripts (n=7) to be checked and coded by a trained independent coder. The coder was trained to 90% accuracy on one master-coded

transcript. Coders' agreement resulted in a Cohen's Kappa value of $k = 0.87$ (91% exact agreement). According to Fleiss (1981), Kappas above .75 represent excellent inter-rater agreement. After all coding was completed, the coders discussed differences in coding and reached an agreement.

Child Assessments

Children's early literacy outcomes were assessed pre- and post-intervention using two measures: The Preschool Language Assessment Instrument 2 (PLAI 2; Blank et al., 2002), and The Peabody Picture Vocabulary Test-Fourth Edition (PPVT-IV; Dunn & Dunn, 2007). The assessments were conducted by the researcher and three doctoral students in special education, all of whom had previous experience with child assessments. The researcher trained the doctoral students to administer the assessments according to each test's examiner's manual and provided opportunities to practice administering the test in a training session of approximately one hour.

Preschool Language Assessment Instrument. PLAI-2 is a nationally standardized assessment tool for children's discourse skills. PLAI-2 measures children's performance on four levels of language abstraction: matching, analyzing, reordering, and reasoning about perception. The assessment allows for both receptive and expressive language at all levels of abstraction. It is recommended for use in intervention programs to document language development and measure discourse abilities for research studies, as well as document aspects related to classrooms discourse and academic achievement. Coefficient alphas for the subtests and the discourse ability score range from .70 to .94. Test-retest reliability for the Receptive and Expressive subtests and the discourse ability score exceeded .80. Test validity was investigated using content-description validity, criterion-prediction validity, and construct-identification

validity with results showing that PLAI-2 is a valid measure of children's discourse skills. Administering this assessment took take approximately 30 minutes for each child.

Peabody Picture Vocabulary Test. PPVT-4 is a widely used, norm-referenced, assessment of child receptive language and is ideal for measuring vocabulary growth in response to instruction. The test asks children to point to one of four pictures that show a given word. Having a wide range of difficulty, the test can be used with children at various levels of language development. PPVT-IV has a very high split half-reliability of .94 to .96 and Cronbach's alpha of .96 to .97 for ages 3 to 5. It took approximately 30 minutes to administer the PPVT-IV to each child.

Observation Field Notes

Half-day classroom observations were conducted weekly in each of the intervention classrooms throughout the study. Running field notes were recorded on site and expanded upon with reflection shortly after the observation. In addition to observations regarding intervention fidelity, notes focused on classroom activities that preceded or followed book reading, how book reading was incorporated in the classroom schedule, and other classroom events related to teacher-child interactions during early literacy activities. One doctoral student and one advanced undergraduate student in special education who served as research assistants in the project conducted classrooms observations with the researcher every 2-3 weeks. Each of them participated in the project for one semester. They collected observation field notes and debriefed with the researcher after classroom visits. The researcher also collected notes from the team meetings and audio recorded the conversations with the teachers' permission.

Fidelity of Implementation Measure

To gather data on the implementation of the intervention the researcher completed a fidelity of implementation checklist for each classroom observation (Appendix D). The checklist included observable teacher behaviors that indicated the implementation of instructional strategies for repeated book reading activities. The checklist provided a space for taking notes regarding implementation of strategies for supporting vocabulary and extending children's comprehensions before, during, and after book reading. The fidelity of implementation measure has been previously piloted in the CSS+ project and proved to be adequate for capturing aspects related to teachers' implementation of book reading activities. An estimated level of implementation was determined using a 3 point scale: low implementation, average implementation, and high implementation. Over the course of the study, both teachers obtained an overall fidelity of implementation score of above average, 2.09 for Ms. Vivian and 2.5 for Mr. Steve.

The Early Language and Literacy Classroom Observation

At the beginning of the year, the Early Language and Literacy Classroom Observation tool (Smith, Brady, & Anastasopoulos, 2008) was administered in both control and experimental classrooms to gain an understanding of the language and literacy environment in these settings. Additional visits were conducted in the control classrooms throughout the year to ascertain whether teachers were using the books and conducting book reading.

Teacher Reading Logs

Each month, teachers were provided with a reading log and were asked to checkmark completed book reading activities and reflect on the implementation of each activity. The logs were used by the researcher to guide discussions with the teachers as well as keep an account of

completed book reading activities throughout the intervention. An example of a teacher's reading log is provided in Appendix E.

Social Validity Survey

At the end of the study, the two teachers were asked to complete a questionnaire about their perspectives on the interventions. The questionnaire included eight questions structured as a five-point Likert scale and seven open-ended questions (see Appendix F). The questions assessed the teachers' views of the implementation and outcomes of the intervention.

Data Analysis

The first question explored how teachers' use of language during book reading changed when using a repeated book reading approach as opposed to book reading "as usual." Teachers' language was coded using the coding system presented in Table 3 and the frequency and proportions for each type of coded utterance for the two conditions were calculated and presented in table and graph format using Microsoft Excel software. Results were descriptively analyzed to uncover patterns in teachers' use of language at the four levels of abstraction.

The second question examined whether the repeated book reading intervention had a statistically significant positive effect on the treatment group's early literacy skills as measured by receptive vocabulary and discourse ability scores. Lenth's (2006) power and sample size computer software was used in order to determine the sample size that would be sufficient for the intervention to have adequate power. From the literature review, the researcher examined similar studies that used similar outcome measures and had reported means and standard deviations for their control and intervention groups and used van Kleeck and colleagues (2006) reported outcomes for PLAI-2, and Wasik and colleagues' (2006) data for PPVT. Calculations indicated that a sample of 28 children in each condition was needed to be able to reject the null

hypothesis for both outcome measures with probability of 0.8 and Type I error probability of 0.05.

Independent sample *t*-tests were conducted to determine if there were significant differences between the two conditions at pre-test and to test the effects of the repeated book reading intervention on the growth rate for children's vocabulary scores. Paired samples *t*-tests were conducted to further examine the change in children's growth rate from pre- to post-intervention in each of the two conditions. Analysis of covariance (ANCOVA) on posttest scores using pretest scores as covariates was used to determine the effect of the intervention on children's discourse ability scores. Lastly, effect size was calculated for both vocabulary and discourse ability growth.

The final question explored how the repeated book reading approach influenced teacher-child discourse patterns particularly for children with disabilities. I anticipated that embedding this qualitative approach will allow for an exploration of how the participants in the study experienced the intervention and how specifically language interactions changed in the context of repeated book reading. Teacher-child language interactions were analyzed using Pomerantz and Fehr's (2011) five steps model for conducting CA: 1) select a sequence (e.g., question and response) and examine the opening and closing; 2) characterize the actions in the sequence (e.g., a request, an offer, a clarification); 3) consider how the speaker performed or "packaged" the action (e.g., attention should be paid to word choice, gestures, gaze, body positioning, and any materials used); 4) consider timing and turns (e.g., detailed turn-taking process); 5) consider how participants enacted roles or relationship identities through the actions that were accomplished.

As essential activity in CA is the careful and repeated listening/viewing of the recorded interactions and detailed transcription using a set of generally accepted conventions (ten Have,

2007), such as ones presented in Appendix G. Depending on the purpose of a study, CA data treatment is generally applied to a sample of data sources selected to examine a particular case or interactional phenomenon in specific settings of interest (ten Have, 2007). In the present study, given the interest in understanding how the repeated book reading intervention influenced teacher-child interactions, CA was applied to representative episodes selected from the total number of 24 transcribed book reading activities at Times 1-4 in both intervention classrooms. Specifically, analyses focused on examining episodes in which: a) teachers emphasized key vocabulary words; b) teachers engaged children in extended conversations; and c) children with disabilities participated in the book reading activities. To address a limitation that CA studies sometimes receive regarding the possible selection of a biased sample of cases (ten Have, 2007), all of the episodes in which teachers interacted with children with disabilities and episodes where key vocabulary words were emphasized in the context of book reading were examined.

To ensure credibility and trustworthiness, Brantlinger and colleagues' (2005) strategies for conducting sound qualitative research were followed. In particular, data triangulation was used to confirm findings using data sources collected in addition to the transcribed book reading activities (e.g., detailed observation field notes, teachers' completed monthly reading logs, and direct quotes of teacher statements). The researcher's prolonged field engagement provided extensive opportunities to conduct observations and check-in with the participants. Debriefing with the research assistants further strengthened the soundness of the researcher's interpretation of how the intervention was being implemented in the two classrooms. The resulting analysis provided an in-depth description of how teachers approached fostering children's language and literacy development in the context of the intervention. These findings also provided an understanding of how feasible the intervention was, giving further direction for study, and

informing professional development about meaningful ways to support teachers' efforts to build children's early literacy.

The quantitative and qualitative data were analyzed following Greene's (2007) five phases of mixed methods data analysis: (a) data cleaning, (b) data reduction, (c) data transformation, (d) data correlation and comparison, and (e) analyses for inquiry conclusions and inferences.

Data Cleaning

Quantitative data including demographic information and child assessment scores were entered into the Statistical Package for the Social Science (SPSS). The researcher reviewed the data for valid responses and missing data. The videos of book reading activities were transcribed verbatim.

Data Reduction

Demographic information and child assessment data were analyzed to obtain descriptive statistics. The teacher language data from all videos at Times 1-4 in in both intervention and control classrooms was coded. Qualitative data, including transcripts, observation field notes, and teacher reading logs was examined to identify all the instances in which the intervention teachers emphasized vocabulary in the three readings at Times 1-4 and interacted with children with disabilities.

Data Transformation

Child assessment pre- and post-test data was statistically analyzed and results were presented in table and narrative form. Teacher language data was analyzed and presented in narrative form and graphs. The repeated book reading transcripts were examined for patterns evident within the identified episodes focused on vocabulary and interactions with children with

disabilities. Representative episodes were selected and analyzed using Conversation Analysis. Evidence from other data sources (i.e., observation field notes, teacher reading logs, team meeting notes) was examined to corroborate findings.

Data Correlation and Comparison

The researcher investigated and compared patterns of relationship across the quantitative and qualitative data to compare findings. Themes that characterize both types of data were identified and presented in narrative form in the synthesis of findings.

Analyses for Inquiry Conclusions and Inferences

In this final phase, the researcher analyzed the data to draw conclusions and inferences from the study as they relate to the current literature. Implications for practice and teacher professional development focused on ways to support teachers' efforts to build children's early literacy skills. Considering the findings and limitations of the present study, directions for future research were outlined.

A summary of the data sources and data analysis procedures for each research question is presented in Table 4. Quantitative and qualitative data were analyzed separately as they addressed different research questions and were subsequently integrated in a synthesis of findings to provide an understanding of the impact of the intervention and how participants experienced the intervention.

Table 4

Research Questions, Data Sources, and Data Analysis

Research Question	Data Sources	Data Analysis
1. Does Head Start teachers' use of language during book reading change when using a repeated book reading approach as compared to	Quantitative Data Collection Videotapes – coded teacher language	Microsoft Excel used to organize and present data in table and graph format.

book reading in a control classroom?		
2. What is the impact of the repeated book reading approach on children's vocabulary development and discourse skills?	Quantitative Data Collection Child assessments Fidelity of implementation measure.	Software (SPSS) used in data analysis.
3. How does the repeated book reading approach influence teacher-child language interactions? In particular, how does it influence teacher interactions with children who have disabilities?	Qualitative Data Collection: Videotapes transcriptions Observation field notes ELLCO Fidelity of implementation measure. Teacher reading logs.	Conversation Analysis.

CHAPTER 4

RESULTS

Research Question 1: Head Start Teachers' Use of Language during Repeated Book Reading

The first research question examined how teachers' use of language during book reading changed when using a repeated book reading approach compared to book reading as usual. For this purpose, all four teachers were videotaped prior and post intervention while they read the same book in their classrooms three times. Teachers were asked to read the book as they would usually do in their classrooms, in a large group activity. Teachers in the experimental classrooms were videotaped two additional times during the year to gain an understanding of the process through which their use of language during reading changed as a result of adopting the repeated book reading approach in their classrooms. As such, while the initial videotaping captures usual book reading activities in all four classrooms, subsequent activities videotaped in the experimental classrooms show the influence of using the repeated book reading approach. The final videotaping in the control classrooms was intended to provide an additional instance of teachers' usual book reading activities and capture any changes that occurred as children matured and as they became familiar with the teachers and the routines.

The two books read in the fall and spring videotaping sessions were called *The Kissing Hand* (Penn, 2006) and *A Sick Day for Amos McGee* (Stead, 2010). These storybooks were selected because they present topics of interest to children (e.g., animals going to school at the beginning of the year, friendship, and zoo animals) and they provided teachers with opportunities to use language across the four different levels of cognitive demand as categorized in the

Preschool Language Assessment Instrument (PLAI). The six additional readings videotaped in the experimental classrooms used the books *Home for Christmas* (Brett, 2011) and *Someone Bigger* (Emmett, 2004) which were scheduled to be read in weeks 10 and 20 of the intervention.

Teachers' extratextual utterances were coded using the 10 code descriptions presented in Table 3 (Chapter 3, pp. 46-47). In the following, a descriptive analysis of the coded teacher language for each of the four teachers will be presented individually to provide an in-depth examination.

Repeated Book Reading in the Control Classrooms

Ms. Lisa's fall book readings. Across the three fall repeated readings, Ms. Lisa' total number of extratextual utterances decreased slightly with each reading from a total of 40 utterances in the first reading to a total of 35 utterances in final reading (see Table 5). Utterances related to the content of the book also decreased in number with each reading. The frequency and proportion of utterances related to the book content on the four levels of abstraction are presented in Figure 1. In the first reading, Level 1 utterances were the most prevalent, followed by level two utterances, which together constituted more than 80% of all book related language used by Ms. Lisa when reading the *The Kissing Hand* (Penn, 2006) for the first time. The remaining four utterances fell at the third level of abstraction, with no utterance on the fourth level. In the second reading, 73% of book-related extratextual utterances fell on the first two levels of abstraction while the remaining utterances addressed the third level of abstraction. A similar pattern was evident during the third reading of the book. Further, all utterances were of low demand and no utterances were used to engage children at an inferential level.

Across the three readings, Ms. Lisa mostly used language that fell at the first two levels of abstraction, focused on noticing, labeling, or locating characters (e.g., "On her hand, see?";

"There they all are at school"; "What are these?") and on describing story actions or recalling previously mentioned information (e.g., "So she said take your hand that she gave the kiss on"; "He gave his mommy kisses on her hand"). Few utterances at an inferential level were used, and when present they were mostly used to make text-to-life connection between elements in the book and children's lives (e.g., T: "Did you kiss her hand?" C: "Yeah." T: "Yeah. So she can keep it [the kissing hand] when you guys come to school"). Ms. Lisa never used language for making predictions, explaining or problem solving in any of the three readings.

Table 5

Frequency and percentage of Code Utterances for Ms. Lisa's Book Readings

Reading Time	Book-Content Related Utterances Levels I-IV	PR-B	FA	MT	ITT	AK	PA	Total utterances
Fall Readings								
First Reading	21 52.5%	1 2.5%	9 22.5%	5 12.5%	4 10%			40
Second Reading	15 38.46%	1 2.56%	19 48.71%	3 7.69%	1 2.56%			39
Third Reading	8 22.85%	1 2.85%	11 31.42%	11 31.42%	4 11.42%			35
Spring Readings								
First Reading	29 50.87%		18 31.57%	4 7.01%	6 10.52%			57
Second Reading	12 32.43%	2 5.4%	13 35.13%	4 10.81%	6 16.21%			37
Third Reading	13 32.5%		14 35%	6 15%	7 17.5%			40

Note: PR-B = Print and book conventions; FA = Feedback and acknowledgement; MT = Managerial talk; ITT = Interaction and turn taking; AK = Alphabet knowledge; PA = Phonological awareness.

Through all of Ms. Lisa's readings, utterances related to feedback and acknowledgement were frequent (9, 19, and 11 respectively). These utterances often consisted of briefly acknowledging and repeating a child response or providing praise (e.g., "Yeah"; "Good. Yeah", "There you go, like that, good job."; C: "Raccoon." T: "Raccoons, good"; C: "I have one at

home." T: "Mm hm, you have one at home?"). Management talk accounted for approximately 12% and 8% in the first and the second reading, respectively. In the third reading approximately 30% of Ms. Lisa's language use during reading was directed at classroom management.

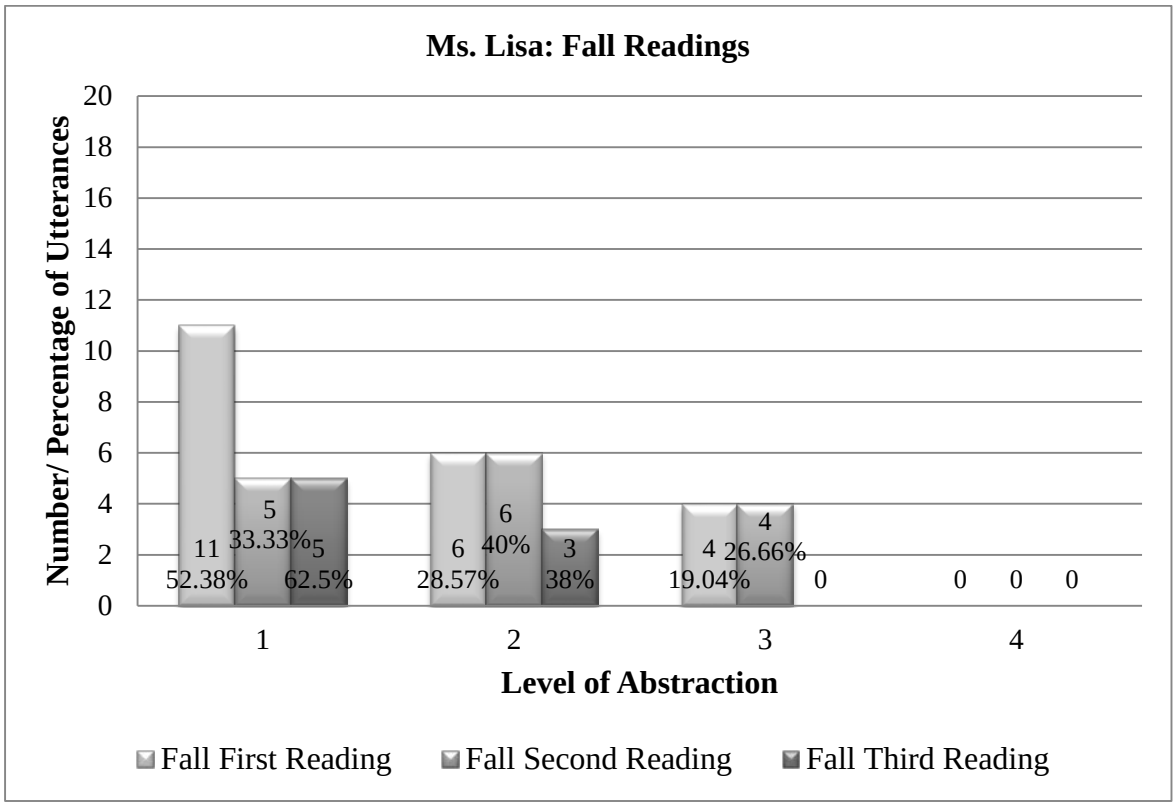

Figure 1. Number and percentage of utterances across the four levels of abstraction for Ms. Lisa's fall readings.

Ms. Lisa's spring book readings. Following the same pattern observed in the fall book reading activities, Ms. Lisa's total number of extratextual utterances in the first spring reading was highest and then decreased with 57, 37, and 40 utterances in the first, second and third reading respectively (see Table 5). Book related language use was also higher in the first reading and decreased subsequently (see Figure 2).

As in the fall, in Ms. Lisa's first spring reading, more than 80% of the language related to the content of the book fell on the first two levels of abstraction. Three utterances (10%) addressed the third level and two (approximately 7%) the fourth level of abstraction. The

number of extratextual book related utterances was reduced by more than half in the second reading. Literal level utterances comprised approximately 70% of the teacher's language use with 2 utterances (approximately 30%) falling on each of the two levels of inferential language. In the third reading, all extratextual language related to the content of the book fell on the first two levels of abstraction with no utterances addressing the third and fourth level.

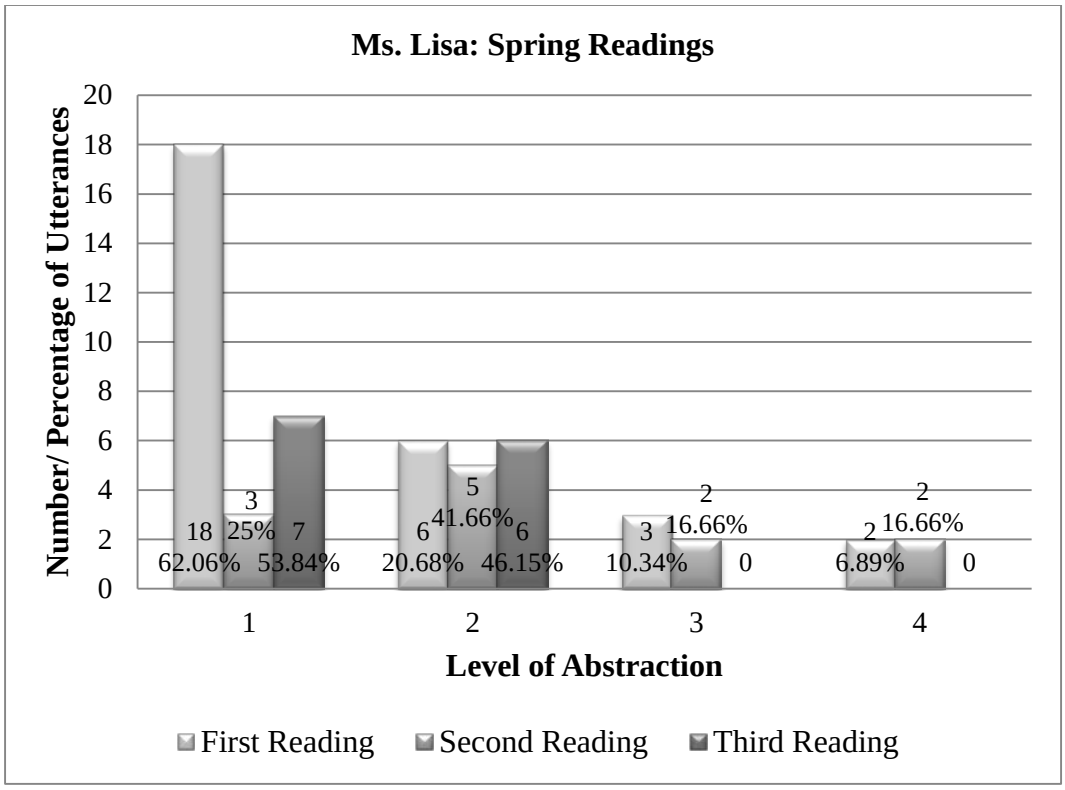

Figure 2. Number and percentage of utterances across the four levels of abstraction for Ms. Lisa's spring readings.

Similar to the fall book readings, most of Ms. Lisa's extratextual book related utterances fell on the first two levels of abstraction. While reading, Ms. Lisa pointed out pictures of objects and characters in the book (e.g., "There's that balloon again"; "What do we see on this page?"; "Look, penguin brought him what?"; "Here it is"). However, compared to the fall readings, some inferential language was used, with children being asked to make predictions (e.g., "Where are these animals headed?") or connections between elements of the book and their own lives

(e.g., “Look, he’s got a teddy bear ‘cause he’s not feeling well. Anybody have a special animal they sleep with when they are sick?”). These instances, however, were limited in the first two readings and absent in the final reading. It is important to note that the two level four utterances in the second reading were prompted by children’s questions about the story as Ms. Lisa prepared to end the activity. In the first instance, a child was interested in knowing whether the rhinoceros was feeling better since he was still wearing a scarf. The teacher responded by giving an explanation: “He has a bit of some allergies or cold, so that’s why he has to have a scarf.” In the second instance a child asked why the balloon was floating and the teacher responded “Why? ‘Cause they have helium in them.”

Feedback and acknowledgement constituted the bulk of the remaining extratextual utterances, approximately 30% across all spring readings. As in the fall, feedback was brief, mostly acknowledging a child response (e.g., “Okay, let’s see”, “Yeah”, “Uh, huh”), repeating the response (e.g., C: “Amos” T: “Amos”; C: “Waiting on the bus” T: “They’re waiting on the bus, aren’t they?”), providing a complete sentence (T: “Do you see who’s holding?” C: “Mouse” T: “A little mouse is holding the balloon”) a brief extension (C: “He’s sick” T: “He’s sick at home in bed, isn’t he?”), or correcting a response (e.g., “He’s not Elvis”). Managerial talk comprised 10-15% of the utterances across the three readings. Two utterances in the second reading related to print and book conventions as the teacher explained, at the request of a child, why the book had a medal on the cover (*A Sick Day for Amos McGee* (2010) is the 2011 Caldecott Medal recipient).

Ms. Jane’s fall book readings. The total number of extratextual utterances across the three book readings for Ms. Jane slightly decreased with each reading. There were 126 utterances in the first reading, 115 and 109 in the second and the third reading respectively (see

Table 6). The proportion of utterances related to the content of the book also decreased in the second and third reading from about 60% in initial reading to approximately 35% and 37% in subsequent readings.

Table 6

Frequency and percentage of Code Utterances for Ms. Jane's Book Readings

Reading Time	Book-Content Related Utterances Levels I-IV	PR-B	FA	MT	ITT	AK	PA	Total utterances
Fall Readings								
First	77	1	34	9	5			
Reading	61.11%	0.79%	26.98%	7.14%	3.96%			126
Second	41		44	22	8			
Reading	35.65%		38.26%	19.13%	6.95%			115
Third	41		38	17	13			
Reading	37.61%		34.86%	15.59%	11.92%			109
Spring Readings								
First	38		33	22	10			
Reading	36.89%		32.03%	21.35%	9.7%			103
Second	26		30	11	3			
Reading	37.14%		42.85%	15.71%	4.28%			70
Third	55		66	27	6			
Reading	35.25%		42.3%	17.3%	3.84%			156

Note: PR-B = Print and book conventions; FA = Feedback and acknowledgement; MT = Managerial talk; ITT = Interaction and turn taking; AK = Alphabet knowledge; PA = Phonological awareness.

In the first reading, Level 1 utterances were the most prevalent and constituted about 65% of Ms. Jane's book related talk (see Figure 3). Level 2 and Level 3 utterances each represented about 17% of the utterances related to the content of the book. One utterance was at the highest level of abstraction. In the second reading, literal language falling on the first two levels of abstraction constituted 80% of all book-related talk. Almost 60% of these utterances fell at the first level of abstraction and 20% on the second level. The remaining utterances represented language at the third level of abstraction with no language used to engage children at the highest level. In the final reading, Level 1 and 2 utterances continued to comprise the majority of Ms.

Jane's language, increasing slightly compared to the first two readings to about 85%. In the remaining utterances, about 12% fell at the third level of abstraction and one (i.e., about 2%) at the highest level.

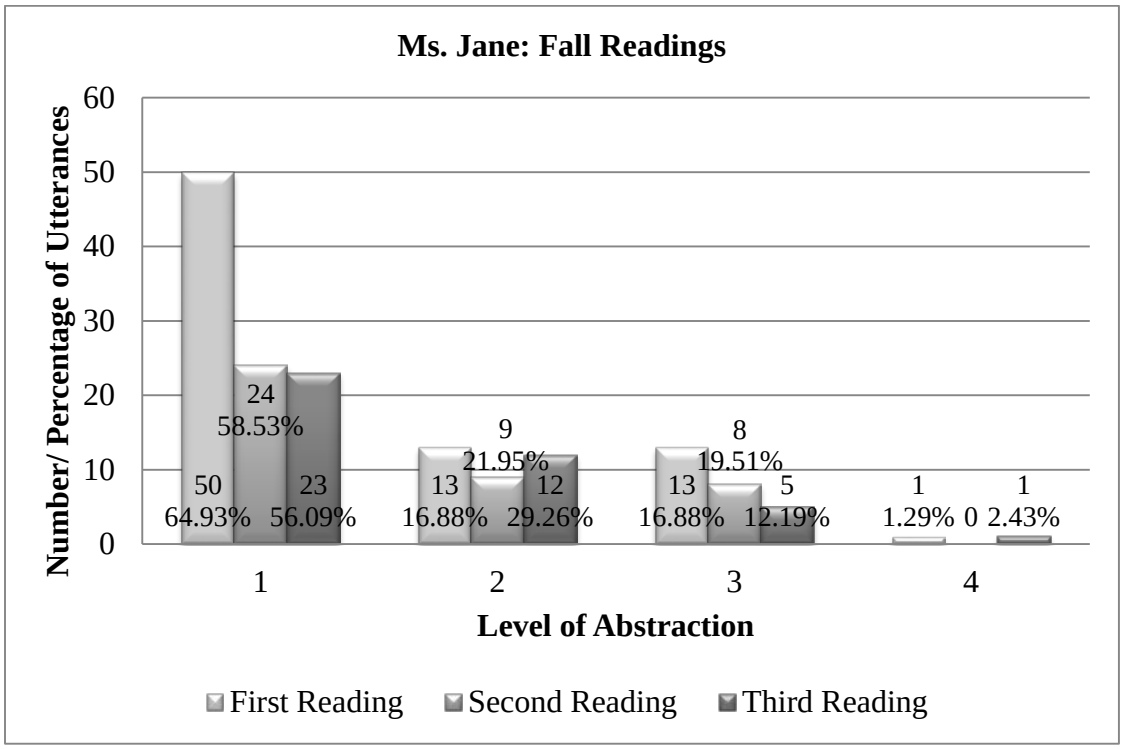

Figure 3. Number and percentage of utterances across the four levels of abstraction for Ms. Jane's fall readings.

Across the three fall readings, utterances falling on the lowest level of abstraction were the most prevalent in Ms. Jane's readings. Using this type of utterances, Ms. Jane engaged children in pointing to or labeling characters and objects in the book (e.g., "Where's Chester?"; "Can you find Chester at his school?"), directing the children's attention to elements in the book (e.g., "See, there it is."; "There's Chester"; "This is a mommy raccoon. And this is the baby."), or imitating actions (e.g., "Put your hand there", "Put your hand out into a fan, "Put your kiss to your cheek"). Level 2 utterances represented the second largest category and increased consistently in proportion across the three reading. These utterances were used by Ms. Jane to

describe characters and story scenes during reading or review information from the text (e.g., "He goes to school in a tree", "There it goes, from his hand, all the way up his arm all the way to his heart he felt it."; "Even when mom wasn't with him at school, he still has her love right here."), and to engage children in recalling information or describing story actions themselves, particularly in the second and third reading (e.g., "Who rang in the new school year?"; "Is it just Chester that's in that tree?; "A secret, do you remember what it is?")

Using Level 3 utterances, Ms. Jane mostly pointed out connections between the story and children's lives, as in the example below:

> **Teacher:** So whenever you have to come to school and sometimes you might miss your mom at school… or your dad, or your grandma, or your aunts, or your cousins.
> **Child:** I miss my grandma.
> **Teacher:** Yeah. Tell grammy before your leave say, give me a kiss right here. And you can catch [taps open palm] her kiss in your kissing hand and curl your fingers up tight, and you can keep it, you can bring it to school with you. Does that sound like a good idea?

Level 3 utterances were also used to explained the meaning of the sign language presented in the story (e.g., "That means "I love you"; "That's a way to say "I love you" in sign language"). In one instance, in the third reading, Ms. Jane briefly provided an explanation for a word in the story (e.g., "He smiled, he grinned"). Ms. Jane's two Level 4 utterances in the first and third reading were both prompted by the children's comments during the reading. In the first case, after practicing making the hand sign for "I love you", a child tried another hand sign and asked Ms. Jane what it might mean, eliciting an inferential response from the teacher (i.e., C: "What's this say?" [holding out hand sign] T: "I don't know, we'll have to… maybe we can find a sign language book and we can figure out what it might mean"). In the second instance, a child wondered aloud about the animals in the book, prompting Ms. Jane to ask a question that required making a prediction:

> **Teacher:** Yeah look at all of those friends of Chester's that are going to school with him.
> **Child:** Where does he put the stuff at?

> **Teacher:** I don't know where they put their stuff that's a really good question. Where do you think they could?
> **Another Child:** That's Chester. Where's his mom?

As evident, the child's question remained unanswered as Ms. Jane directed her attention to another child's question. Toward the end of the reading, maintaining her interest for finding out where the animals may be placing their belongings while at school, the same child wondered again:

> **Child:** That right… Those holes might be, where they put…
> **Teacher:** Mhm, those are holes. Hey (other child name), scoot down just a little bit. You're on top of your friends.

Ms. Jane's feedback was brief and interrupted by classroom management as the children came close to the book to see the pictures. Throughout the readings, Ms. Jane's feedback mostly consisted of praise or brief acknowledgements of children's responses (e.g., "Yes, you're right."; "Nice job remembering."; "Oh, you guys are remembering so many things about this."; C: "A skunk." T: "It's kind of like a skunk."; C: "A raccoon." T: "Yes, a raccoon."; C: "I found them." T: "Yeah. You found Chester?"; C: "Mom" T: "That's Chester's mom."; C: "I can't do it!" T: "Let's keep trying."), with short extensions at times (e.g., C: "A bunny and two animals." T: "There are more animals, they're watching them."; C: "But it's dark out there." T: "I know, he goes to school at night time"; C: "On the tree!" T: "In a big tree, that's right").

Across the three readings in Ms. Jane's classroom, management talk doubled in proportion the second and third time the book were read. In the first reading, management utterances were mostly used to ask children to pay attention to the story (e.g., "Sit on your bottom. Okay, turn your voices off so that you can hear this wonderful story called *The Kissing Hand"*; "Listen!"; "Look at this!"), in subsequent readings Ms. Jane used utterances to manage interactions and ask children to raise their hand and wait for their turn in talking about the book (e.g., "Okay, listen. Okay, put your hands up"; "Okay, whose voice should be talking right

now?"; "Hey (child name), during this, story who's voice should we be hearing?"; "Wait until I call your name, buddy, sit down. Sit down and you can tell me when I call you"). At the beginning of the second reading, after several children proceeded to respond simultaneously to Ms. Jane's recall questions about the book, classroom rules for participating in book reading activities were reviewed:

> **Teacher:** Hey, (Child name)! If you guys are all talking to me at the same time, can I hear you?
> **Children:** Nooo!
> **Teacher:** Mhm, yeah. So if you have something to say what should you do?
> **Child:** Talk!
> **Teacher:** [Shakes head]
> **Other Child:** Noo.
> **Teacher:** You should talk when?
> **Child:** Uhh..
> **Other Child:** After the book is over!
> **Teacher:** After the book is over, that'd be a great time to do it. If you have something to tell Ms. Jane, remember you can raise your hand. That way, I can say one friend's name at a time and then I can hear you.

Ms. Jane's spring book readings. In the three spring readings, the total number of utterances decreased in the second reading from 103 to 70 and then increased to 156 in the final reading (see Table 6). This contrasts with the fall data for Ms. Jane, when the total number of utterances decreased steadily from the first to the last reading. The total number of book-related utterances across the readings was about 35%, similar to the final two fall readings.

In the first two readings, language used at a literal level comprised about 76% of the utterances related to the content of the book (see Figure 4). This proportion was nearly evenly distributed between Level 1 and 2 utterances in the first reading, while in the second reading Level 2 utterances were four times more prevalent. In the first reading, Ms. Jane used five (13%) and four (10%) utterances to engage children at the third and fourth level of abstraction respectively. In the second reading, six (23%) of the utterances fell at the third level of abstraction and there were no utterances at the highest level. In the final reading, the majority of Ms. Jane's talk was comprised of literal language, with only two utterances falling at the third

level of abstraction and none on the fourth level. Fifty-eight percent of the literal language was comprised of Level 2 utterances and 38% by utterances falling on the first level of abstraction.

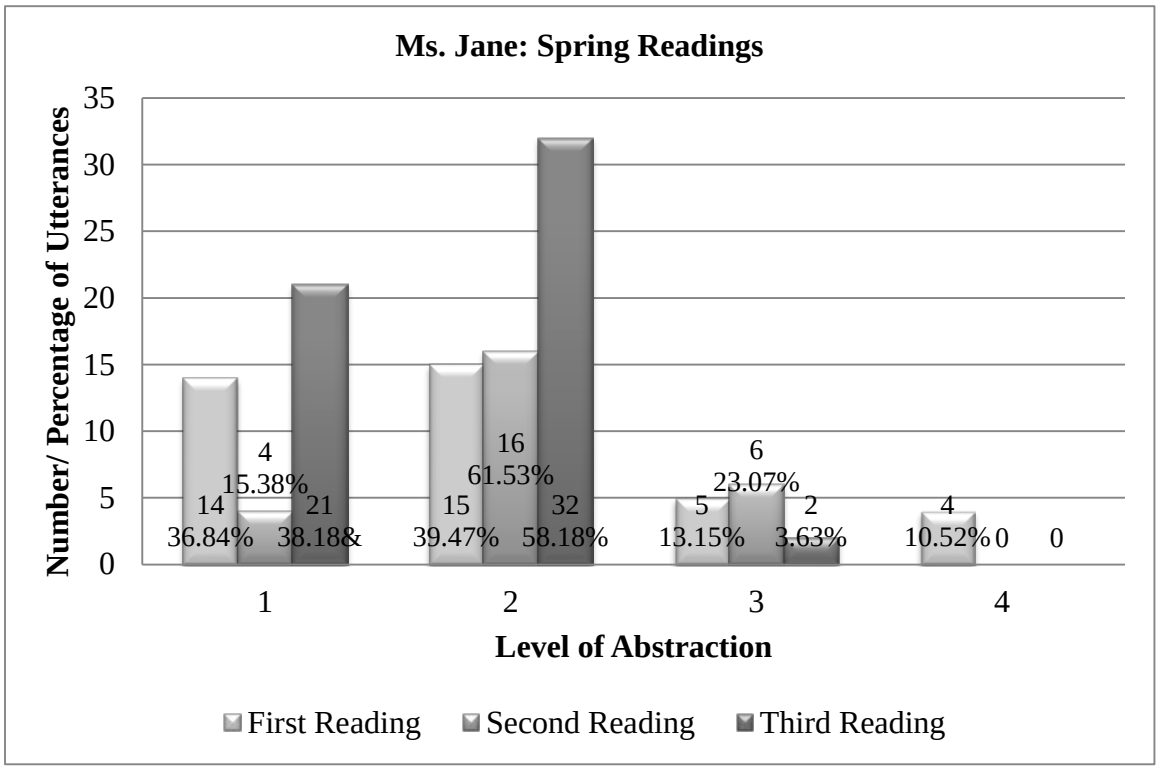

Figure 4. Number and percentage of utterances across the four levels of abstraction for Ms. Jane's spring readings.

Similar to the fall readings, only a low proportion of the language used across the three readings engaged the children at an inferential level. Further, while Level 4 utterances were limited in the fall and continued to be absent in the spring second and third reading, spring readings were also characterized by a decrease in the proportion of Level 3 utterances. As such, in the spring readings, less of the Ms. Jane's talk was aimed at having children label, locate, or otherwise direct their attention to objects or characters in the book (e.g., "What do you see here?; "Look at his little red nose"; "What is this?"; "Here's his little blue house"; "What did he sit on?"; "*So Amos said good night to the…"* [eliciting response while pointing to picture]) Instead, more of the teacher's language was used to review information or describe story actions (e.g.,

"He's gettin' on the bus and going to the zoo."; "Amos always comes to the zoo to help the friends and to do things, but look. They are wondering where he was.") and engage children in recalling information previously mentioned or describing characteristics of objects and characters (e.g., "Since Amos every day came to the zoo, and he was a great friend, and he helped his animal friends, and he took care of them, and he did things with them, when he was sick what did they do?"; "Do you remember where he's walking to?"; "Where's the stop at?"; "What did he do with the elephant?"; "And what did he do with the tortoise?") Level 2 utterances increased considerably in the second and third reading as children were engaged in recalling story events.

Language aimed at the third level of abstraction was used by Ms. Jane to make inferences about the story (e.g., "Look at the tip of his nose, it's red. What do you think that might mean?"; T: "A sick day. Does that mean he might have a cold?" C: "Yeah."; "Wasn't that a great friend?"; "They're sleeping with him, look, to make him feel better.") or to make connections between story events and children's experiences (e.g., T: "So do you think you should go to school or work if you're sick and have a cold?" C: "No." T: "You're right. He says "I'd better not go to work today."") The four Level 4 utterances from the first reading were all used to prompt children to make predictions about the new book and story events (i.e., "What do you think it might be about?" [the book]; "Where'd the animals go?"; "What are they waiting for?"; and "Where are they going to get up and go in the morning?") No similar questions or others aimed at supporting children's reasoning skills were observed in the second and third reading.

Throughout the spring readings, feedback and acknowledgement of children's contributions continued to be brief (e.g., C: "To his house." T: "You think they're going to his house?" C: "Yeah." T: "Let's see what happens next"; T: What were they doing with the

elephant? What did he do with the elephant? C: “Play checkers!” T: “Close.”; C: “He raced the turtle! He raced the turtle.” T: “Yeah”). Brief extensions to the children’s responses were made on few occasions (e.g., C: “They forgive him.” T: “They forgive him and they came to him, didn’t they?” C: “And they’re sleeping” T: “And now they’re sleeping, yeah. They’re sleeping with him, look, to make him feel better”). Overall, Ms. Jane readily accepted responses from children, provided praise, and promptly resumed reading even as children sometimes continued to show interest in discussing the story, as in the example below from the first reading:

> **Teacher:** He’s gettin’ on the bus and going to the zoo. “*Amos-*“ [resumes reading]
> **Child:** [interrupts] Cause he’s a zoo worker!
> **Teacher:** He might be a zoo worker, that’s a great idea! “*Amos-*“ [resumes reading]
> **Other Child:** He might be a fish helper.
> **Teacher:** Let’s find out! *“Amos has a lot to do at the zoo...”* [resumes reading]

Similar to the fall readings, missed opportunities to engage children with using inferential language were apparent throughout the spring readings, as in the example below:

> **Teacher:** Well, let’s see. “*He would wind his watch and set a pot of water to boil, saying to the sugar bowl, A spoonful for my oatmeal and two for my tea.*” So he had one for his oatmeal and two for his tea. How many spoonfuls of sugar did he have?
> **Children:** Three.
> **Teacher:** Three every morning. “*And with his belly full and ready for the work day he ambled out the door.*“
> **Child:** [interrupts] Sugar’s not good for you.
> **Teacher:** You’re right, too much sugar’s not good for you. [turns page and resumes reading]

Compared to the fall readings, classroom management talk increased in the first reading to about 20% and decreased in the second and third reading. Overall, children continued to be redirected to pay attention to the story, use their “inside voices” and wait for their turn. It was also evident at times that classroom management interfered with the teacher’s ability to engage children in extended discussions, as in the following instance:

> **Teacher:** The tortoise hid inside his shell, but where did Amos hide?
> **Child:** Under the covers.
> **Teacher:** Yeah, beneath the covers. [turns page]
> **Second Child:** That was not a good place!
> **Teacher:** You didn’t think it was a very good place to hide?

Third Child: Because you see him, like…
Second Child: His legs! His legs were sticking out!
Teacher: They were. Hey (child name), scoot back just a little bit because you're right in front of (child name).

Repeated Book Reading in the Intervention Classrooms

Ms. Vivian's fall book readings – Time 1. Descriptive information for the frequency and percentage of each category of coded utterance across the four repeated book reading time samples is presented in Table 7. Book readings videotaped at Time 1 constitute pre-intervention data and they provide an overview of how Ms. Vivian read books to children in her classroom before being introduced to the repeated book reading approach. The analysis of nine subsequent readings collected at three different time periods, in week 10, week 20, and at the end of the intervention illustrates how Ms. Vivian continued to read books in her classroom throughout the study.

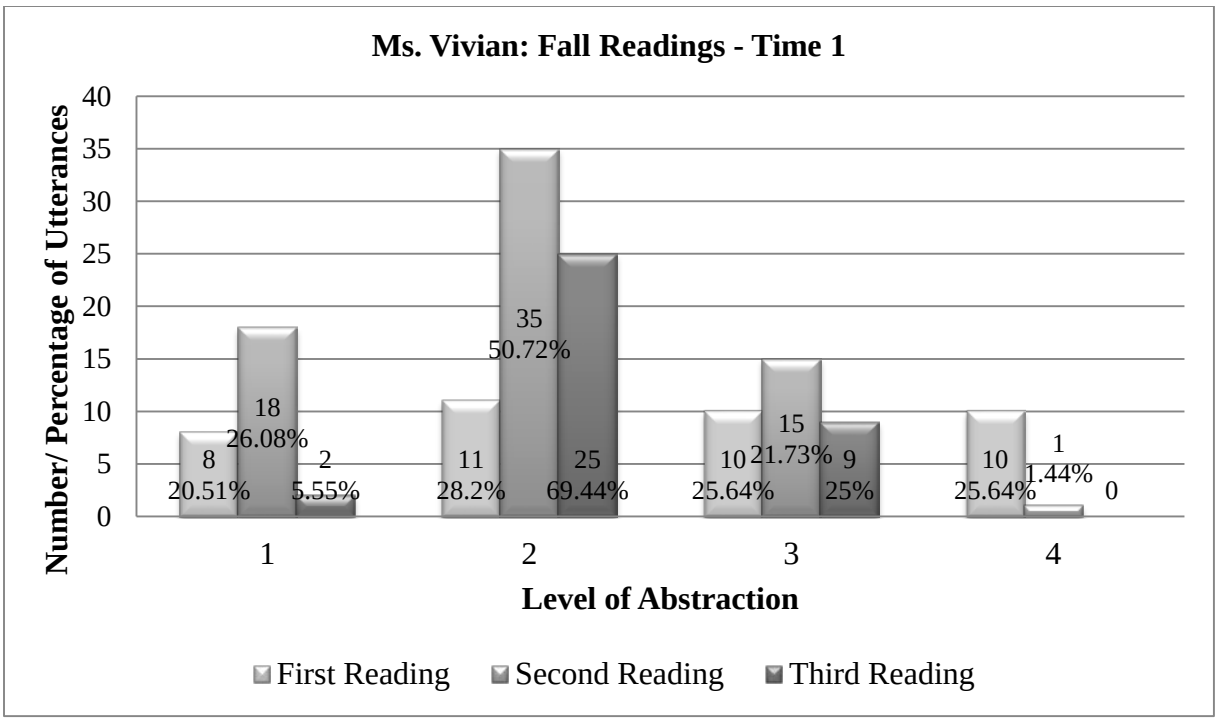

Figure 5. Number and percentage of utterances across the four levels of abstraction for Ms. Vivian's fall readings - Time 1.

At Time 1, the total number of utterances increased from the first to the second reading and then decreased considerably in the third reading (129, 223, and 81 respectively). The number of book related utterances constituted approximately 30% of Ms. Vivian's language use during the first two readings and increased to 44% in the final reading. In the first reading, the 39 book related utterances were fairly evenly distributed across the four levels of abstraction, with approximately 50% of her utterances using literal language and 50% using inferential language (see Figure 5). Notable is the high percentage of management talk during this reading, comprising almost half of Ms. Vivian's total utterances in this activity. In the second reading, close to 80% of Ms. Vivian's book related utterances fell at the first two levels of abstraction, with 21% at the third level, and only one utterance at the highest level of abstraction. While teacher talk related to classroom management slightly decreased in the second reading, it continued to be higher than the proportion of book related utterances and constituted close to 40% of the total utterances. Across the first two readings, the percentage of feedback was about 20% of the teacher's total extratextual language. One utterance was used to point out a rhyme and five (approximately 2%) to refer to print and book conventions (e.g., "What is this part of the book?"). In the third reading, 75% of the language used by Ms. Vivian was literal, with almost 70% falling at the second level of abstraction. Management talk decreased to 17% and feedback increased to almost 30% compared to the first two readings.

Overall, Ms. Vivian's book readings in Time 1 demonstrated a decrease in the complexity of teacher language across the three readings. In contrast, her use of literal language increased in the second reading and remained steady in the final reading. In particular, Ms. Vivian used a high percentage of Level 2 utterances asking children to recall or describe events from the story in the second and third readings (e.g., "What did Mrs. Raccoon do? Who

remembers from the other day?" [showing pictures]; "What will he get to do?"; "What does he do to his mom's hand?"; "What's he doing?"). Across the three readings, 20-25% of the book related utterances fell at the third level of abstraction. Most often Ms. Vivian made text-to-life connections and discussed the similarity between the main character's problem of starting school and children's own experiences with coming to preschool and missing their parents (e.g., "Does that sound like any of us? Are we always excited to come to school? Sometimes we might cry, sometimes we like to… "I just want to stay at home, mom, please!" I am like that coming to school"; "What does he have like us?"; "It'd make you feel good wouldn't it if mommy gave you a kiss or daddy gave you a kiss?"; "You didn't want to go to school because you were scared, you wanted to just stay home").

In the first reading, several high-level questions were asked so the children would explain story actions or make predictions (e.g., "Why do you think mom thinks it's a good idea to go to school?"; "What do you think mom was hearing?"; "Why will he like school once he goes?"). However, such questions often remained unanswered as Ms. Vivian did not wait for a response from the children and continued reading. At times, it was also the case that Ms. Vivian focused on classroom management right after asking higher level questions, missing an opportunity to listen and respond to children.

Across the three readings, but particularly in the first, Ms. Vivian's talk related to management overpowered book related discussion. Children were constantly redirected throughout the readings, oftentimes individually called by name and asked to position their bodies in a specific manner to attend to the story ("This way [child name] so you are facing me, please"; "Get a bubble please and do not let your bubble pop."; "Sit down here, sit down right here."; "Turn your body around."; "Since you're sitting so nicely, if you would like to lay on

your belly, put your belly on your nametag."; "No monsters at circle"; "Sit down. Come join us"; "Unless I'm asking you a question voices are off."; "You come over to circle please"), monitored as they interacted with peers (e.g., "Keep your body to yourself"; "Keep your body to yourself. He's not gonna get you let's just ignore"; "Don't tickle her please, keep your hands to yourself", "[Child name], keep your feet to yourself"). She also reminded the children of presumably more enjoyable activities that they would have the opportunity to participate in after the book reading (e.g., "I would like for us to go outside"; "Let's listen to our story and we can go outside"). At times, children were given contradictory directions about how to position their bodies during the same activity (e.g., "It's fine to lie on your belly. Let's listen"; "If you want to lay on your belly that's fine, but keep your feet still."; "Please sit up on your name"; "If you want to lay on your belly you can try again").

Feedback and acknowledgement of children's responses increased across the three readings, with almost 30% of the book-related teacher language in this category evident in the final reading. Ms. Vivian's feedback to children during reading was mostly a brief acknowledgement or repetition of child responses oftentimes in the form of a question (e.g., "What will he get to do when Chester goes to school, what will he get to do?" C: "Play" T: "He'll play"; C: "One time I didn't want to" T: "One time you didn't want to?"; C: "Love" T: "Love. Yes, love"; C: "Daddy always does that." T: "Daddy always does that?"; C: "Because they love each other" T: "Because they love each other?"; C: "I didn't want to go to school today" T: "You didn't want to come to school today?") or, at times, a correction (e.g., C: "It stings" T: "No, it doesn't sting") or a short extension (e.g., C: "A sandbox" T: "A big sandbox"; C: "Him liked it." T: "He loved it, he liked it").

Table 7

Frequency and percentage of Code Utterances for Ms. Vivian's Book Readings

Reading Time	Book-Content Related Utterances Levels I-IV	PR-B	FA	MT	ITT	AK	PA	Total utterances
Fall Readings (Time 1)								
First	39		26	59	5			
Reading	30.23%		20.15%	45.73%	3.87%			129
Second	69	5	47	86	15		1	
Reading	30.94%	2.24%	21.07%	38.56%	6.72%		0.44%	223
Third	36	5	24	14	2			
Reading	44.44%	6.17%	29.62%	17.28%	2.46%			81
Late Fall readings (Time 2)								
First	174	1	53	75	25			
Reading	53.04%	0.3%	16.15%	22.86%	7.62%			328
Second	140		70	31	7			
Reading	56.45%		28.22%	12.5%	2.82%			248
Third	186	3	124	43	16			
Reading	50%	0.8%	33.33%	11.55%	4.3%			372
Winter Readings (Time 3)								
First	37	2	23	11	2			
Reading	49.33%	2.66%	30.66%	14.66%	2.66%			75
Second	117		82	34	8			
Reading	48.54%		34.02%	14.1%	3.31%			241
Third	89	4	71	38	7			
Reading	42.58%	1.91%	33.97%	18.18%	3.34%			209
Spring Readings (Time 4)								
First	60		39	25	7			
Reading	45.8%		29.77%	19.08%	5.34%			131
Second	75	5	81	44	7			
Reading	35.37%	2.35%	38.2%	20.75%	3.3%			212
Third	103	1	88	42	12			
Reading	41.86%	0.4%	35.77%	17.07%	4.87%			246

Note: PR-B = Print and book conventions; FA = Feedback and acknowledgement; MT = Managerial talk; ITT = Interaction and turn taking; AK = Alphabet knowledge; PA = Phonological awareness.

Ms. Vivian's late fall book readings – Time 2. In the tenth week of the intervention, during the month of December, Ms. Vivian's classroom was videotaped while Ms. Vivian was reading the book *Home for Christmas* (Brett, 2011). As can be observed from Table 7, the total number of utterances across the three readings remained high (328, 248, and 372 respectively). The number of book related utterances was comprised of at least 50% of all teacher's language

across the three readings, contrasting to Time 1 when only the third reading contained a percentage approaching this value. The second reading, while containing the lowest amount of total utterances among the three readings, also includes the largest amount of book related utterances.

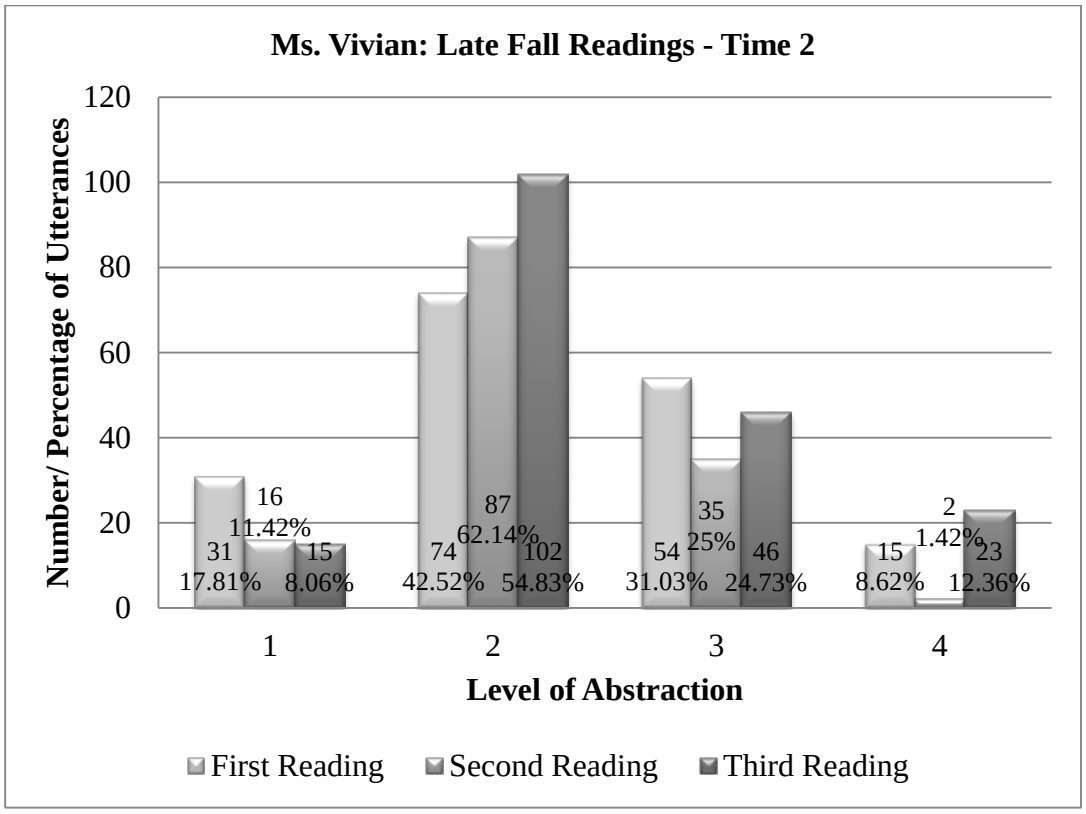

Figure 6. Number and percentage of utterances across the four levels of abstraction for Ms. Vivian's late fall readings - Time 2.

In the first reading, approximately 60% of book related utterances fell at the first two levels of abstraction and 40% at the third and fourth level. The second reading presented a substantial increase in the utterances related to the second level of abstraction and a decrease in the other levels, particularly the fourth level (see Figure 6). While more than half of book related utterances continued to fall at Level 2 in the third reading, inferential teacher language comprised about 37% of the remaining utterances. As in Time 1, management talk continued to represent a substantial amount of the total language used by Ms. Vivian during the readings,

particularly in the first activity (i.e., approximately 23%). However, management talk decreased across the readings, with only 11% of all utterances observed in the final reading. Teacher feedback and acknowledgement steadily increased throughout the three readings, with a third of the utterances coded as feedback and acknowledgement in the final reading. Utterances related to print and book concepts was minimal in the first and last reading.

Compared to Time 1, an increase in teacher's inferential language use, specifically at the fourth level in the final reading, was particularly noticeable. Higher-level questions and comments were more evident compared to the initial pre-intervention readings as Ms. Vivian asked children to explain actions from the story or make predictions. Throughout the readings, Ms. Vivian was observed waiting for children's responses and providing feedback after asking more complex questions. In some instances her feedback was brief or introduced a correction when children were misinterpreting story events (e.g., T: "Why did she already lose her tail, but he hadn't lost his tail yet?" C: "Because she's little." T: "Because she's little? I believe there's another reason why." [resumes reading]) Similar to Time 1 there were instances, albeit limited, when Ms. Vivian asked a question and rapidly continued reading without waiting for children to respond, as in the example below:

> **Teacher:** Oh, there's no food, what do you think is gonna happen? *"One afternoon..-"*
> **Child:** It's gonna turn into hard ice!
> **Teacher:** The snow will turn to hard ice.

However, in most cases, after asking complex questions, Ms. Vivian stopped reading and engaged in a conversation with the children, such as shown below:

> **Teacher:** *"Rollo felt lynx's eyes staring at him in a hungry way."* Oh no, listen. Remember like how the bear hunt? The bear has great big eyes, and a fuzzy little tail. Listen to what happens to Rollo. The lynx is looking at him with hungry eyes. What does that mean?
> **Child:** He's gonna eat him.
> **Teacher:** The lynx might eat Rollo. Oh no! *"It was time to move on."* Why was it time to move on?
> **Child:** Because he was gonna eat him!

Teacher: Huh. Lynx was gonna eat Rollo? He might. Why would he eat Rollo?
Child: Because he's hungry!
Teacher: He's very hungry because there's, no food around. Remember it said it was snowing and colder and colder and no food to eat.

Oftentimes, Ms. Vivian elicited responses from several children after asking a question, although without making specific connections between their contributions:

Teacher: "*As the days passed, it got harder for Rollo to keep up with the bears."*
Huh. Why can't he keep up with the bears (child name)?
First Child: Because he's slow.
Teacher: (Second child), why can't he keep up with the bears?
Second Child: He gets slow and slower and slower.
Teacher: Why is he getting slow? Or are they just getting fast?
Third child: They're getting fast.
Teacher: Ooh, they're getting big and fast.

Ms. Vivian gradually used more variety in the types of Level 3 utterances used across the three readings. While continuing to make connections between the text and children's experiences, the teacher also explained new vocabulary words and provided opportunities for children to make inferences. When explaining new words, Ms. Vivian made connections to children's daily classroom activities:

Teacher: "*But this lazy life didn't last long. The owlets grew fast and, the nest got crowded. "*Do you ever feel crowded? What does crowded mean?
Child: Crowded means you're… you're little bit, mad.
Teacher: Oh really? I think crowded just means you're… you don't have a lot of room to move. Like on the bus sometimes when we have to use the other bus and we have to put three people in one seat. Isn't it kind of crowded and you can't really move? It feels too tight. It's crowded look [points to book] it was crowded, the babies were falling and she had to… she kicked them out of the nest!

Ms. Vivian also used gestures and facial expressions to explain new words when relevant and engaged the children in imitating actions that would express their understanding of the new word:

Teacher: "*Otter didn't give it any mind. But Rollo could not stop shivering*." [Shivering] Can you shiver?
Child: [Shivers] Oohoo.
Teacher: [Still shivering] Everybody shiver like we were outside. Before we came inside we were all shivering. Our teeth were chattering, we were so cold. Our cheeks… and we were

jumping up and down, and we were trying to get warm.

Across the three readings, Ms. Vivian's feedback indicated more focus on children's responses and she extended their contributions:

> **Teacher:** Who remembers, he put his clothes back on, and he put the moss in his shoes. Why did he put the [taps book] moss in his shoes?
> **Child:** Keep him warm.
> **Teacher:** Yes, (child name), he did that to keep himself warm because he was shivering and cold.

When correcting a child response, Ms. Vivian was observed providing specific feedback to help children understand story events:

> **Teacher:** Do you think he wants to go home yet?
> **Child:** Noo.
> **Other Child:** Noo!
> **Other Child:** No.
> **Teacher:** Are you sure? His nose is blue, and he's really cold, and he missed his sister's cookies. He really missed her. He's starting to miss his family let's see if he can make it home.

This substantial increase in feedback and acknowledgement from Ms. Vivian's first to the third reading, along with the high percentage of Level 2 utterances may be indicative of the gradually increasing child engagement in retelling the story. Level 2 utterances were particularly used to elicit children's participation in retelling story events during the second and third reading. Prompts such as "Who remembers…" and "What happened…" were often used to engage children in describing information and recalling story actions. It may be important to point out that management talk also decreased across the three readings as the children were provided with more feedback from the teacher and essentially more opportunities to be actively engaged in the story.

Ms. Vivian's winter book readings – Time 3. In the twentieth week of the intervention, during the month of March, Ms. Vivian's classroom was videotaped during the reading of *Someone Bigger* (Emmett, 2004). Throughout the three repeated readings of this book the total

number of extratextual utterances increased dramatically from the first to the second and third readings, from 75 to 241, and 209 utterances respectively. This rhyming book was shorter than the previous two books, which may help explain the lower number of total utterances in the first reading. The number of book related utterances approached 50% in the first and second reading and decreased slightly in the final reading (see Table 7).

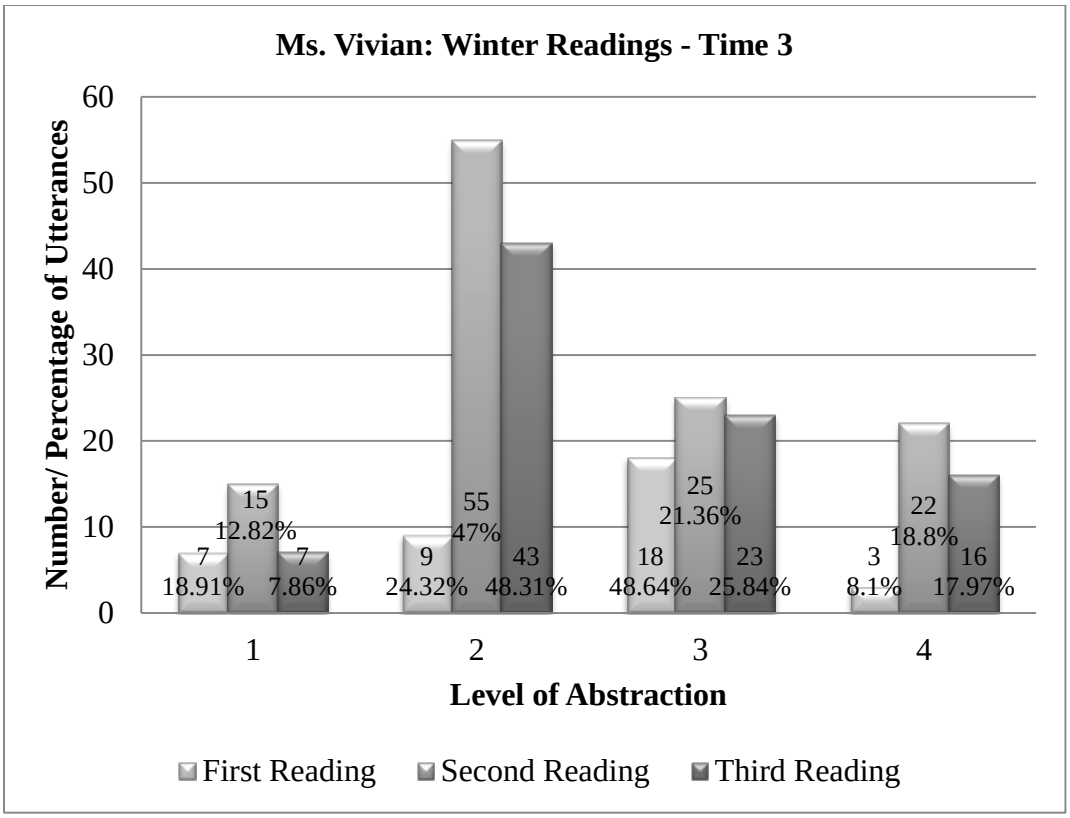

Figure 7. Number and percentage of utterances across the four levels of abstraction for Ms. Vivian's winter readings - Time 3.

As shown in Figure 7, in the first reading, nearly half of all book related utterances fell at the third level of abstraction. Approximately 45% of the teacher's language was used at the two literal levels and the remaining utterances were at the highest level of abstraction. The distribution of coded utterances across the four levels of abstraction were similar in the second and third reading. As such, close to 50% of the utterances fell at Level 2 and approximately 40%

at the two inferential levels in both readings. Level 1 utterances were the least frequent in both readings and decreased in the final reading. Management talk represented approximately 14% of the total language used by the teacher in the first and second reading and slightly increased to 18% in the final reading. Feedback and acknowledgement was consistently above 30% in the three readings.

Similar to Time 2, the total number of Ms. Vivian's utterances remained rather stable in the second and third reading, although the first reading of this book included less extratextual talk. A notable difference between Time 2 and Time 3 is that, while Ms. Vivian continued to use more inferential language across the three readings, more of the language engaged children at the highest level of abstraction than previously. Specifically, in the second and third reading of Time 3 approximately 18% of book related utterances fell at the fourth level of abstraction, while only about 1% and 12% respectively were at the same high level at Time 2. This more frequent use of Level 4 utterances provided children with opportunities to make predictions and provide explanations related to the events in the story (e.g., "Do you think that could really happen?"; "Could it really happen? Could it really pick up all the animals?"; "Where do you think they would have gone if they would've kept flying?"). The teacher frequently used questions to extend the children's responses as in the two instances below:

Teacher: If you were gonna fly a kite, where would you go?
Child: I would go to the park.
Other Child: A park with no trees.
Teacher: Go to a park where there's no trees. Why wouldn't you want any trees around?
Child: Because, my kite would get stuck.
Teacher: Your kite could get stuck in the trees.

Teacher: What kind of a day was it?
Child: A windy day.
Teacher: A windy day, it was a windy day. Why does it have to be a windy day?
Child: Because the kite has to fly in the air.
Teacher: Ohh it has to be, strong enough of a wind to make the kite float up.

Ms. Vivian was also observed seizing various opportunities to extend concepts beyond the context of the story providing children with practice making predictions and providing explanations. The conversation below serves as an example:

> **Teacher:** What else could be light? [like the kite]
> **Child:** A key.
> **Teacher:** A key is light. What else is light?
> **Other Child:** A fish tank. [A fish tank was located close to the reading area]
> **Teacher:** A fish tank is probably not light. Have you ever tried to lift a fish tank?
> **Teacher:** [Lifting motion] Heavy….

The examples presented above illustrate that Ms. Vivian's language related to providing feedback and acknowledgement not only increased in proportion across the three readings at Time 3, but also provided children with further opportunities to engage in the activity. Children were often asked to clarify responses or to provide further explanation related to their contribution. When relevant, Ms. Vivian promptly corrected child responses to accurately depict the meaning of newly introduced concepts (e.g., see the example of the fish tank above). Further, when several children provided a response to an open-ended question asking them to make predictions, Ms. Vivian sometimes reviewed all the answers emphasizing the various ideas expressed in the group (e.g., "Where would they have gone if Sam did not grab the kite and pulled it back down to the park?")

As at Time 3, Level 3 utterances continued to be varied and included making inferences, definitions, and text-to life connections. As such, children were encouraged to make inferences about the characters' thoughts and feelings (e.g., "When he pulled all of them down, what do you think they said to Sam?"; "Why do you think he looks sad?"; "Why do you think he kept running after them?) Across the three readings, Ms. Vivian also continued to emphasize new vocabulary by providing explanations:

> **Teacher:** "*Sam and his dad made a kite. They made it…*" Tiny. Did they make it tiny?
> **Child:** Big.

Other Child: No, they made it big!
Other Child: Big!
Teacher: They made it big, very big, large! They made it large. That's another word that means big.

At times, children themselves asked questions that prompted Ms. Vivian to introduce new vocabulary as in the following example:

Child: Why the bank robber have white pants and white shirt?
Teacher: 'Cause it's called a uniform. And, when, someone is in jail they have to wear a Certain color of the uniform, so that if they escape they can be found really easy that's why. So that you can see, they'll stand out.

Children also contributed as Ms. Vivian explained new words:

Teacher: What is on his kite? What did he make on his kite?
Child: An-eagle.
Other Child: A bird.
Teacher: He put an eagle or a bird.
Child: A Eagle!
Teacher: A type of- a type of bird called an eagle. That's very nice. *"Then dad let go, and launched, the kite."* He launched it and that means it went [swings arm up] up high! It went whhhshew! You know like how we do, [finger countdown] five four three two one and we blast off? When you launch that-
Child: Yeah like this! [flaps arms]
Teacher: Yeah it went up reeaally high like that. [shakes hands, lifting arm up]

At times, children's questions and contributions created opportunities for Ms. Vivian to respond by asking further questions to extend their thinking beyond the story. One such instance followed after the teacher's explanation of the word "uniform" presented above:

Child: If you find a golden treasure... steal it…
Teacher: If you stole a golden treasure? Why else would you go to jail?
Other Child: If you steal. .
Other Child: Kill somebody.
Teacher: If you were being a bad guy, if you were stealing?
Child: No, if you were stealing the fish tank.
Teacher: Stealing a fish tank.

Similar to Time 2 readings, the high proportion of Level 2 utterances in the second and third reading often represented the teacher's attempt to engage the children in retelling the story and describing story actions. Further, consistently high percentage of feedback and

acknowledgement utterances across the three readings suggests that children have continued to actively participate in the activity.

Ms. Vivian's spring book readings – Time 4. At the end of the intervention, Ms. Vivian's classroom was videotaped during the reading of *A Sick Day for Amos McGee* (Stead, 2010). Similar to Time 3, in this final sample point, the second and the third reading contained a higher total number of teacher's extratextual utterances than the first reading of the book. The total number of utterances increased from 131 in the first reading to 212 and 246 in the second and third reading respectively. The number of book related utterances decreased from 45% in the first reading to approximately 35% and 41% in the second and third reading.

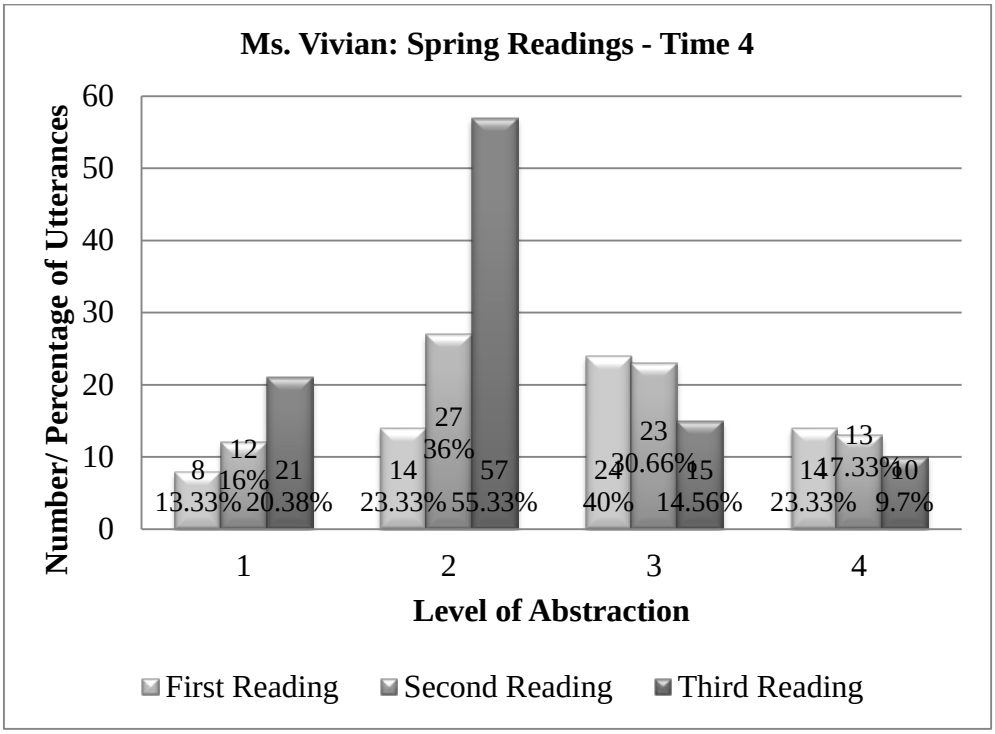

Figure 8. Number and percentage of utterances across the four levels of abstraction for Ms. Vivian's spring readings - Time 4.

In the first reading, most of Ms. Vivian's book related utterances fell at the third level of abstraction while the highest level of abstraction characterized approximately 23% of the utterances. Approximately 37% of her utterances fell at the first two levels of abstraction (see

Figure 8). The proportion of literal language increased to 52% in the second reading, with more than 30% of the utterances falling at the second level. Of the remaining book related utterances, 30% fell at the third and approximately 17% at the fourth level of abstraction. In the final reading, there was a decrease in inferential level to 24% of the teacher language. The proportion of Level 2 utterances increased to more than half of all book related utterances, while Level 1 utterances increased to 20%. Across the three readings, feedback and acknowledgement remained close to 30% of all utterances, as was the case at Time 3, although an increase was evident in the second and third reading. Notable also is the amount of management talk which was approximately 20% in the first and second readings and slightly lower in the third reading.

Similar to Time 3, during Time 4 the proportion of inferential language continued to remain high in the first and second reading with utterances at both the third and fourth levels of abstraction. This proportion decreased in the third reading when more language was used at the second level of abstraction as Ms. Vivian emphasized the retelling of the story. The bulk of the Level 2 utterances involved children's recalling of story events and describing scenes from the book. Throughout the three readings, Ms. Vivian used higher level questions to help children make inferences while also providing opportunities to make connections with their own experiences to clarify events from the story, as in the example below from the first reading:

> **Teacher:** They're riding bus number five all the way to Amos McGee's house, their friend. Why do they go to his house?
> **Child:** Because, because him was sick.
> **Teacher:** They knew he was sick? They knew before they got there that he was sick? Remember they just sat and waited and waited and waited. Did he call them and say "Hey guys, I'm not coming in today, I'm sick. Achoo!" Did he call them and tell them?
> **Other Child:** They don't have a phone!
> **Teacher:** They don't have a phone, they don't have a cell phone, so how did they know he was sick? Do you think they knew before they got to his house or do you think they were just being kind and went to check on him?
> **Other Child:** Check on him.
> **Teacher:** They went to check on him? Have you ever went and checked on somebody before?
> **Other Child:** Yeah.
> **Other Child:** My baby brother, yeah!

Other Child: My mom checks me in bed.
Teacher: Your mom checks on you when you're in bed? Your grandparents?

Inferential responses related to the characters' feelings were at times elicited to further children's understanding of broader concepts and situations, such as being able to see in the dark:

Teacher: What's he afraid of?
Children: Daark! Dark. Daaarrk.
Teacher: The dark. Why is the dark so scary?
Child: 'Cause the wolves can come out at night.
Teacher: Wolves come out. Why else is the dark scary?
Other Child: 'Cause, there's a coyote.
Teacher: Coyotes, why else is dark scary for the owl?
Other Child: Cheetah.
Other Child: Wolf.
Other Child: Maybe cheetahs could sneak out of their home.
Teacher: Cheetahs can sneak out of their home. Can you see this happening in the dark?
Other Child: No.
Other Child: Maybe!
Teacher: Maybe…
Child: You can see a cop car.
Teacher: Could see a cop car. Why could you see a cop car?
Other Child: Because the lights.
Teacher: Oooh.

As at Time 3, children are observed initiating recalling the story, asking questions of their own, and making comments as illustrated below:

Child: Ms. Vivian, I remember that the elephant got on the bus, and he could've break that bus.
Teacher: He could have, if an elephant really got on a bus. Do you think our bus can carry an elephant?
Children: Noooo!
Child: No way!
Child: I could feed the elephant peanuts.
Teacher: We might have to feed him peanuts just to keep him calm.
Teacher: Do you think he would um even fit through the door?
Children: Noo.
Child: Ms. Vivian, if he got on the top of the bus, he'll squish all of us and he'll break the whole bus.
Teacher: It would. If we were inside, we better get out fast so we wouldn't get smushed inside the bus, huh?

At times, children also contributed to explaining words that they were familiar with:

Teacher: *"Sit quietly with the penguin who was very shy."*
Child: He was like this, maybe. [making shy face]
Teacher: What does 'shy' mean? Like that, like (child name)'s doing? [imitates child]
Other Child: Like this. [hugs knees to hide face]

Teacher: Oh, putting your chin down? Does he want to play with the other penguins?

Ms. Vivian's feedback continued to be focus on the children's response, often asking for clarifications and extensions of children's ideas:

Teacher: They played hide-and-seek instead, why?
Child: 'Cause, they were sleepy.
Teacher: 'Cause they were sleepy?
Other Child: Yes
Teacher: They were too tired to run races today?
Child: Yeah
Teacher: They were too sleepy to run the race?
Child: No, Amos McGee was too sick.
Teacher: [nods] Amos McGee was too sick, so he decided to play hide-and-seek.

Regarding the increasing proportion of management talk observed in all three readings at Time 4 it is important to note that one third of the management related utterances were used to redirect two of three new children who had recently joined the classroom in the spring semester. The remaining management talk constituted approximately 13% of the total utterances, which would be characteristic of Ms. Vivian's readings at Times 2 and 3.

Mr. Steve's fall book readings – Time 1. The total number of utterances across the three pre-intervention readings in Mr. Steve's classroom increased from 127 to 152 in the first two readings and then decreased to 98 in the third reading. Of these utterances, teacher language related to the content of the book represented approximately 51% in the first and third reading and about 57% in the second reading (see Table 8). In the first reading, about 60% of the book related utterances were at the literal levels, with approximately 37% falling on the second level of abstraction (see Figure 9). The majority of Mr. Steve's language at the inferential levels consisted of Level 3 utterances, while only three of the utterances (i.e., about 4%) engaged children at the highest level of abstraction. Level 3 utterances constituted the majority of Mr. Steve's language in the second reading, with about 61% of the teacher's language at this level. Literal language constituted the majority of the remaining utterances and was fairly evenly

distributed between the two levels. Similar to the first reading, only three utterances (i.e., 3.4%) were at the fourth level of abstraction. In the final reading, Mr. Steve's utterances were evenly split between literal and inferential language. Further, of the literal language, Mr. Steve directed 48% at the second level of abstraction and 2% at the first level. The same high proportion of 48% of the inferential language was constituted by Level 3 utterances and only 2% by Level 4 utterances. Management talk decreased in proportion across the three readings, from approximately 9% to 7% and 3% in the first, second, and third reading respectively. At the same time, feedback and acknowledgement slightly yet steadily increased from about 24% to 26% and 29% across the three readings. Interaction and turn taking language (ITT) decreased from about 8% to 4% in the first two readings and increased to approximately 15% in the last reading. A small number of interactions related to print and book concepts was present in each of the readings.

All fall readings in Mr. Steve's classroom are characterized by a high proportion of Level 3 utterances and a small and decreasing proportion of Level 4 utterances. The majority of Level 3 utterances are focused on making connections and comparisons between the text and the children's life experiences (e.g., "That raccoon has a name just like you guys do."; "Did you guys some of you guys were probably really ready to come to school, but some of you guys kind of scared about starting school? You didn't really, you know, you kind of wanted to go, but you still kind of wanted to stay home with your family. But now, are you guys scared to come to school now? 'Cause you guys came to school and started coming to school, didn't you? Now you know that's fine, it's not scary."; "Probably like your family misses you when you come to school too."; "Do you think that the love your family has for you will go everywhere with you too?"; "Does your family do anything special before you come to school to kind of help you start

your day?") Infrequently, children were asked to make judgments and inferences based on information presented in the book (e.g., "So did Chester do okay in school you think?"; "What she gave him, she kissed his hand and how did that make him feel?"; "[…] do you think she's gonna miss Chester when he goes to school?"; "Did it make him feel good or feel bad?")

A general trend across all of Mr. Steve's readings was for more complex Levels 3 and 4 utterances to be nested within interactions in which Mr. Steve took a major role in providing explanations and making direct connections between the text and the children's or his own life. The interaction below serves as an example:

> **Teacher:** What does it mean to pretend to play possum? Have you ever heard of somebody say "Oh, they're just playing possum!"?
> **Child:** They're just possums.
> **Another Child:** I don't play possums.
> **Teacher:** Yeah but, you know, when somebody says what they mean by playing possum? Well… [child interrupts]
> **Child:** It means they're rolling things under.
> **Teacher:** Well, it means… It's an expression that big people use and it means that they're pretending. Because possums, you know how they protect themselves from other animals? They pretend like they're dead. They play possums like that [pretends to be dead, stick tongue out], like that and they pretend they're dead animals. 'Cause sometimes, some of the things that like to eat other animals, if it's dead, they don't like it very well and want to eat it while it's still alive and try to catch it. So, if it's… if it pretends like it's dead, it can protect itself. So that's why you gotta be careful with possums if you see one laying on the ground, 'cause it might be thinking that you're gonna try to get it, so it's gonna pretend like it's dead.
> **Child:** I see a possum.
> **Teacher:** [puts finger on lips to shush and whispers] We don't interrupt. And then when you try to catch it they will wake up and might scare you. That's what they say when they say "Oh, they're playing possum." It means you're pretending, you're faking.
> **Child:** Like a person is like a possum and the other is an animal and… another kid can be a different animal, and the other kid… like a possum, just playing possum.
> **Teacher:** [nods at the child's attempt to give an example] Okay, all right. I've got a really fun story for us. This is one of Teacher Steve's favorite […].

It may be important to note that the possum was not a main character in this story and "playing possums" was not an expression used in the story. Mr. Steve explained the expression after showing children a possum on the back cover of the book and explaining how they sleep at night before beginning to read the story. The children's lack of contribution to this interaction

was particularly evident. Other occasions were used to explain new words, mostly in the first and second reading, with no reference to new words in the third reading. Below is an example from the second reading:

> **Teacher:** "*Later that night, Chester stood in front of his school and looked thoughtful."* That means he went "Hmmm.." [scratches temple and scrunches forehead] Do you think he's ready to go?
> **Teacher:** "*Suddenly, he turned to his mother and grinned.* Do you know what it means to grin?
> **Children:** No.
> **Teacher:** It means he smiled. He turned around, and he smiled at her. What do you think he smiled for?
> **Child:** To school!
> **Teacher:** Cause he's going to school.

Table 8

Frequency and percentage of Code Utterances for Mr. Steve's Book Readings

Reading Time	Book-Content Related Utterances Levels I-IV	PR-B	FA	MT	ITT	AK	PA	Total utterances
Fall Readings (Time 1)								
First	66	7	31	12	11			
Reading	51.96%	5.51%	24.4%	9.44%	8.66%			127
Second	88	5	41	11	7			
Reading	57.89%	3.28%	26.97%	7.23%	4.6%			152
Third	50	1	29	3	15			
Reading	51.02%	1.02%	29.59%	3.06%	15.3%			98
Late Fall readings (Time 2)								
First	98	1	36	3	11			
Reading	65.77%	0.67%	24.16%	2.01%	7.38%			149
Second	108		72	20	19			
Reading	49.31%		32.87%	9.13%	8.67%			219
Third	105		83	9	22	2	1	
Reading	47.29%		37.38%	4.05%	9.9%	0.9%	0.45%	222
Winter Readings (Time 3)								
First	140		83	16	35			
Reading	51.09%		30.29%	5.83%	12.77%			274
Second	151	3	83	28	39			
Reading	49.67%	0.98%	27.3%	9.21%	12.82%			304
Third	101	9	66	45	47			
Reading	37.68%	3.35%	24.62%	16.79%	17.53%			268
Spring Readings (Time 4)								
First	111	2	79	23	27			
Reading	45.86%	0.82%	32.64%	9.5%	11.15%			242

Second	125	4	70	15	17	
Reading	54.11%	1.73%	30.3%	6.49%	7.35%	231
Third	101	2	77	31	34	
Reading	41.22%	0.81%	31.42%	12.65%	13.87%	245

Note: PR-B = Print and book conventions; FA = Feedback and acknowledgement; MT = Managerial talk; ITT = Interaction and turn taking; AK = Alphabet knowledge; PA = Phonological awareness.

The very high proportion of Level 3 utterances in the second reading (i.e., over 60%) was particularly unusual and merited further analysis. Upon closer examination, it became evident how this high proportion was accrued. During this activity, Mr. Steve stopped frequently to make connections to children's lives (e.g., "Can you guys think of some things that you really dintn't want to do but you have to?"; T: "Did you guys, were you guys like that when you first started school?" C: "Nooo"; "Sometimes some of those things that we have to do are very scary, like going to meet Mr. Steve for the first time. You guys were pretty scared, weren't you? Some of you guys didn't want to talk to me when you first saw me, did you? But now you guys talk to me all the time, don't you?"; T: "What about cleaning your room? Do we want to clean our room? C: "Nooo" T: "Do we have to clean our room?" C: "Nooo" T: "Yeah we should, 'cause it's our job, isn't it? 'Cause we have to help"). Children were frequently asked by Mr. Steve whether their experiences were similar to Chester's, eliciting their agreement or disagreement:

> **Teacher:** *"You'll make new friends."* Did you guys make new friends?
> **Children:** Yeah.
> **Teacher:** "*And play with new toys."* Did you guys play with new toys?
> **Children:** Yeah.
> **Teacher:** Okay. Did you read new books?
> **Children:** Yeah.
> **Teacher:** Did you swing on new swings?
> **Children:** Yeah.
> **Teacher:** No! Cause we don't have swings!

Connections to children's lives and Mr. Steve's own life, in which the teacher took the lead in explaining concepts with minimal input from children, continued to be present in the second as well as the third reading:

Excerpt from second reading:

Teacher: That's good if you do, but sometimes, some of my friends don't want to do things like brush their teeth or, here's a good one, like, my son does this sometimes too, taking a bath. Do we always like taking a bath?
Child: Yes.
Other Children: Noo.
Teacher: That's good to hear. Sometimes we don't though… [Son's name], my son [son's name], sometimes when he was little he'd be like, "I don't want to take a bath, Daddy, why do I have to take a bath? Cause you're dirty." That's what I told him. "Cause you're dirty." Sometimes we have to do things like that. Adults are the same way. Big people like Teacher Steve [child interrupts]
Child: I like to take bath.
Teacher: [holds finger up in front of mouth] Big people like teacher Steve and Miss [teacher assistant's name] and stuff, we even have to do some things that we don't want to sometimes. The biggest one for grownup's like pay bill. We don't want to pay bills, we want to keep our money. We have to pay our bills so you guys can have food, and we can have a place to live, and clothes, and cars.

Excerpt from third reading:

Teacher: Yup, some of my friends when the first started school they cried. I know I probably did when I was your age too and first started school. And I know I cried when my little boy started school. 'Cause I didn't want him to go yet, I wanted him to stay little, so I cried when he went to school. He had fun though, he didn't care. He didn't miss his daddy at all. He just went and learned stuff. And he still keeps going to school now.

Similarly, Level 4 utterances were mostly introduced when the teacher provided explanations related to concepts from the story (e.g., "Yeah, sometimes going to school, you may not want to, but we have to go to school, don't we? That way we can learn, we can learn new things"). On one occasion, the children were asked to make a predictions based on the story (i.e., "What's he gonna do with his mom's hand?")

Mr. Steve's utterances at the second level engaged children in describing illustrations or recalling information from the story (e.g., "What does he want to do instead of go to school?"; "So what did his mommy tell him?"; "What's he gonna do at school?"; "Okay so remember why he was crying?"; "What's he gonna do at school?"; "Do you guys remember what that secret is?") In the final reading, Mr. Steve also stopped frequently to allow children to recall words from the text (e.g., T: *"I don't want to go to school he told his mother. I want to…"* C: "Stay at home!")

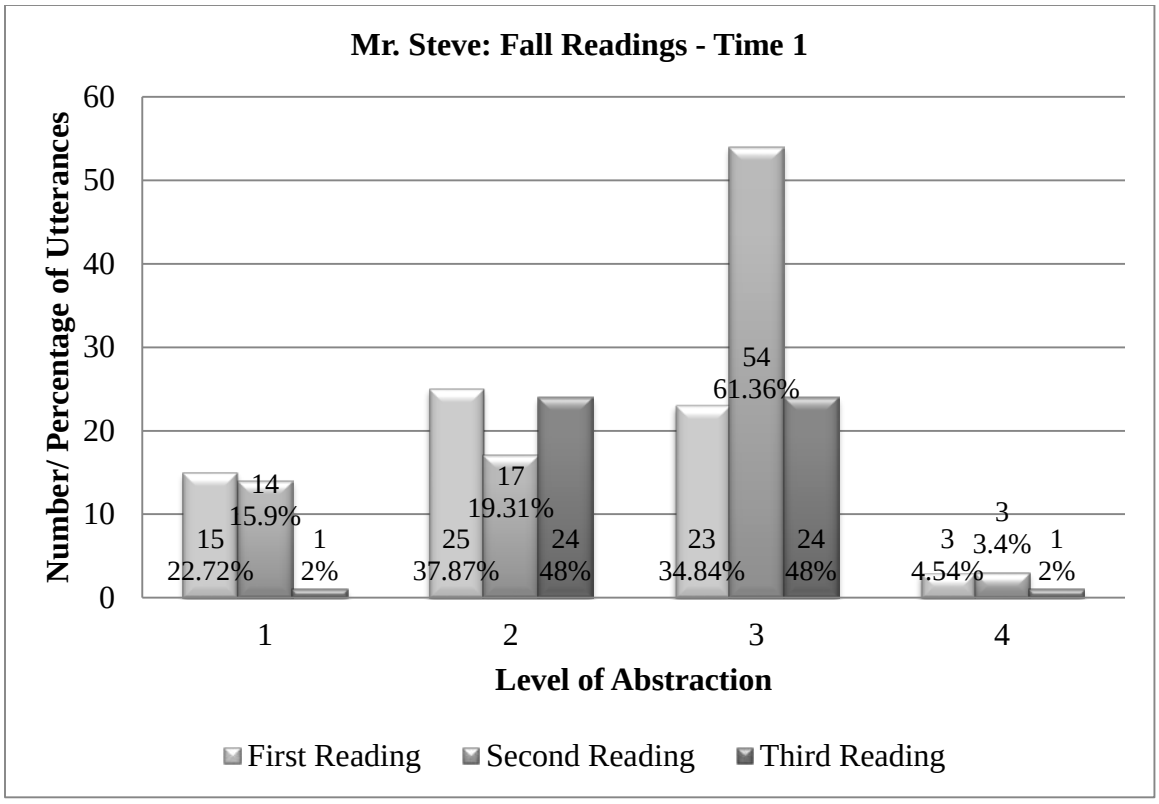

Figure 9. Number and percentage of utterances across the four levels of abstraction for Mr. Steve's fall readings - Time 1.

Feedback utterances across the readings at Time 1 were mostly focused on acknowledging children's contributions by repeating their response (e.g., C: "That's an owl." T: "That's an owl, that's right."; C: "Raccoons" T: "That's right, they're raccoons."; C: "The raccoon play in the sandbox." T: "Yeah, he wants to play in the sandbox."; C: "He's maybe gonna jump of the swing 'cause he's standing up like I do on the swing! T: "Okay, looks like he's gonna jump off the swing."; C: "No, it's a little scary, but I like it." T: "Well, that's good as long as you like it"). At times, the teacher repeated the response as a question (e.g., C: "Kiss it." T: "He's gonna kiss her hand?"; "You don't think it will come off, huh?"; C: "Kiss it." T: "Think he's gonna kiss her hand?") or corrected a child response (e.g., "It's got a raccoon in it, but it's not called the raccoon"). Although an infrequent occurrence, the teacher's feedback to a child's question sometimes lead to more complex language interactions, as in the example below:

Child: What is that orange stuff around him?
Teacher: It's just like a special picture. You know, just kind of making him feel… sometimes they use colors to represent how they're feeling. Like have you ever heard somebody say "Aw, I'm feeling blue today."
Child: Yes.
Teacher: Are they really blue?
Children: Nooo!
Teacher: No, it just means they're feeling sad. Sometimes when you feel, you know, loved or someone loves you or you feel like, real special, sometimes… look at the heart. What color's the heart?
Children: Red.
Teacher: Red is kind of what you would, what you think of when you think of love or when you think about people that love you, sometimes people think of the color red. That's why for Valentine's Day, we see a lot of red, don't we?
Child: Or pink.
Teacher: Yeah. We see pink too for Valentine's Day.

Management talk across the three readings was focused on reminding the children to listen to the story and wait for one's turn to talk after being called by the teacher (e.g., "Remember, when Mr. Steve is reading, we keep our voices quiet so we can hear the words, okay?"; "I want my friends raising their hands then she… can because if you don't follow our rules and listen [child name] then you're not helping her either, okay?"; "Miss [child name], on your name. We're listening to our teachers."; "Miss [child name], listen please. We can't interrupt when people are talking we gotta let them share and talk too. Okay, just sit right there, [child name] can't sit on his name so he's sitting close to his name so just sit close to your name please. Okay?"; "I was just waiting, some of my friends are making some sounds and stuff so I wanted to stop so they can hear me again, okay?"). In the third reading, a higher percentage of interaction and turn taking utterances was used as Mr. Steve explained the need to continue to read to find out if the children had correctly recalled events from the story (e.g., "I don't know, I guess we better read 'cause I just can't remember what it is."; "Alright, let's read some more of our story and see if that's how she does it."; "Okay, let's read on and see").

Ms. Steve's late fall book readings – Time 2. During the reading of *Home for Christmas* (Brett, 2011) in the tenth week of intervention, the total number of utterances

increased across the three readings from 149 to 219, and 222 respectively. Book related utterances constituted about 65% of all utterances in the first reading and approximately half of all utterances in subsequent readings. In the first reading in late fall, similar to the fall readings, the largest proportion of Mr. Steve's language was comprised of Level 3 utterances (i.e., about 52%; see figure 10). Level 2 utterances constituted the next largest category, with 40% of the utterances engaging children at this level. Of the remaining utterances, about 6% were aimed at the first level of abstraction and only one utterance fell at the highest level of abstraction. In the second reading, following a similar pattern, 4% of the utterances fell at the first level of abstraction and three utterances (i.e., about 3%) engaged children at the highest level of abstraction. Most utterances fell at the second level of abstraction in this reading (i.e., about 58%) and approximately 34% were aimed at the third level. In the third reading, similar to the second, the highest proportion of Mr. Steve's language (i.e., about 59%) was at the second level of abstraction and about a fourth of the utterances were at the third level. Level 1 utterances represented approximately 7% of Mr. Steve's language during this books reading. This proportion was equal to that of Level 4 utterances, which increased in the final reading. Management talk increased from about 2% in the first reading to 9% in the second reading and decreased to 4% in the final reading. Feedback and acknowledgement from Mr. Steve steadily increased across the three readings (from approximately 24% to 32%, and 37% respectively), with higher proportions evident in comparison to the fall readings. Interaction and turn taking language increased slightly across the three readings.

Compared to the fall readings, readings at Time 2 in Mr. Steve's classroom indicated a steady increase in the total number of utterances across the three readings. Also, notable was the

decrease in the proportion of Level 3 utterances in the second and third reading and the increase in the use of utterances at the highest level of abstraction in the third reading (see Figure 10).

Utterances aimed at the first level of abstraction commonly asked children to label objects or characters in the story (e.g., "(Child name), what do you think our next animal is that we might come across? [shows picture]"; "Alright what's our first animal?" [points to book]) Through utterances falling on the second level of abstraction, Mr. Steve described story actions himself (e.g., "So Mother Bear took her paw and hit the beehive and then broke it open, and it dumped out, delicious honey."; "And so that's what Rollo did, didn't he? He played hide and seek and rolled around in the snow with him") and asked children to recall events from the story (e.g., "So Rollo decided, 'hey, I better get outa here cause this big cat thinks I'm some food.' So he goes through the snow and he finds some what?"; "Well, the moose family decided they needed to start moving, didn't they and so Rollo, rode on top of the… of the moose holding on to his antlers. And what happens to antlers on a moose, in winter time?"; "What did he do?"; "Is he gonna do any chores for them?"; "And (child name) what did they do when they started hearing, Rollo's voice? What did his family do?"; "(Child name), when do trolls lose their tails? Remember from last time, when do they lose their tails? What do they have to do, in order to lose their tails?" "What does Rollo do when he meets the owls?") When reading the story for the second time, similar to the third fall reading, Mr. Steve paused and waited for the children to complete sentences from the text (e.g., T: "*A very wild troll, always racing off, his scruffy troll tail bouncing around behind him. Troll tails will drop off, one day. But only if a troll is kind, helpful, and does his…..";* C: "Chores."; T: *"Rollo never made his…."* C: "Bed").

The most notable change in Mr. Steve's utterances compared to the fall readings is the systematic and intentional teaching of vocabulary at Level 3. Some new vocabulary words are

explained once upon being read (e.g., "…and a troll is something that we read about in fairy tales and stories."; "Slim means that, she doesn't think he's gonna do it. It's gonna be very hard for him to be able to lose his tail."; "Sway moves means they're going… they're moving back and forth [demonstrates swaying with hands]"; "See when they shed their antlers [points to book] that means that they're… they fall off. And they grow new ones."; "Baby bears or cubs. Baby bears are called cubs."; "So the owlets is another name for baby owls. And they can't fly right away so they have to practice. And then the day finally came when it was time for them to fly out of the nest"). Further, Mr. Steve also emphasized the same new words across the three readings, allowing children opportunities to recall and use the new words as in the examples below:

Vocabulary emphasis in the first reading:

Teacher: (Child name), what are *chores*?
Children: I.. I did mine last… I did my clothes last night and my chores.
Teacher: Ok what are… when we say "Do your chores", what does that mean?
Child: You fold them.
Teacher: Ok so it means… for you it's folding clothes. (Child name)?
[…]
Child: Dishes.
Teacher: Ok, so washing dishes.
Child: Laundry.
Teacher: Laundry.
Child: And wh- cleann up your bedroom.
Teacher: Clean your bedroom.
Child: Make your bed… go to school…
Teacher: [Nods] Thank you, (child name). Miss (other child name)?
Child: Um… You can fold the clothes up and put them in there, and sometimes when you get up for school…(inaudible).
Teacher: Ok, those are all different types of chores you guys are telling me and what the chores are, are jobs that you do to help your family out. So folding the clothes, doing dishes, making up our bedroom are all kinds of chores.

Teacher: (Child name), what does it mean to *shiver*?
Child: Um, when you go to um… go home make your bed, clean the dishes, clean laundry, and put up in your closet, and.. make your blankets. And you can go sleep you can get a good sleep.
Teacher: Ok, well that's a good try but.. that's not what shiver is. Does anybody else have a, a guess. (Child name), what do you think it means to shiver?
Child: Um.. cold.

Teacher: That's right its… It means your body shakes [simulates shivering] cause you're.. like what (child name) said cause you're cold.

Mr. Steve's vocabulary emphasis in the second reading:

Teacher: And (child name), what are chores? Do you remember? What are chores… it says he wouldn't do his chores. What does that mean?
Child: He don't want to.
Teacher: [Nods] He didn't want to. Miss (child name)?
Child: Uumm.. the troll.. um didn't want to help his family.
Teacher: That's right he didn't wanna help, he didn't want to do his chores or his jobs to help his family.

Vocabulary emphasis in the third reading:

Teacher: (Child name), what are chores?
Child: He don't want to make his bed or anything.
Teacher: Ok so his… his chores are like… kind of like jobs that he's supposed to do like... just like he doesn't want to make his bed, he's supposed to make his bed.
Child: [Raises hand] And he keeps saying [shakes head] no no no no no no no.
Teacher: [Nods] He keeps saying no no nono that's right.

Teacher: Yup. That's right, Miss (child name) was saying then the water… it gets to Be… probably this time of the year gets to be getting colder and the ice freezes. So Rollo has to get out of the water.
Child: And he does this [shivers].
Teacher: Yup. And what do we call that you do that? You remember?
Child: Shivering.
Children: Shivering.
Teacher: [Nods] Very good, shivering means you go [shivers] oooo we're cold!
Child: Every time when I get out [laughs] I'm cold too.
Teacher: Like when… if we probably went outside right now without our coats on, we would probably shiver [shivers] Oooo shake- we're cold.
Child: When, I get out of the bathtub I shiver like ss [shivers].

Through his use of Level 3 utterances, Mr. Steve also continued to make connections between the book and children's experiences, as in the readings at Time 1 (e.g., "Do you guys have chores that you do in your home?"; "Sometimes when we miss our families, it makes us kinda cry, doesn't it?"; "So, well I want you guys to do a favor for me, I want you guys to think of a way that you could help your family out at home, a chore that you could do at home"). Some connections were also made to other activities children were doing in the classroom (e.g., "Kind of like, you know when how our last story from last week we read about the mitten how,

the little boy Nikki came across different animals that were using his glove and stuff? Well Rollo has some different animals that I need your help with too in a minute, when we go through 'em"). Children were also prompted to identify similarities and differences (e.g., "Now, does this little boy look like us?") and were provided with opportunities to make inferences (e.g., "And in this story, the trolls lose their tails when they're doing good things, when they're being helpful. And so, if he still has his tail, is he being helpful yet?"; "Why do you think the lynx was looking at him, staring at him in a hungry way?"; "Why do you think Rollo was starting to cry?"; "Luke, why does Mama Troll think, that Rollo will never lose his tail?"; "Do you think that's gonna make his mom very happy?")

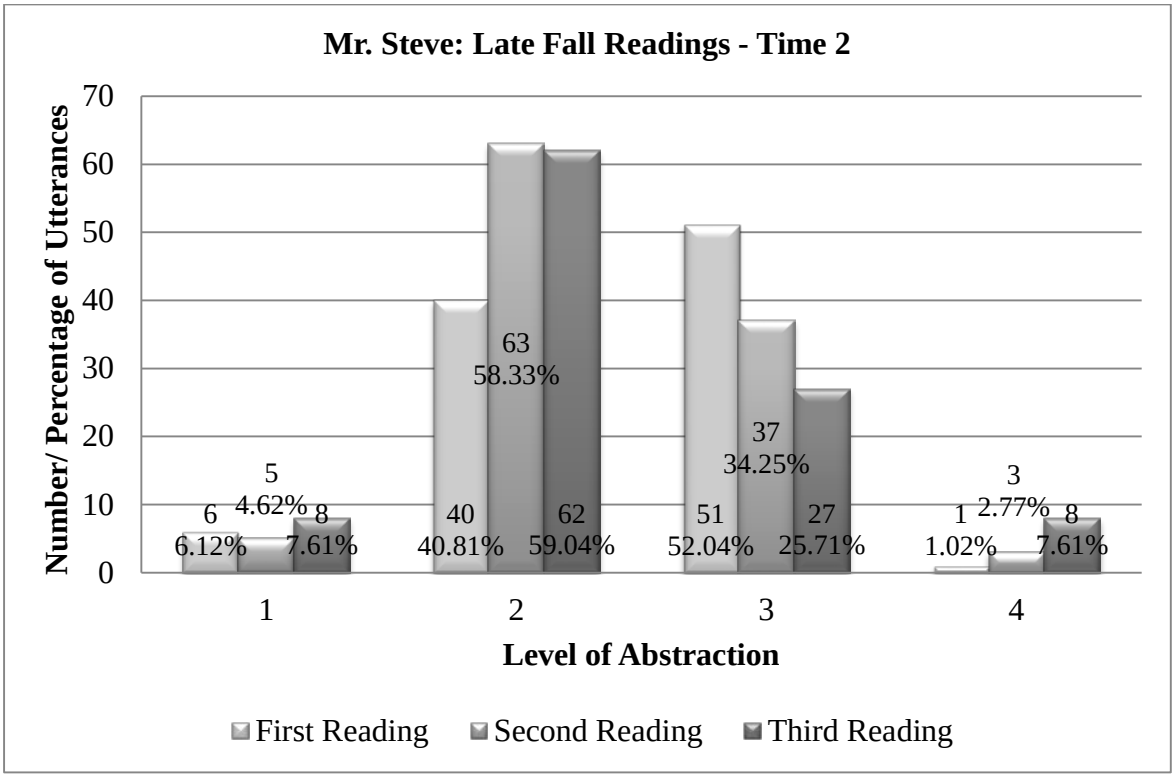

Figure 10. Number and percentage of utterances across the four levels of abstraction for Mr. Steve's late fall readings - Time 2.

Mr. Steve's utterances at the highest level of abstraction prompted children to provide explanations (e.g., "Why didn't the bears get stung by the bees? Why was it only… why did the bees only go after Rollo?"; "Why can't we fly?" "What do we fly in to help us?"; "Why are they happy? How do we know?"), problem solve (e.g., "Alright we're gonna jump up in the air while we're flapping our wings, and see if jumping helps us."; "How do people have to fly? What do we have to use to fly?") and make predictions in one instance (i.e., "What do you think he might do?")

As in to the fall readings, Mr. Steve's feedback continued to consist of repetitions of the child's answer or a brief approval (e.g., "Okay") as in the examples below:

> **Teacher:** Why is he starting to think you know 'maybe I should go home'?
> **Child:** To do his chores.
> **Teacher:** You think maybe he's starting to think he needs to go home to do his chores?
> **Child:** And his laundry.
> **Teacher:** [Nods] And his laundry? Ok.
> **Child:** And do dishes.
> **Other Child:** And fold his clothes.
> **Teacher:** Alright.

> **Child:** He went to different places.
> **Teacher:** [Nods] He went to some different places, didn't he? Now (child name), why did he want to go to different places?
> **Child:** He want to.
> **Teacher:** Just because he wanted to? Ok.

At times, however, Mr. Steve also completed the children's sentences:

> **Teacher:** So did, did Rollo finally do something?
> **Child:** Yup.
> **Other Child:** He-his tail is gone.
> **Teacher:** His tail is gone. What kind of chores did he do (child name)?
> **Child:** Mm. Help his dad- help his troll dad.
> **Teacher:** Yup, he helped his dad by… cutting the wood.

> **Teacher:** And did Rollo have wings? Do trolls have wings to fly?
> **Children:** [Shakes head] Nooo.
> **Teacher:** Nope, and he didn't want to try so the mother owl did what (child name)?
> **Child:** Bumped him out of the nest.
> **Other Child:** Bump!
> **Teacher:** Bumped him out of the ne- kicked him out of the nest, tried to make him fly. (Child name) do you think he was able to fly?

and corrected their responses:

> **Teacher:** Moose. And that's where he stays forever and ever right?
> **Children:** Yeah! Yeahh. Yeah. No.
> **Teacher:** He stays with the moose forever and ever and he's happily-
> **Child:** No. Whenever the bees come he dives into the water.
> **Other Child:** Yeah!
> **Teacher:** Well that's what he does when we meets the bears.
> **Child:** Oh.
> **Teacher:** The moose, something else happens [shows book to class].
> **Child:** Yeah made him do this [gesture].
> **Other Child:** No the moose- um, um um-
> **Other Child:** No the moose broke their ears off.
> **Other Child:** The ear fall off and he's slides down the mountain.
> **Teacher:** Well something does fall off but are they ears that fall? [points to place on head where antlers are]
> **Children:** No! Nope.
> **Child:** No the horns!
> **Other Child:** Antlers.
> **Teacher:** Antlers or his horns fall off.
> **Child:** Antlers.
> **Teacher:** Because… Rollo forgets that during the winter time, that's when they shed or they fall off. [uses hand to simulate antler falling off]

Extensions of children's responses by Mr. Steve were evident at times (e.g., T: "Angela, what animal do you think that is?" [points to book] C: "Birdy." T: "Ok, it's a bird but it's got special name for it, Anna?" C: "A owl." T: "An owl, ok?"; "C: "One time when I went out fishing I caught a catfish." T: "Ok, wonderful you find those in the water don't we?")

In the third reading, two utterances were used to emphasize alphabet knowledge and one was related to phonological awareness.

> **Child:** Um.. they little boy's name is.. is… um-
> **Assistant:** Sounds like a candy.
> **Child:** [Silent].
> **Teacher:** It starts with the letter "R," what we're working on this week, our letter "R."
> **Child:** "R"… "R."
> **Teacher:** What do you do when you go down a hill? You..
> **Children:** Roll.
> **Teacher:** You roll over and… his name is…
> **Children:** Rollo. Rollo.
> **Teacher:** Rollo, that's right. So the little boy is Rollo.
>
> **Teacher:** What kind of animal does Rollo find next? [Shows book to class].

Child: A fox?
Children: Fox. Fox.
Children: Lion. A lioonn. A lion.
Teacher: Alll very good guesses but not..
Child: Lion.
Other Child: A lion.
Teacher: It does start with the letter "L" like lion but this one is a..
Child: It's a "L." Cat.
Other Child: A cat. Cat.
Teacher: LLynx.
Children: Lynx.
Teacher: [Nods] And a lynx does look like a cat, yes.

Across the readings, Mr. Steve's management talk was used to prompt children to listen to the story, raise their hands to provide an answer, and use a lower tone of voice (e.g., "I like how (child name) and (child name) are raising their hands, so I'm gonna call you guys first ok?; "Friends, what kind of voices are we using?")

Mr. Steve's winter book readings – Time 3. Across the three readings at Time 3, the teacher's total number of utterances increased from 274 to 304 in the first two readings and slightly decreased to 268 in the third reading. It is notable that although this was the shortest book used in videotaping to this point (i.e., Someone Bigger by Emmett, 2004), in each of the three readings Mr. Steve used a higher number of utterances than in any of the previous videotaped readings. The proportion of book related utterances constituted about half of the total number of utterances in the first two readings and decreased to about 37% in the final reading (see Table 8).

As presented in Figure 11, in the first reading, Mr. Steve used literal language about 36% of the time in his utterance, with a third of these utterances falling on the first level of abstraction and two thirds on the second level. The majority of book related utterances fell on the third level of abstraction (i.e., 45%), which was the case for Mr. Steve's first reading at Time 2 as well. Nineteen percent of the utterances fell at the highest level of abstraction in this reading. In the second reading, about 60% of Mr. Steve's language fell on the first two levels of abstraction,

with approximately 20% on the first and 40% on the second level. Of the remaining utterances, about 30% fell at the third level and 8% at the highest level of abstraction. Level 2 utterances continued to increase in the final reading and comprised about 77% of all book related utterances. Utterances at the third level of abstraction represented about 13% and only 3% of the language used by Mr. Steve engaged children at the highest level of abstraction. Feedback and acknowledgement utterances constituted 30% of the teacher's language in the first reading and decreased slightly to about 27% and 24% in the second and third reading respectively. Management talk increased from about 6% in the first reading to 9% and 17% in the second and third reading. A category that increased at Time 3 compared to previous data collection points is language used to direct interactions and turn taking (ITT). In the first two readings, ITT language represented about 13% of the number of utterances and the proportion increased to 17% in the third reading.

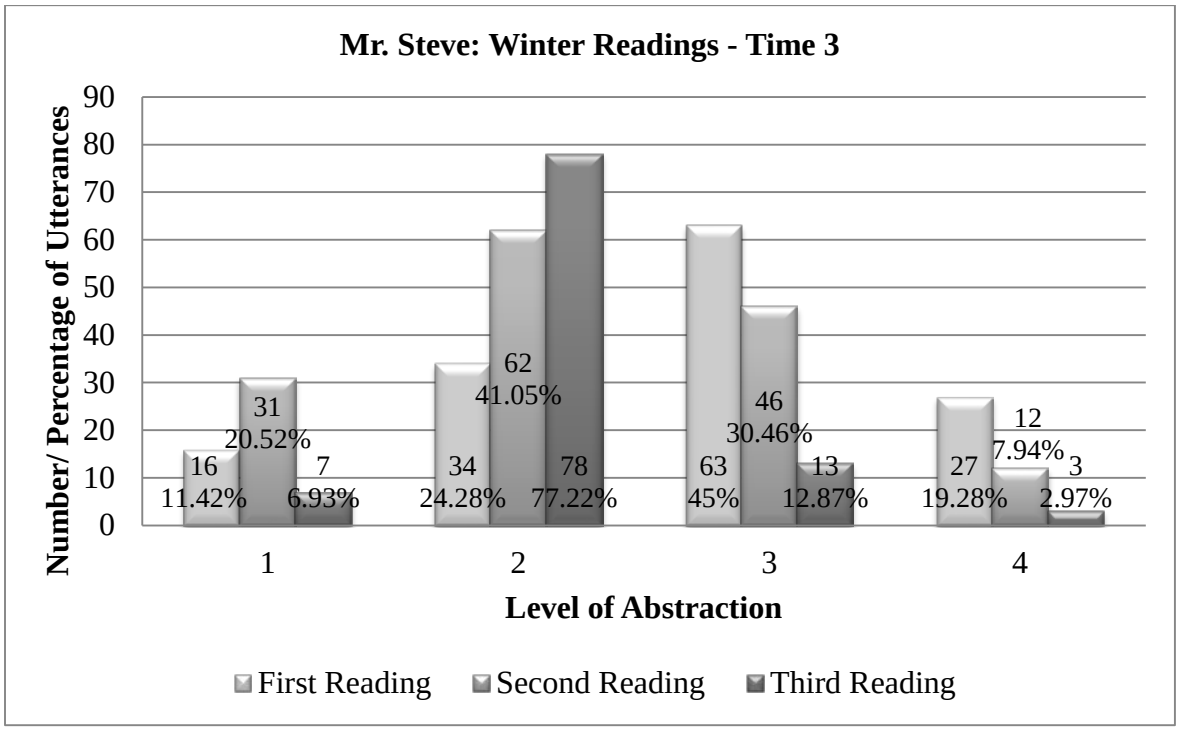

Figure 11. Number and percentage of utterances across the four levels of abstraction for Mr. Steve's winter readings - Time 3.

Mr. Steve's readings at Time 3 distinguish themselves from previous readings through the presence of higher number of Level 4 utterances. The proportion of utterances aimed at the highest level of abstraction decreased gradually across the three readings at Time 3. In the first two readings, Level 4 utterances engaged children with making predictions (e.g., "What do you think our story might be about today?"; "Will the paint help it to stick together?"; "Where would you find a rhino?"; ""Cause what happens if you don't hold it very tight?"), problem solving (e.g., "How do you think he's gonna get it to stick on those sticks?"), and providing explanations (e.g., "How do… looking at our… the front of our book, how do we know that it's a windy day?") While asking children to make predictions, Mr. Steve also engaged them in discussions of brief problem solving situations as illustrated below:

Teacher: Ok, now this kite, [holds up kite] can I just fly it like this?
Child: No.
Teacher: It will fly right? You can just put it up and just let it go and it will fly?
Child: No.
Other Child: [Shakes head]
Other Child: No.
Teacher: What does a kite need to fly?
Child: String.
Teacher: Needs some string, that's right, something to hold on to it. And what's the most important thing that a kite needs to fly?
Child: A tail!
Other Child: Wind!
Teacher: (Child name)?
Child: Wind.
Teacher: Wind! So, I can put a tail on it, I can have string on it- (Child name), (child name), we're over here please, listen. I can put, all kinds of stuff on it, but without wind will it fly?
Child: Noo!
Teacher: Let's try it [holds kite up, drops it]
Teacher: Did it fly?
Child: Yeah.
Other Child: No.
Child: A little bit.
Teacher: Nope, it just fell to the ground didn't it?
Child: A little bit fly.
Teacher: But if I had a string on it I was able to hold it, but I had wind… would it stay up in the air then?
Child: Yeah.
Teacher: It might.
Child: And it'll fly away.

Teacher: Maybe this week, we can try that, if we get a warm enough day.

The few Level 4 utterances by Mr. Steve in the final reading also focused on asking children to problem solve and consider solutions (e.g., "I want you to think about, how the animals, or the people... what they could have done, to show that they were thankful, for Sam bringing them back down to the ground").

Through utterances at the third level of abstraction, Mr. Steve engaged children in making inferences (e.g., "Why do you think they need somebody bigger for?"; "How do you think, how do you think Sam's gonna feel… when he asks… when his dad says 'noo you can't fly it, we need someone bigger,' how do you think that, is gonna make him feel?"; "How do you think Sam is feeling now?") and judgments (e.g., "Would Sam holding the string help?") Level 3 utterances were also used to prompt children to make connection between the content of the book and the children's personal experiences (e.g., "Do sometimes our families tell us that?"; "I want you guys to think about something that you wish you could do, but your parents or grownups, or big people have told you, 'No you need to be bigger.'"; "Does it help you guys think you know sometimes when I wanna do something, people tell me I'm not big enough yet and it kinda talks to us about...you know, about.. Does Sam ever give up? Does he say, 'Ok.' and just quit asking?"; "I want you to think about something that your family… has told you you're not big enough to do yet"). Similar to the pre intervention readings, Mr. Steve made connections to his own life and experiences:

> **Teacher:** Sam says all the kite needed was…?
> **Child:** Sam.
> **Other Child:** Saam!
> **Teacher:** 'Me.' that all it needed was me. So sometimes, you know… and I have a son, you know, cause I've told you guys I have a little boy too.
> **Child:** His name is (name), (name).
> **Teacher:** No, no. My son's name is (name). I have told him that too. I've told him, you know, 'You're too little, let daddy do it.' But, then… you know what happened? I started letting him do things. And guess what? He could do it.

Similar to the readings at Time 2, vocabulary continued to be emphasized across the three readings (e.g., “So you’ve got a postman or somebody that delivers the mail to your house.”; So they “firmly”… that means they didn’t move, that’s what that word ‘firmly’ means. They stayed kinda like… stuck to the ground, they stayed on the ground and they… they didn’t move”). Connections to the children’s classroom experiences were also used to explain new vocabulary (e.g., “Sam holds onto the kite, his feet stay on the ground, like when we were doing our dances, and we couldn’t move our feet ‘cause they were stuck to the ground, his feet were stuck, firmly. That means they were stuck on the ground, they weren’t gonna move”). While the proportion of Level 3 utterances gradually decreased toward the final reading, the language aimed at this level of abstraction continued to emphasize vocabulary. Similar to the readings at Time 2, Mr. Steve systematically focused on specific vocabulary words across the repeated readings:

First reading

Teacher: *“The kite flew on, it would not fall, it pulled a rhino from its stall.”* Who can tell me what the word ‘stall’ means? What is a stall?
Child: Mmm mm.
Other Child: Dino!
Children: Dino. Dino. Dino.
Teacher: No. I want us to raise our hands and wait till Mr. Steve calls our names, so we’re not all talking at the same time.
Teacher: [Points to child with raised hand] (Child name), what is a stall?
Child: Sometimes… rhinos got babies, ‘cause they go run.
Teacher: Okay. Who else? If you think you know what the word ‘stall’ means, keep your hand up so I know which friends wanna, try to tell us. (Child name)?
Child: Um, it means how… it can lift um the hippopotamus.
Teacher: (Child name)? What is… what is a stall?
Child: Stall means... it’s bigger bigger bigger bigger. It (unintelligible).
Teacher: Ok, well those are some very good guesses. No… we’re not getting close yet. But a stall is a place where animals live. Like if you… you know… have you ever heard of a horse stall?
Child: No.
Teacher: Well that’s a place where they keep the horses, like at night time they give a stall, a place to keep ‘em… Or kinda like a pen… like a dog pen? You guys have seen dog pens haven’t you?
Child: Dog pens sleep and wake up at the morning and they sleep again and… and then they eat.
Other Child: Pop pop.
Teacher: One friend is talking, we need to listen to that friend.

Child: And, he can go back to sleep and, (unintelligible) he can go back to sleep.
Teacher: Yeah. The stall is kinda like a pen and is a place to keep animals to protect them… you know to keep them safe. But sometimes it's also to keep people safe too.

Second reading

Teacher: Alright, when we read this Tuesday, we said a stall is a what?
Child: A animal's home.
Other Child: That was a animal cage!
Teacher: Ok, let's not, yell please, (child name), ok?
Child: It's an animal cage.
Teacher: (Child name)?
Child: It's a zoo where you keep all the animals. It's like a zoo where you keep these animals. Like birds and the monkeys and the rhinocerosaurs.
Teacher: They all belong in the zoo, but a stall is not just at a zoo, it could be anywhere. What did you say it was the first time though, (child name)?
Child: I said it was…
Teacher: An animals'...
Child: Home.
Teacher: Home. It's kinda like a… home for the animals, like at night time… a place for them to maybe sleep, you could've… like a horses we put in… in stalls sometimes..
Child: And monkeys!
Teacher: And monkeys, they're in a… different kind of thing. But some of the animals at night time, at- especially at the zoos.. they put in stalls to help them, keep 'em safe and give them place to rest. So it's kinda like (child name) said, an animals' home.

Third reading

Teacher: And there's one of our words that we've been practicing I need your help with, (child name), see if you remember what it means. What does this word 'stall' mean? Remember when we been talking about this week, what does the word 'stall' mean?
Child: Mmm
Teacher: (Other child name), do you know what the word 'stall' means?
Other Child: It means.. um… There's a animal- there's a group of animals…
Teacher: What does the word 'stall' mean (other child name)? What were you gon… you raised your hand that you wanted to share, do you remember what it means?
Child: Mhm, the rhinos came out of the (unintelligible)
Children: [Playing with their kite cutouts].
Teacher: Ok, (child name) and (child name), bring me your kites. Does anybody else remember? Some of my friends are trying and I like it when my friends try…what the word stall means? Ok, we're gonna let one more friend. (Child name), what does 'stall' mean?
Child: 'Stall' means place to sleep.
Teacher: Yeah, it's kinda like a place for them to sleep.

Along with the gradual decrease in Level 3 utterances across the three readings, a steady increase in Level 2 utterances was also observed. The final reading includes the highest proportion of Level 2 utterances among all videotaped readings. In this third reading of *Someone*

Bigger (Emmett, 2004), Mr. Steve solicited continuous contributions from children in retelling the story and describing illustrations (e.g., "Who would like to tell us what is happening first?"; "What are they getting ready to do?"; "Can you tell us about these pictures please?"; "What can you tell me about these pictures?"; "What do they tell him?"; "What does Sam ask?"; "What is happening in the story now?"; "Alright, who can share this part with me?) The increase in Level 1 utterances in the second reading is mostly related to teacher's effort to engage children in repeating the rhymes in the story, as Mr. Steve capitalized in this opportunity:

> **Teacher:** Alright, I want you guys to help practice, saying these word with me ok? These next ones because, when we read it tomorrow I wanna see if you guys can say these ones with me a lot ok? You ready? "*'Can I hold it first?'"*
> **Child:** Noo.
> **Other Child:** Noo.
> **Other Child:** Can I hold it first?
> **Teacher:** *"'Can I?' said Sam."*
> **Children:** Can I said Sam.
> **Teacher:** *"I'm old enough,"*
> **Children:** I'm old enough.
> **Child:** I know I am.
> **Teacher:** *"'I* [points to child and nods] *know I am.'"* That's right.
> **Children:** I know I am.
> **Teacher:** Alright so… *"'Can I hold it first?'"*
> **Children:** Can I hold it first?
> **Teacher:** *"'Can I?'"*
> **Children:** Can I?
> **Teacher:** *"'I'm old enough,'"*
> **Children:** I'm old enough.
> **Child:** I know I am.
> **Teacher:** *"'I know I am.'"*
> **Children:** I know I am.
> **Teacher:** Alright.

Notable in all three readings is the increased proportion of ITT language. These utterances were mostly used to provide individual children with a turn to respond and to direct turn taking interaction (e.g., "Dan, go ahead."; "Ok… Alright, one more person, anybody else? [Four or more raise their hands] Ok, we can do a few more then. Luke?"; "Ok. Aaron, did you have, a guess bud?"; "Go ahead, Tim."; "Anybody else have any more guesses?"; " Kyle, let's

let some other friends answer too please, ok?"; "Who would like to tell us what's happening first. Miss Angela?; " Ok, we're gonna let one more friend."; "A friend that hasn't shared with us yet?"; "Doesn't anybody else wanna share, I'll give… or I'll c… Mr. Steve will call somebody too. Somebody who hasn't shared yet. How about, Tina?"; "Let me see, Zyna, you were the only friend that raised their hand so I'll let you tell me").

Management talk also increased across the three readings, with Mr. Steve continuing to focus on asking children to raise their hands and listen to the story (e.g., "I want us to raise our hands and wait till Mr. Steve calls our names, so we're not all talking at the same time."; "I said I'm gonna show everybody I didn't tell anybody to talk yet remember? We're working on listening"). Children were at times asked to move to a different place on the carpet or sit next to the teacher assistant (e.g., " I'm sorry Kyle, I've got some friends that are talking again, so Miss Anna, I want you to go over and sit with (teacher assistant) until you're ready to quit talking when, other friends are talking. We just talked about when somebody's speaking, we listen. We're not gonna keep stopping our story today, we'll just move my friends away from our circle where they can still hear, but they're not… they're not right next to each other").

The increased proportion of management talk in the final reading was also related, most likely, to the children's play with a cutout kite which was provided to each child before the reading, in an attempt to engage them in retelling the story. This proved to be an attractive to the children and they were unable to resist playing with it during the reading (e.g., "You need to sit down on your name. I won't give you a kite yet until you're sitting down on your name. Any kites that go up in the air, until we're ready for them... will not get to stay with my friends. Put 'em on the floor… remember we're trying to do something special for you guys. So if we don't listen now we won't do special times next time."; "Ok Connie and Anna bring me your kites.";

"Ok Miss Brielle, go put yours [kite] in the trash since we're putting them in our mouths, ok? We're showing Mr. Steve that we don't need to do anything special for story like this, and give you guys something to… like our kites, something about our story so... next time Mr. Steve's not gonna let us do that, because too many people are putting them in their mouths, they're tearing them up, we're not listening... so we're not gonna try that again for a while until my friends can show me that they're big boys and big girls again. Feet in front, hands in your lap. Nothing ever, ever goes in our mouth, except for food and drinks, when we're sitting down at the table").

While similar to previous readings, Mr. Steve's feedback to the children was oftentimes a brief acknowledgement of their response or praise, particularly when he asked the same question of several children. However, as illustrated in the previous vocabulary examples, as well as the examples below, Mr. Steve also provided more extensive feedback intended to expand children's responses and provide clarifications or corrections:

> **Teacher:** How do you think he's gonna get it to stick on those sticks?
> **Child:** Glue.
> **Teacher:** Maybe some glue, alright.
> **Child:** Maybe some paint.
> **Teacher:** Well, the paint might help with the decorating. [points to book] Will the paint help it to stick together?
>
> **Teacher:** *"Sam and dad had made a kite, they made it large, the made it light."*
> Light? Why does 'light' mean?
> **Child:** It means it's a bird.
> **Teacher:** Ok… Is a rock light,
> **Child:** No.
> **Other Child:** NNnooo.
> **Teacher:** …or is it heavy?
> **Child:** Heavy.
> **Other Child:** Heavy!
> **Other Child:** Heavy.
> **Teacher:** [Nods]
> **Child:** Maybe a little rock can be light.
> **Teacher:** Could be... it could be lighter than another one. So light means it didn't weight much… Cause if… if you tried to fly a rock, would if fly?
> **Children:** Noooo.

Ms. Steve's spring book readings – Time 4. At the end of the intervention, Mr. Steve maintained a high total number of utterances across the three readings, similar to the readings at Time 3 (i.e., 242, 231 and 245 in the first second and third reading respectively). The proportion of utterances related to the content of the book increased from 45% to 54% in the first two readings and decreased to about 41% in the third reading. In the first reading, approximately 32% of Mr. Steve's language related to the content of the book was on the first two levels of abstraction, with a fourth of his utterances on the first level (see Figure 12). More than half of the utterances fell at the third level of abstraction and 14% at Level 4. Across the second and third readings, similar to the readings at Time 3, an increasing proportion of Mr. Steve's utterances were at the second level of abstraction, reaching 59% in the second read and 76% in the third reading. The proportion of Level 1 utterances increased to about 23% in the second reading and decreased to 3% in the final reading. Level 3 utterances decreased to 17% and 14% in the second and third reading respectively. Only one utterance fell at the highest level of abstraction in the second reading and about 7% of the language was at this level in the final reading.

Feedback and acknowledgement comprised approximately 30% of Mr. Steve's language across the three readings. Management talk slightly decreased from 9% to 6% in the first two readings and increased to 13% in the final reading. Following a similar trend, ITT language decreased from 11% to 7 % in the first two readings and increased to about 14% in the final reading.

Compared to the readings at Time 3, the teacher's language followed a similar pattern with a gradual increase in Level 2 utterances and a decrease in Level 3 utterances. Utterances aimed at the second level of abstraction continued to engage children in recalling and describing

story actions (e.g., “And what happened to him one day?”; “I want you guys to think about our story, when we read it the first time. And I want you to raise your hand if you can remember one of the animals that was in the story.”; “Where’s he walking to? Does anybody remember?”; “Which animal does he visit first”; “What’s happening in these pictures? Tell us this story.”; “Yup, but he’s doing something else first. What’s he doing first?”; “Who would like to share what Amos is doing in this picture?”; “And then our next animal… is Amos and the penguin, and what does Amos and the penguin… what do they do?”)

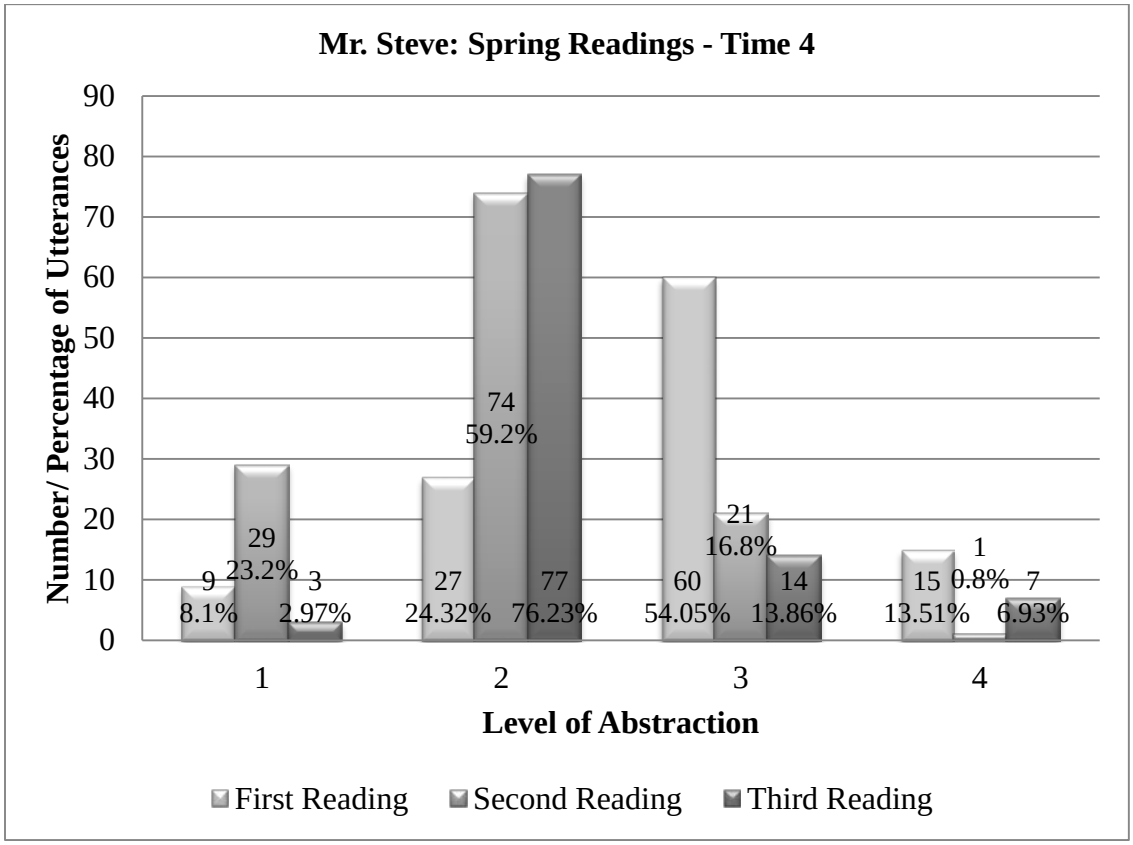

Figure 12. Number and percentage of utterances across the four levels of abstraction for Mr. Steve’s spring readings - Time 4.

Through the use of Level 3 utterances, Mr. Steve continued to emphasize new vocabulary words in each reading. Similar to Times 2 and 3, he again focused on systematically targeting some of the same new vocabulary words in all of the readings, as in the example below:

First reading

Teacher: *"[…] and swapped his pajamas, for a fresh, pressed, uniform."* What's a uniform?
Child: It's when you go to work and you have to wear a special uniform.
Teacher: That's right. A uniform, yeah you're… you're real close, you're right there. A uniform is somethin' special you have to wear for your job.
Child: Yeaah.
Teacher: And some kids, we don't have to do it here, but at some schools, they have uniforms too for schools that they have to wear, special... special colors, or special outfits to… for school, they have a uniform. Good job, Miss (child name).

Second reading

Teacher: "*Every morning when the along- alarm clock clang, he swung his feet out of bed.. swapped his pajamas for a fresh pressed…"*
Child: Suit.
Other Child: Suit.
Teacher: Close. Uniform.
Children: Unifoorm.
Teacher: What did we say a uniform was?
Child: [several talking at once]
Teacher: Raise our hands. That way we're not… we are able to hear friends better. [Several raise their hands] (Child name)?
Child: Um…
Teacher: A uniform is what?
Child: It's when... you go to work some- somewhere special and you have to wear a special uniform.
Teacher: Ok, yeah. Sometimes a uniform is a special outfit. Special clothes that you have to wear for your job… We talked about, also to that some schools have uniforms, so you have to wear special clothes for you school.
Child: Mr. Steve, you have the same shirt almost. It's green…
Teacher: Yup, I've got a green shirt on and his... part of his uniform is green.

Third reading

Teacher: (Child name), what does he put on that's special?
Child: A unicorn.
Teacher: Not a unicorn, a unicorn's an animal.
Child: Oh, it's-
Teacher: A uni…
Child: Corn.
Teacher: …form.
Other Child: Uniform.
Teacher: A unicorn is an animal, he doesn't put an animal on, does he?
Children: Noo.
Teacher: Noo, he puts on a uniform.
Other Child: Only on Halloween you wear a unicorn.
Teacher: Yup, puts on that uniform.
Child: I know! [Raises hand] It's…

> **Teacher:** Alright, we're, raising our hand and waiting for Mr. Steve to call names please, ok? That way we're not talking out loud too much, ok? We give everybody a chance to share.

Along with learning new words, Mr. Steve's interactions at the third level of abstraction also enabled children to continue to make inferences (e.g., "How does Amos know that that's the right bus?"; "*"The tortoise stretched his leg, and limbered up."* What was the tortoise getting ready for?"; "Alright, here's' the question. I want you to think about… how Amos would have felt, if his friends did not come to visit."), judgments (e.g., "Why do you think he stayed home when he was sick?"; "Do you think Amos is gonna feel better, and be able to go back to work tomorrow?"), and connections to their own experiences (e.g., "Our bus has a number on it doesn't it, so we know which bus. Does anybody know what, numbers we have on our bus?"; "Do you guys go visit, somebody when they're sick?"; "Just like some of our friends some days have, runny noses all day long").

Utterances at the highest level of abstraction particularly engaged children in making predictions (e.g., "Alright what are some of the things we find in a zoo?"; "So Amos, he has to ride bus number five. What would happen if we got on bus number four?"; "I want you to think about what would happen if those friends had never come to visit"). Noteworthy in these final readings were the multiple connections Mr. Steve made to other classroom activities both stemming from and connected to the book reading, as illustrated in the examples below:

> **Teacher:** Alright what we're gonna… we're gonna draw somethin' special here in just a minute ok?
> **Child:** Cool!
> **Teacher:** Cause we're gonna write more about the story, cause… do we know how it ended? Did Amos go back to work the next dayy?
> **Child:** Noo…
> **Other Child:** Maybe.
> **Other Child:** Nooo.
> **Teacher:** Did any animals get sick?
> **Children:** Nooo. Noo!
> **Teacher:** And what did they do the next day?
> **Other Child:** Maybe-
> **Teacher:** So what we're gonna do…

Other Child: Maybe all of them (unintelligible) sick.
Teacher: …is we're gonna get some paper and we're gonna write more of the story. We're gonna, think about what happened next. What happened after they woke up? What did.. . Amos and the zoo animals do?

Teacher: Ok what else, might happen, if you go to work with… or go to school when you're not feeling good, if you're sick?
Child: You have go back home.
Teacher: Yup, you might have to go back home that's right. But what would… what might happen to you friends?
Child: You might get sick and, sick… and uh, if you get sick, you have to take medicine, eevery day. If you get sicker and worser... you have to go to hospital, I'm telling ya'.
Teacher: What might happen to your friends though if you go to school or work sick? (other child name), what might-
Child: Well, my mommy at the hospital and she had to go.
Teacher: Ok, let's let other friends have a turn too, ok?
Child: Ok.
Teacher: (Child name) what- what might happen to your friends if you go school or work when you're sick?
Other Child: Well, this is different from- I (unintelligible) papal, he got the sick dog.
Teacher: Ok, got a sick dog yeah. Animals and people all get sick.
Child: A dog.
Teacher: Yeah.
Other Child: Cat.
Teacher: Could we spread our sickness? What… whatever's making us sick, could we spread it to other people?
Child: It could… we could spread it to the carpet.
Other Child: Nooo.
Other Child: Noo.
Child: We could spread it to the carpet, or every… everybody.
Teacher: That's something that we're gonna be working on this week too. Do you guys remember what those are called that make us sick?
Child: Yeaah.
Teacher: We called them… we gave them a special word.
Child: Germs.
Teacher: Germs. And we're gonna be talking about how to avoid spreading our germs. Because the germs, are like the little invisible bugs that make people sick.

Following the same pattern with the readings at Time 3, ITT language and management talk increased simultaneously in the first and third reading. Further, the proportion of language falling under these two coding categories also decreased concurrently in the second reading which may indicate a connection. As in previous readings, management talk was focused on asking children to raise hands and wait to be called by the teacher to contribute to the conversation (e.g., "Raise your hand if you want to tell me what is happening with these pictures

in the story."; "I don't want us just yelling the answers out, I want us to be polite, and share together, ok? Luke?"; "Raise your hand. Please, on our bottom Tim. Friends can't see behind you if you keep, standing up").

The possibility that an increase in the teacher's ITT language may be accompanied by the same trend in the proportion of management talk by Mr. Steve might also be supported by the fact that management talk was at times interwoven with language focused on turn taking and ensuring that all children have an opportunity to answer (e.g., "I'm not gonna ask you guys the same questions I did yesterday, cause I need your help, so you have to tell me the story today. So when I ask, for somebody to tell me about the story make sure we raise our hands. Until I ask, our hands are down. We're sitting on our bottoms, so everybody gets to see and help, ok? Cause I'm gonna try to make sure everybody gets to help us, ok?"; "Alright, we're, raising our hand and waiting for Mr. Steve to call names please, ok? That way we're not talking out loud too much, ok? We give everybody a chance to share. Miss Connie, can we please look at the story for Mr. Steve? 'Cause I might need your help with some more of our story later"). The teacher's concern for ensuring that all children have an opportunity to answer was directly expressed to the children as Mr. Steve addressed questions to specific children or asked others to give their peers an opportunity to contribute (e.g., "Someone who hasn't shared yet. Dan, you haven't shared once yet."; "Please Mr. Kyle, ok? It's wonderful if you know it, but we raise our hand and wait our turn guys, ok? Please listen, 'cause I want all… a lot of my friends to share, because, when we just yell the answer out we don't always know if everybody understands us, so we're sharing").

At times, language focused on management and ITT appeared to interrupt opportunities for extended discussions or acknowledgement of children's contributions:

Teacher: And the turtle or the tortoise never lost a race. Amos couldn't beat him.

Child: He was (unintelligible).
Teacher: He was… Was he too fast for Amos?
Child: Mr. Steve, I raised my hand.
Other Child: He could run!
Teacher: Yeah, he could run but, what did he do instead?
Child: And then, running running running.
Other Child: Walk…
Teacher: Yeah. But, why did he walk?
Other Child: 'Cause he wanted to lose.
Teacher: 'Cause he wanted to lose, that's right. Cause it… is it good to win all the time?
Child: Nooo.
Teacher: Or maybe is it good to let others win sometimes?
Child: Other win… but my sister never let me win on Mario Kart.
Other Child: [Interrupts] And my brother at… big broth, he…
Child: …she always keeps passing me 'n passing me passing me passing me.
Teacher: [Shush gesture] (Child name)'s, the only one talking right now let's listen to Miss (child name) please.

Nonetheless, similar to previous readings, Mr. Steve provided both brief and more extensive feedback as children contributed to the discussion. In particular, when providing feedback, he often asked further questions and made comments in response to the children's answers (e.g., T: "Ok what else, might happen, if you go to work or go to school when you're not feeling good if you're sick?" C: "You have go back home." T: "Yup, you might have to go back home that's right. But what would…what might happen?"; T: "They're waiting for the bus. How do we know they're waiting for the bus?"; T: "'Cause can they run in his house?" C: "Noo!" T: "Noo. He doesn't feel good, and maybe there's not any room to run"). At times, however, there were also missed opportunities to respond to children such as in the excerpt presented above (i.e., children sharing about their experiences with winning and losing), as well the dialogue around the word "uniform" in the third reading (i.e., a child pointing out that a unicorn can be worn on Halloween).

Summary

For the two teachers in the control condition, the average number of utterances across the three readings in the fall were similar in the spring (see Figure 13). Further, the total number of

utterances for each reading in both fall and spring decreased from the first to subsequent readings. One exception is Ms. Jane's third spring reading which includes a higher number of utterances than the first reading. Another similarity between the two teachers' use of language during reading, in both fall and spring, is the high proportion of literal language they used. Further, inferential language was mostly represented by utterances falling at the third level of abstraction, reordering or inferring about perception. Utterances engaging children at the highest level of abstraction were either very limited or absent.

The distribution of the control teachers' coded utterances indicates that repeated readings mostly engaged children in simple language tasks, such as noticing, labeling, or locating characters (i.e., language falling on the first level of abstraction) and describing story actions or recalling previously mentioned information (i.e., language falling on the second level of abstraction). Teacher language at the third level of abstraction was inconsistently provided, particularly in Ms. Lisa's classroom, and it mostly consisted of making connections between the story and children's experiences. Opportunities to learn new words or make inferences and judgments were seldom provided. Across fall and spring readings teachers' utterances on the highest level of abstraction was either minimal, inconsistent across the readings or absent. Children were provided with minimal opportunities to make predictions or engage in problem solving.

The repeated book reading intervention enabled teachers in the experimental condition to extend their use of language in book reading, which was evident starting with the readings at Time 2 (see Tables 7 and 8). For both Ms. Vivian and Mr. Steve the average number of utterances across the three readings increased from the beginning to the end of the study (see Figure 13). An analysis of the total number of utterances for each of the three readings at the

different data collection times indicated that while third readings at Time 1 used the lowest number of utterances, subsequent data points presented an increase in the total number of utterances as a book was being re-read. Further, using the repeated book reading approach appeared to enable teachers to provide children with more input on the highest level of abstraction and more diverse opportunities to use language at the third level of abstraction (e.g., by making inferences, judgments, and learning new words along with making connection to their lives and experiences).

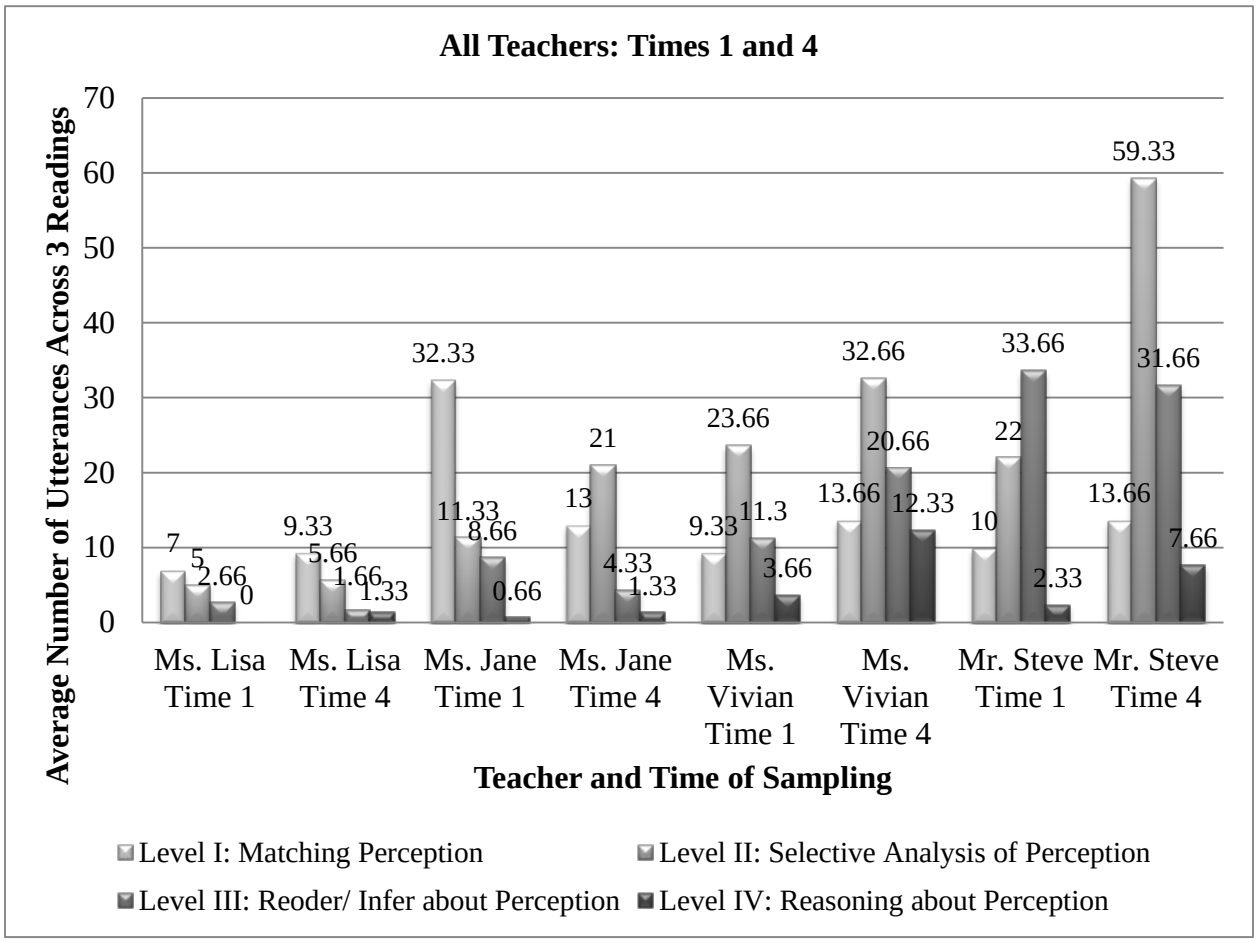

Figure 13. Average number of utterances across the four levels of abstraction for all teachers at Times 1 and 4.

Similar to the teachers in the control classrooms, through their input on the third level of abstraction even before the intervention, both Ms. Vivian and Mr. Steve provided children with

opportunities to make connections between the story and their own experiences. However, the introduction of new words was either limited or inconsistent across the readings. Opportunities to engage with language at the highest level of abstraction were also limited in the three readings at Time 1. For Ms. Vivian, these opportunities were also not particularly meaningful as she often redirected her efforts to classroom management rather than eliciting responses from children. Subsequent data collection points indicated an increase in the use of inferential language at both the third and fourth level of abstraction and an emphasis on introducing new vocabulary words in a systematic and intentional manner for the two teachers in the intervention condition. Repeated book reading proved to be a rather uncommon approach to book reading in preschool classrooms. This was evident from observing teachers' practice, teachers' own reported use of book reading, and the children's reaction to being read the same book again at the beginning of the study. In all four classrooms, upon hearing the same book read a second or third time, at least one child in each classroom expressed interest in understanding the teacher's decision. "Why do you want to read it again?" wondered a boy in Mr. Steve's classroom as the teacher introduced *The Kissing Hand* (Penn, 2006) for a second time. "Oh, that book again?" exclaimed a child in Ms. Lisa's classroom as the teacher was getting ready for a third reading of *A Sick Day for Amos McGee* (Stead, 2010). In the following, an analysis of the influence of repeated book reading on teachers' use of language will be presented. Further, the repeated readings of the teachers in the control group will be contrasted with those of the two teachers in the intervention classrooms to outline the benefits of using the repeated book reading approach employed in this study.

In the two control classrooms, there were similarities in the trends describing the decreasing total number of utterances across the readings and the limited teacher input at an

inferential level. In the fall, in both Ms. Lisa and Ms. Jane's classrooms, reading a book repeatedly resulted in using a decreasing total number of utterances from the first to the third reading. Spring readings followed a similar pattern, with small difference (see Tables 5 and 6). Ms. Lisa's total number of utterances decreased from the first to the second reading and remained approximately constant in the final reading. Ms. Jane's second reading also showed a decrease from the first to the second reading. However, the total number of utterances doubled in the third compared to the second reading, surpassing the total number of utterances in the first reading by more than half. This may indicate that even as children are exposed to repeated book reading, as in Ms. Jane's classroom, teachers still have the opportunity to use more language to engage children.

It is important to note that although the total number of utterances increased in Ms. Jane's final spring reading, only two utterances provided input on the third level of abstraction and none on the highest level. Children were mostly engaged in retelling the story and recalling previously mentioned information rather than making inferences, learning new vocabulary, problem solving or making predictions. This pattern was evident throughout the fall and spring readings for both teachers. Further, it was notable in the case of both teachers that each additional reading of a book provided fewer opportunities to engage children at an inferential level. As such, in Ms. Lisa's classroom, in both fall and spring, third readings provided no opportunities for language interactions on either the third of fourth level of abstraction. This was also evident in Ms. Jane's classroom, where the proportion of inferential language was the lowest in third readings.

In both classrooms, across both fall and spring readings, opportunities to introduce and explain new vocabulary were mostly absent. Ms. Jane's approach to the word "grinned" in the

three fall readings was particularly notable. The text stated, "*That night Chester stood in front of the school and looked thoughtfully. Suddenly, he looked at his mother and grinned. 'Give me your hand!' He said.*" The introduction and teacher's explanation of the word across the three readings is presented below:

> First reading: "*That night, Chester stood in front of his school and looked thoughtfully. Suddenly, he turned to his mother and said 'Give me your hand!'*"
>
> Second reading: "*That night, Chester stood in front of his school and looked thoughtful. Suddenly, he turned to his mother and grinned. He smiled at her, he said 'Give me your hand!'*"
>
> Third reading: "*That night, Chester stood in front of his school and looked thoughtful. Suddenly, he turned to his mother and he smiled, he grinned. 'Give me your hand!' He told her.*"

The teacher's gradual introduction of the new word when the book was read again may indicate that teaching new words is particularly suitable through the use of repeated reading, since children have multiple opportunities to be exposed to the same new words. It is important to note, though, that the introduction of this word for the control condition teacher was brief and appeared to be incidental. The teacher did not elicit children's input or provide opportunities for children to recall or use the new word.

In Ms. Lisa's classrooms it was also the case that the teacher's management talk increased in the final readings. Both teachers' feedback and acknowledgement also increased from the first to subsequent readings, which may indicate a higher level of child participation in the reading of the book. Overall, in the control classrooms, reading a book multiple times appeared to have some influence on the proportion of feedback teachers provided to children and consequently on the level of child participation as books were reintroduced. However, reading a book multiple times by itself did not appear to have a specific influence on the teachers' use of language on the four levels of abstraction.

In the two intervention classrooms, the readings for both Ms. Vivian and Mr. Steve at Time 1 showed a similar pattern in the total number of utterances. Both Ms. Vivian and Mr. Steve's total number of utterances increased in the second reading and then drastically decreased in the final reading, well below the number of utterances in the first reading. Along with this aspect of the book readings, the two teachers were also similar prior to the intervention using limited or inconsistent language at the highest level of abstraction. A difference between the two teachers was Ms. Vivian's more frequent use of literal language, particularly in the second and third reading and Mr. Steve's higher proportion of language on the third level of abstraction, asking children to make connections to their own experiences. Particularly notable was also Ms. Vivian's frequent of management talk and Mr. Steve's higher proportion of language focused on ITT.

In Ms. Vivian's classroom, reading *The Kissing Hand* (Penn, 2006) for a second and third time resulted in increasingly lower proportions of inferential language, with no utterances on the highest level of abstraction in the final reading. In the second and third reading, a high proportion of Level 2 utterances were used to engage children in recalling or describing events from the story. Across the three readings, Level 3 utterances were mostly used to introduce connections between the text and children's lives and experiences. Characteristic of Mr. Steve's classroom was the high proportion of Level 3 utterances and the small and decreasing proportion of utterances on the highest level of abstraction. When compared to Ms. Vivian's classroom, Level 3 utterances also included the introduction of new vocabulary; this was inconsistent in the first two readings and absent in the final reading. Similar to the teachers in the control classroom, Ms. Vivian and Mr. Steve also used an increasing proportion of feedback and acknowledgement throughout the three readings at Time 1.

At Time 2, after beginning to use the repeated book reading approach, several differences were noticed in Ms. Vivian's repeated book readings. An increase in her inferential language use across all three readings was evident (see Table 7). Moreover, the final reading for Ms. Vivian contained the highest percentage of utterances on the highest level of abstraction. An extended variety in the types of Level 3 utterances used across the three readings was also noted. Ms. Vivian emphasized more vocabulary words and provided children with opportunities for making inferences. The percentage of management talk decreased from the first to the third reading. At subsequent data collection points, Ms. Vivian continued to consistently provide input on all levels of abstraction, providing opportunities for children to describe and recall information from the book, make inferences, connections to their lives and experiences, predictions, while also emphasizing new vocabulary.

Mr. Steve's readings at Time 2 also showed an increase in the language he used on the highest level of abstraction (see Table 8). Further, this proportion increased with each reading. Level 3 utterances focused on introducing new vocabulary more systematically and providing children with opportunities to recall and use the new words. At Times 3 and 4, Mr. Steve continued to use similar proportions of utterances across the repeated readings. Notable was the systematic emphasis on the same vocabulary in each of the three readings. At Times 3 and 4, an increase in the teacher's use of ITT language was observed. The proportion of ITT language appeared to increase toward the final reading as the teacher engaged children in retelling the story by taking turns. This increasing proportion of coded utterances also seemed to be related to his increasing use of management talk.

It was evident in both intervention classrooms that using the repeated book reading approach enabled teachers to consistently use inferential language and emphasize new

vocabulary as they read books to children. While teachers did use more complex strategies to engage children in interactions about the repeated book reading, an increasing exposure to more complex language from the first to the final reading was not always the case. Rather, in final readings, teachers allowed children to retell or reconstruct the story oftentimes without reading the text a third time. To engage children in recalling events from the story and describe story actions, a higher proportion of Level 2 utterances was used in the second and more so the third reading. The increasing proportion of feedback and acknowledgement as children were being reintroduced to a book may indicate that subsequent exposures to the same text, which was also evident in the control classrooms, provided more opportunities for teachers to actively engage children in the activity.

To conclude, while there may be some aspects of book reading that change as books are read multiple times (e.g., children may be more actively engaged, there may be an increase in the teachers' overall use of language), other important aspects remain constant (e.g., the complexity of teachers' language). The analysis of the four teachers' use of language during repeated book reading activities at different times in the study indicated that simply re-reading books does not bring about change in the teachers' use of language interactions. At the beginning of the study, the teachers consistently used literal language across multiple readings, but had difficulties engaging children in more complex language interactions. It is important to note that the four teachers differed in their overall use of language during reading, with Ms. Lisa being the one to use the least total number of utterances among the four teachers. While for the control teachers the total number of utterances remained fairly constant from the beginning to the end of the study, teachers in the experimental condition extended their use of language, evident in their increased number of total utterances at Times 2-4. Becoming familiar with the repeated book

reading approach and strategies to support inferential language and emphasize vocabulary assisted teachers in the intervention classroom to provide their children with more enriching book reading activities.

Research Question 2: Effect of the Intervention on Children's Early Literacy Skills

The second research question tested the hypothesis that children in the experimental group, who participated in repeated book reading activities throughout the year, experienced significant growth in their language and literacy development compared to children in control classrooms who engaged in book reading as usual. Pre- and posttest scores on the PPVT-IV and PLAI were used to examine the effect of the intervention on children's early literacy development by measuring receptive vocabulary development and discourse ability. The means and standard deviations for all children's pretest and posttest scores on the two early literacy measures are presented in Table 9.

Table 9

Means and Standard Deviations for Pretest and Posttest Measures

Measure and	Pretest		Posttest	
group	*M*	*SD*	*M*	*SD*
PPVT-IV				
Experimental	89.85	20.44	96.44	16.49
Control	94.22	13.85	95.61	13.97
PLAI				
Experimental	88.33	20.02	95.38	21.81
Control	99.61	19.25	94.65	13.35

Note: PPVT-IV = Peabody Picture Vocabulary Test – IV; PLAI = Preschool Language Assessment Instrument.

There was no statistically significant difference between the groups at pretest on the PPVT-IV standard scores, $t(48) = -.868$, $p = .39$. Levene's Test of Equality of Variances indicated that variances for the two groups were not significantly different prior to the intervention ($F = 1.442$, $p = .236$). Standard scores for receptive vocabulary development

increased for children in the experimental group by 6.59 (SD = 14.21) points on average, while scores for children in the control group remained relatively constant with an increase of 1.39 points on average (SD = 11.94; see Table 10). An independent samples *t*-test was conducted to test the effects of the repeated book reading intervention by comparing the difference between pretest and posttest scores (i.e., the growth rate) for children in the intervention and control classrooms. Results revealed that children's growth was not significantly different for children in the intervention compared to control classrooms, $t(48) = -1.386$, $p = .172$, $d = 0.38$. However, according to Cohen's (1977) convention, there is a small to moderate effect size indicating that there is a difference between these two groups, with the experimental group outperforming the control group by .38 of a standard deviation.

Table 10

Comparison of Growth for Vocabulary (PPVT-IV)

Group	*M*	*SD*	*t*	Sig. (2-tailed)	Effect Size
Experimental	6.59	14.21	-1.38	.172	0.38
Control	1.39	11.94			

Note: Independent samples *t*-test for between group differences; PPVT-IV = Peabody Picture Vocabulary Test – IV.

Paired samples *t*-tests were conducted to further examine the change in children's growth rate from pre- to post-intervention in each of the two conditions. Results revealed no statistically significant change between pre- and posttest scores for children in the control classrooms, $t(22) = .559$, $p = .582$. In contrast, children in the intervention classrooms experienced a statistically significant positive change from pre- to posttest, $t(26) = 2.410$, $p = .023$. These results provide additional evidence that the repeated book reading intervention had a positive effect on the

vocabulary development of children in the experimental classrooms despite the statistically non-significant independent samples *t*-test.

The analysis of children's pretest PLAI scores revealed a significant difference between the two groups prior to the intervention, $t(48) = 2.01$, $p = .049$. Children in the experimental group started with lower discourse ability scores compared to children in the control classrooms. As can be observed in Table 11, the discourse ability scores of children in the intervention classrooms increased post intervention by 6.46 (SD = 11.5) points on average, while those of children in the control group decreased by 4.96 (SD = 16.93) points on average (see Table 11). It is important to note that the discourse ability score is obtained through a conversion of scaled scores which account for the child's age (Blank et al., 2002). Slightly higher posttest raw scores (1.82 points on average) indicate that the decrease in posttest discourse ability scores for children in the control group is a result of not making sufficient progress throughout the 7 months in which the children in the experimental classroom received the intervention, as opposed to a decline in skills. Levene's Test of Equality of Variances indicated that variances were similar between the two groups prior to the intervention ($F = .067$, $p = .797$). Considering the initial difference in scores between the groups a one-way analysis of covariance (ANCOVA) was conducted on the posttest PLAI scores while controlling for children's pretest scores. Results revealed a statistically significant main effect for group, $F(1, 46) = 4.261$, $p = .04$. Children in the intervention classroom experienced a significant growth in the discourse ability scores at posttest compared to children in the control group and there was a large effect size ($d = 0.74$).

Follow-up paired samples *t*-tests were conducted to further examine the changes experienced by children in each group. The analyses indicated that children in the intervention classrooms registered significant growth in the discourse ability scores from pre- to posttest,

$t(25) = 11.106$, $p = .008$. In contrast, children in the control classrooms did not make significant gains at posttest, $t(22) = -1.403$, $p = .174$. The findings further supported the positive effect of participating in the repeated book reading intervention for children's discourse ability scores.

Table 11

Comparison of Growth for Discourse Ability (PLAI scores)

Group	*M*	*SD*	*F*	Sig (2-tailed)	Effect Size
Experimental	6.46	11.5	4.26	.045	0.74
Control	-4.96	16.93			

Note: Analysis of covariance for between group differences while controlling for pretest scores; PLAI = Preschool Language Assessment Instrument.

Overall, results indicated that children in intervention classrooms made significantly larger gains in their discourse ability score at posttest compared to children in the control classrooms. While children in the experimental group experienced growth in their receptive vocabulary scores as well, the difference in growth rate compared to children in the control classroom did not reach statistical significance. Given the observed small to moderate effect size, the non-significant difference may likely be explained by considering the influence of the sample size on the *p* value. Cohen (1992) emphasized the importance of a priori statistical power analysis when designing a study in order to determine the sample size necessary to attain the desired power for a specified alpha level and a hypothesized effect size. The power analysis for this study indicated that a sample of 28 children in each group would be needed to reject the null hypothesis for both outcome measures with a probability of 0.8 and Type I error probability of 0.05. Considering the result of the power analysis, 32 children were initially enrolled in the experimental group and 31 in the control group, to ensure the sample size would be sufficient if a few children from each condition would leave the their classrooms. While the initial sample size was adequate, throughout the year,

more children than initially anticipated moved from their classrooms leaving the experimental group with an enrollment of 27 children and the control group with 23 children. It is possible that with an adequate sample size, the analyses would have shown a significant difference in the scores of children in the experimental compared to the control group for both receptive vocabulary and discourse ability scores.

Research Question 3: Teacher-Child Interactions in the Context of Book Reading

A close examination of the teacher-child language interactions taking place in the context of repeated book reading was accomplished through an analysis of selected episodes focused on specific aspects of interest. These included instances exemplifying how vocabulary development was supported in book reading activities, as well as how teachers and children with disabilities interacted during book reading. To provide an understanding of how the intervention influenced teacher-child language interactions in these areas of interest, all 24 transcripts containing readings from Times 1-4 in the two intervention classrooms were examined. In the following analysis, specific patterns of behavior that emerged from the data are presented.

Supporting Vocabulary Development

Before the intervention. In one of the instances in which vocabulary was emphasized in Mr. Steve's classroom at Time 1 (included in the present chapter on p. 89), the teacher provided an elaborate explanation of what it means to "play possum" and explained that it was an expression "big people" use. That was the only instance in which vocabulary was emphasized in that activity and, as evident from the children's subsequent response, without much success. Mr. Steve did emphasize two other vocabulary words in the final reading at Time 1, both of which are examined later in this section. In Ms. Vivian's classroom, two words were emphasized in the readings at Time 1, on two different days. Since one explanation of a word was initiated by a

child and the interest in this study is on teacher intentionality in supporting early literacy development, only the episode in which the second word, “illustrations”, was emphasized by the teacher is included in the present analysis. It was notable that Ms. Vivian referred to the word as being “kind of a big word.”

***Brief introduction of new words*.** Three episodes in which the teachers briefly emphasized new words are analyzed below. Two of the instances took place at Time 1, before the intervention started and one episode took place at Time 2, in Mr. Steve’s classroom. An episode was not selected from Ms. Vivian’s classroom because all of the instances when vocabulary was emphasized in her classroom were more elaborate, falling under the following two patterns of interactions: eliciting children’s participation and recalling words from previous readings.

The interaction presented in Excerpt 1, illustrated following, took place during the third reading of *The Kissing Hand* (Penn, 2006), before Ms. Vivian began reading the text. In this episode, the teacher made a request for information. After reading on the cover of the book the text “by Audrey Penn”, the teacher explained that it meant Audrey Penn “wrote the book.” The self-correction in line 4 and the identical beginning format of the question in line 5 indicates the teacher may have inserted the additional information “if Audrey Penn wrote the words” to assist children in answering the question. After asking the question, the teacher immediately commented on the word about which she requested information, rather than waiting for the children to respond to the question. The downward ending intonation of the comment may be suggestive of her conviction that this question may be too difficult for the children to respond (Edwards, 2001). This is further supported by the use of the expression “big word” to refer to

the key vocabulary and the frowned expression on Ms. Vivian's face when making this comment.

Excerpt 1

1	**Teacher:**	The title is <The Kissing Hand> ((follows text on cover with finger)) (1.2)
2		by:: Au:drey Penn (.) Audrey Penn <wrote the wo:rds> (0.6) <illustrations
3		by:: Ruth E Harper>
4		((follows text on cover with finger)) (.) So what doe- if- if Audrey Penn
5		wrote the wo:rds (.) what does illustrations mean? ((looks at children))
6		(0.5) >It's kind of a big word↓< ((frown brows)) (.) what do you think it
7		means?
8		(0.6)
9	**Child:**	(it)
10		(0.2)
11	**Teacher:**	It means she drew the pictures ((moves hand over front cover)) (.) she
12		made the pictures (0.5) for us to see.

A child self-selected to respond and contributed a brief, unintelligible utterance. The child's unrelated response indicates that he either did not understand the question or did not know the answer. Ms. Vivian promptly provided a response to her own question, without providing feedback for the child's attempt to respond and without soliciting further contributions. Her response is notable in that it does not actually provide a response to the question "What does illustrations mean?", which would have required a definition of the word. Rather, the response likely explained the meaning of "by Ruth E. Harper", the text read from the cover. In this interaction, the minimal child participation and the provision of information by the teacher, positions Ms. Vivian as the giver of information.

In Excerpt 2, Mr. Steve emphasized two new words while reading *The Kissing Hand* (Penn, 2006) a second time: "thoughtful" and "grinned." The first sequence is a typical teacher initiation-student response-teacher feedback classroom interaction in which the teacher asked a question, the children responded, and were provided with feedback. After reading the text "That night Chester stood in front of his school and looked thoughtful", the teacher explained the

meaning of the word “thoughtful” through a suggestive gesture, by scratching his forehead. Since he explained this word right after reading the text containing it and did not repeat the word “thoughtful” in the context of his explanation, Mr. Steve implied that children did not know what it meant. He may have also implied that children understood he was referring to the word “thoughtful” in his explanation. Finally, Mr. Steve may have placed emphasis on children understanding the story actions rather than learning the meaning of the new word. This is supported by the teacher’s question in line 3 which asked children to consider Chester’s future actions.

Although in addressing the question Mr. Steve asked children to consider what they thought about the character’s future actions, this question was formulated a yes/no or closed question. Children were restricted to providing either a confirmation or disconfirmation in their response while Mr. Steve maintained control over the conversation (Wang, 2006). Children’s immediate and animated choral response indicates that they were attending to the conversation. In response to children’s confirmation of Chester’s readiness to go to school, the teacher responded with “Yeah”, as a brief token of acknowledgement (Drummond & Hopper, 1993).

Excerpt 2

1	**Teacher:**	*That night (.) Chester stood in front of his schoo:l and looked thoughtful*
2		(0.8) It means he went m::: ((scratches temple and scrunches forehead)) (.)
3		You think he’s ready to go?
4	**Children:**	↑ye:::s!
5	**Teacher:**	ºYeahº (0.9) *Suddenly* (.) *he turned to his mother and grinned* (.) Do you
6		know what it means to grin?
7		(0.5)
8	**Children:**	No::
9	**Teacher:**	It means he <u>s</u>mi:led at her (0.2) He turned around [(1.8) and he smiled at
10		her
11	**Tim:**	[>he turned around and
12		smiled at her<]
13		(0.3)
14	**Teacher:**	What did he- (.) what do you think he smiled for?

In the following sequence starting in line 5, the teacher read an additional sentence from the text, briefly paused, and asked another closed yes/no question. This question was addressed to the entire classroom and represented a request from the children to confirm or deny whether they "know" the meaning of the word "grin." Children promptly responded in unison, denying that they know what the word means. Mr. Steve provided a definition in line 9, emphasizing the word "smile." He continued by situating the synonym in the context of the story. In line 11, anticipating what the teacher was going to say, Tim interjected and quickly provided the entire explanation, overlapping in speech with the teacher. Tim's contribution was notable for several reasons. First, Tim was aware of the meaning of the word in the context of the story. Although his speech overlapped with the teacher's, the onset of Tim's comment took place during a longer pause on the part of Mr. Steve, which indicates that Tim was aware of rules about taking turns in conversation. Lastly, the child's contribution was stated faster than the teacher's explanation, possibly showing the child's awareness that it was not his turn to talk. Tim was not offered feedback for his contribution and Mr. Steve continued by asking a question about the character. In this interaction, Mr. Steve's closed questions and direct delivery of information closely resembles traditional classroom interactions in which the teacher is situated as the "owner of knowledge" and the students as the "inexperienced learners" (Bateman, 2013, p. 276).

During the intervention. At Times 2-4, 54 new vocabulary words in total were emphasized in the two classrooms, 22 in Ms. Vivian's classroom (an average of 2.4 words per reading), and 32 in Mr. Steve's (an average of 3.5 words per reading). All of the episodes in which key vocabulary words were emphasized were examined. In these episodes, different types of teacher behaviors were used to emphasize new vocabulary. In some instances (similar to the readings at Time 1), the teachers used brief interactions to introduce new words. At other times,

Ms. Vivian and Mr. Steve enlisted children's help to uncover the meaning of new words, while in other cases children were asked to recall words introduced in previous readings.

Brief introduction of new words. In the three readings of *Home for Christmas* (Brett, 2011), Mr. Steve emphasized several new words. While most words were introduced in an extended conversation with the children, some were briefly explained, as in the example presented in Excerpt 3.

Excerpt 3

1	**Teacher:**	But then he saw a gang of (0.2) o:tters ((points to book))
2		(0.6)
3	**Child:**	O::[tters]
4	**Children:**	[(ters)]
5	**Teacher:**	He saw some otters (.) that are- (.) are animals that live in the water and
6		like to eat (0.6) cla:ms and fish and stuff like that (1.0) *Wait for me he*
7		*cried as he scrambled out. He threw off his wet clothes and dove back in to*
8		*slide down the waterfall.*

In line 1, Mr. Steve emphasized the pronunciation of the word "otter" while describing story actions. He briefly paused before and after saying the word and pointed to the picture of an otter in the storybook, calling the children's attention to the word. A child self-selected for the next turn and repeated the word "otter" with the same emphasis as Mr. Steve. Several other children joined in repeating the word, overlapping in speech with the first child who initiated the repetition. The children's contribution suggests they were actively listening to the teacher. In his response, the teacher repeated his previous sentence with a slight rephrasing and continued to provide a definition for the word "otter." In providing the definition, the teacher both stopped and reinitiated his turn and paused before providing examples of what an otter might eat. There was a slight hesitation on his part, possibly related to finding the right words to explain the word "otter." The inclusion of "stuff like that" further indicates that the teacher perceived this definition as incomplete. The teacher's follow-up on the children's repetition appeared aimed to

provide a clarification for the word otter. In this interaction, similar those presented in Excerpts 1 and 2, Mr. Steve is the information giver and the children the receivers of this information. What differs is Mr. Steve's receptiveness to the possibility that children might not know the word through their direct repetition of it. Further, he proceeded to explain the new word without asking the children whether they understood its meaning.

Eliciting children's participation. In the first reading of *Someone Bigger* (Emmett, 2004) Ms. Vivian emphasized the key vocabulary word "launched" (see Excerpt 4). While reading the text, she read the key word with emphasis and used her arm to demonstrate its meaning. After reading the text, Ms. Vivian provided a verbal definition and continued to use her arm to illustrate the meaning of the word. Further, she provided an example of a relevant context in which the word could be used in other classroom activities. By using her fingers, Ms. Vivian softly counted down and enacted the launching of a rocket. The children were familiar with this from a movement song they knew. The use of the pronoun "we" in lines 4 and 5 presents evidence that Ms. Vivian thought this was familiar to the children. Tyrec interrupted the teacher's explanation and demonstrated with enthusiasm, using similar gestures. Ms. Vivian promptly responded and acknowledged his response with "yeah" and validated his attempt to demonstrate the meaning of the word by saying "like that" (i.e., Tyrec's gesture). The child's self-selected turn to talk and use of an appropriate gesture is indicative of his understanding and engagement in the activity. In this interaction, the teacher initially provided information about the new word and then connected the word to children's previous experiences in an attempt to activate their background knowledge. The success of her action is demonstrated by Tyrec's animated interjection aimed at displaying his understanding of the word. This episode

contributed to validating children previous experiences while they were being introduced to a new word.

Excerpt 4

1	**Teacher:**	*Then (.) Dad let go ((raises hand)) and launched the kite* ((demonstrates
2		with raised hand)) (.) He launched it and that means it went up↑ high
3		((swings arm up)) (.)
4		It went whe:::w ((swings arm up)) >You know like how we do< °five,
5		four, three, two, one° ((finger countdown)) and we blast off? ((swings arm
6		up))
7		When you l[aunch that-]
8	**Tyrec:**	[like this!] ((flaps arms))
9	**Teacher:**	Yeah (.) it went up (.) re::a:lly high like that.((shakes hands, lifting arm
10		up))

In the first reading on *A Sick Day for Amos McGee* (Stead, 2010) Mr. Steve stopped reading to emphasize several new words. One of the key vocabulary on which the class focused in this reading was "amble", which is presented in the Excerpt 5 episode. It was evident that Mr. Steve's intention was to call the children's attention to the word "amble" from the pause before reading the word and the emphasis placed on the word while reading it. He provided a question and used pause to provide children with time to think (Bateman, 2013). While the question was addressed to the entire class, no child responded until the children raised their hands and waited to be called by the teacher. Angela, one of the children who had raised their hand, was given the floor to respond. Her pauses and use of "uh" to delay the response indicated that she was unsure about the meaning of the word. After trying to give a response, she quickly stated that she "had it" and "lost it." This explanation stated in the form of an excuse may have come from the child's awareness that raising one's hand is indicative of the ability to provide a response to the teacher's question. This has been previously emphasized by Mr. Steve in instances when children raised their hand and were unable to contribute to the conversation. In his response to Angela, Mr. Steve recycled her turn saying "you had it and you lost it" to affirm her statement

(Church, 2010). He suggested that she can think about it to try to remember and offered to come back to her after calling on another child to respond.

Excerpt 5

1	**Teacher:**	*Be:lly full* (0.3) *and ready for the work day* (1.1) *he <u>ambled</u> out the door.*
2		((Shows book to class)) (2.3) What do you think the word <u>a:mble</u> means?
3		(.) *He <u>ambled</u> out the door* ((A few raise their hands)) (3.0)
4		Angela (.) what do you think it means to <u>amble</u> out the door?
5		(0.5)
6	**Angela:**	Uh:: (4.6) (amble out) the door me:ans uh: (2.0) >I just had it and now I
7		lost it<
8		(0.4)
9	**Teacher:**	You had it and you lost it=Alright (.) well ((points to Angela)) >you keep
10		thinking about (it) (.) let me call on one friend and I'll come back to you<
11		ok?
12		((holds up 1 finger)) ((Several raise their hands)) ((teacher coughs))
13		Anna (.) what do you think i- (0.4) it means he- (.) Amos <u>ambled</u> out the
14		door?
15	**Anna:**	Um:: (0.7) go:in: <u>t</u>o work.
16	**Teacher:**	Ok (.) maybe he's going to wo:rk↑ ((nodding)) ((children waive raised
17		hands))
18		(0.8) Angela (.) did you think of it yet? ((looking at Angela))
19		(0.6)
20	**Angela:**	Yes (4.0) >amble out da door< me:::ans to walk out the door.
21	**Teacher:**	Yeah (.) amble's- (.) yeah (.) that's a good one. He (0.6) walked out the
22		door ((gestures with hand)) (1.6) he walked out and went- and got ready
23		for work he was ready to go and he (0.6) walked out his door.
24		((the teacher held up the picture of Amos walking out the door throughout
25		the conversation))

Anna is called next to provide an answer to the same question. After a brief delay marked by "um", she responded by emphasizing the preposition "to" and as such, Amos's future actions, rather than the meaning of the word "amble" seemed to be the target of her answer. The rising intonation at the end of Mr. Steve's response keeps the question up for negotiation indicating that he perceives the response as incomplete (Hellerman, 2003). Using "maybe", he saves room for further contributions from children on the same topic. Although several children waved their hands in an attempt to get him to call their name next, Mr. Steve returned to Angela

to ask if she had thought about the question, without reiterating it. Angela took a few seconds to respond after confirming that she did have an answer, which indicates she was thoughtfully considering the question. The teacher provided a positive evaluation for Angela's response in line 21.

In this episode focused on uncovering the meaning of the word "amble", the teacher had a major role in directing the interaction as he was the one to decide who could take a turn in the conversation. Still, he solicited the children's opinion on the meaning of the word, which was eventually defined by the children, and in so doing, the teacher affirmed the children as meaning makers. In addition, by going back to provide Angela with a second turn to talk, he exemplified the importance of taking time to think and recognized Angela for her well thought-out contribution.

Recalling words from previous readings. In the third reading of *A Sick Day for Amos McGee* (Stead, 2010), Ms. Vivian engaged the children in recalling the word "uniform" (see Excerpt 6). She paused before the word was introduced in the text, asking the class to recall and fill in the blank. Kyler self-selected to respond in line 4. Without evaluating his response, Ms. Vivian asked a follow-up question which included the word "suit" from Kyler's response as an affirmation of his contribution. Jimmy's correct response in line 8 was acknowledged through the teacher's slow repetition of the word and the stretching of the vowels. Ms. Vivian continued the conversation around the key vocabulary by asking children if they remembered who else wears a uniform, swiftly reminding children they had discussed this before. The question was addressed to the class and several children volunteered responses. The minimal overlap indicates that, for the most part, children were aware of and able to follow general rules of turn taking while talking.

After Kyler's animated response in line 11, Ms. Vivian repeated his responses as an affirmation (Church, 2010) and clarified the question by including the word "jobs." Holly volunteered next but her contribution in line 14 is ignored by the teacher. Ms. Vivian did hear her, evident from her brief gaze toward the child, but decided to look around the classroom for other responses. Several other children offered names of possible jobs in which a uniform is worn. Ms. Vivian repeated children's responses without casting judgment or providing an evaluation, which suggests that she was listening to the children's responses and acknowledging them (Bateman, 2013). While the word "firefighter" had been previously mentioned by Jimmy in line 18, the teacher repeated and affirmed Coal's contribution in line 20. It is not clear in the transcription whether Coal did indeed say "firefighter" and Ms. Vivian was able to hear him because he was sitting close to her, or if the teacher tried to make a guess and affirmed the child's attempt to respond. While responding to Kyler in line 22, Ms. Vivian appeared amused and smiled at Kyler's mention of Captain America, yet accepted the response and affirmed it by repeating the name of the superhero in a complete sentence. The multiple animated contributions in this episode are indicative of the children's active participation and investment in recalling the story and contributing to the discussion.

Excerpt 6

1	**Teacher:**	*He swings his legs out of bed* ((swings hand)) *and swaps his paja:mas* (.)
2		for what?
3		(0.6)
4	**Kyler:**	A- a- a- a ni:ce new suit.
5		(0.5)
6	**Teacher:**	What kind of a suit is it? ((points to picture and shows book to class))
7	**Child:**	(A form)
8	**Jimmy:**	A u::niform.
9	**Teacher:**	A >u:ni:fo:rm< (0.4) Like (.) who else wears a uniform? >remember you
10		told me yesterday?<
11	**Kyler:**	A wedding!
12		

13	**Teacher:**	In a wedding ((nods head on left side)) o::r↓ what other jobs wear
14		uniform? ((tilts head to the right))
15	**Holly:**	Pri:ncess! ((teacher briefly looks at Holly))
16		(0.6)
17	**Kyler:**	Uh:: >police officers<
18	**Teacher:**	[Nods] Police officers, [(ambulance)
	Jimmy:	[FIREFIGHTER!
19	…	
20	**Teacher:**	Firefighter ((nods))
21	**Coal:**	(fire)
22	**Kyler:**	=Captain America
23	**Teacher:**	Firefighter ((nods toward Coal)) (.) Ca(h)ptain America wears a uniform
24		((nods and smiles turning page))
25	**Children:**	((several talking at once))
26		(2.0)
27	**Teacher:**	So (.) *"Amos* (.) *McGee* (.) *would wind his watch and set a cup of water to boil.*

The episode presented in Excerpt 7 is extracted from Mr. Steve's third reading of *Home for Christmas* (Brett, 2011) in which the class reviewed the word "shivering." The episode started with the teacher's acknowledgement of Allie's desire to contribute to the discussion (while the camera was not positioned to capture Allie, she likely raised her hand to make known her intention). Allie took a deep breath before commenting, action indicative of her seriousness in taking on the task of talking about the character in the story, specifically the pages Mr. Steve was showing. Her comment was closely followed by the teacher, evident from his gaze toward Allie, his interjection in line 6 right as Allie was taking a breath, and his decision to turn the page when Allie began describing what was going to happen on the following page. Mr. Steve provided a positive evaluation of Allie's contribution at the beginning of line 9 and continued by recasting her comments for the group. This further affirmed the value of Allie's contribution and emphasized it for the group in an expanded form.

Excerpt 7

1	**Teacher:**	Yes (.) Miss Allie? ((Sophie is waving her hand to take a turn to talk))
2		((teacher holds pictures up for children to see and looks at Allie))

3		(1.1)
4	**Child:**	Um:: ((takes deep breath)) the water's fro:zen so he can't even swim (.) At
5		the next page .hhh
6	**Teacher:**	=yup= ((turn pages))
7	**Allie:**	he will get out and (put) his clothes on.
8		(0.5)
9	**Teacher:**	That's right (.) Miss Allie was saying (.) then the water- (1.0) it gets to be
10		probably this time of the year (.) gets to be getting colder and the ice
11		freezes (0.8)
12		[and Rollo has to get o[ut of the water]
13	**Sophie:**	[And the-] [and he does this] ((shivers))
14		(1.5)
15	**Teacher:**	((nods)) And what do we call that when you do t[hat? You remem-
16		((extends arm toward Sophie))
17	**Child:**	[shiveri:ng]
18	**Children:**	Shiveri:ng.
19	**Teacher:**	((nods)) Very g(h)ood (.) <u>shivering</u> means you go ((shivers)) ah::: we're
20		<u>cold</u>!
21		(1.3)
22	**Allie:**	Every time when I get o(h)ut I'm cold too↓.
23	**Teacher:**	Like when w- if we probably went outside right now without our coats on
24		(0.5) <we would probably shi<u>ver</u>↓> (.) shaky cold ((shivers))
25	**Brielle:**	=WHEN I GET OUT OF THE BATH (.) CUZ I SHIVER LIKE ((shivers))
26		(0.5)
27	**Teacher:**	((nods)) Yeah when- ((points hand to Brielle)) especially when we get out
28		of the bathtub yeah we shiver [cause we-]
29	**Sophie:**	[(if I have) very hot water (.) <I will do this>
30		((lays head down pretending to faint))
31	**Child:**	[me too]
32	**Teacher:**	((Nods and laughs)) ( ) (hot water)
33	**Children:**	( )
34	**Child:**	(me too)
35	**Teacher:**	(Alright)
36	**Children:**	((several talking at once))
37	**Teacher:**	What kind of animal does Rollo find next? ((shows book to class))

Sophie, who had been waiting to be called by Mr. Steve to participate, tried to interject during a brief pause in the teacher's speech at the end of line 11. After a first unsuccessful attempt, she persisted and interjected again, her speech overlapping with the teacher's (line 13). In response, Mr. Steve asked the group to name the action that Sophie was performing, which was one of the key vocabulary words emphasized in previous readings. One child responded and

provided the word before the teacher finished asking the question. Other children joined him in saying the word together. The teacher's positive evaluation and laughter in line 19 indicated that he was pleased with the children's recalling of the word.

Following a slight pause after Mr. Steve's turn in line 21, Allie commented with an example from her own experience. Although she did not use the word "shiver", her talk demonstrated her understanding of the context of the conversation and the ability to make a relevant connection to her life. The teacher followed up on her response by expanding it and making it applicable to all the children in the classroom. In doing so, he included and emphasized the key vocabulary word "shiver." Brielle contributed and made an additional connection between the key vocabulary and her experiences. Her comment came right after the teacher's turn in line 24 and used an animated, loud tone, indicative of her eagerness and excitement to contribute to the conversation. Her comment is affirmed by Mr. Steve who attempted to provide an explanation for Brielle's example. His explanation is interrupted by Sophie who provides an additional example which creates a moment of laughter and excitement in the classroom. Mr. Steve redirects the children to the story by asking a question about what happened next. This episode demonstrates that children were able to recall the new word and use it in appropriate contexts related to their individual experiences. While the teacher directed the interaction by managing turns at talk, evaluating responses, and redirecting the conversation to his goal of engaging children in recalling the story, children were able to self-select to talk at appropriate times in the conversation and contributed to the conversation by displaying their knowledge and making connections to their experiences.

In the readings at Time 1, in both classrooms, it was evident that the teachers' focus on supporting vocabulary development was limited. In the few instances when new words were

introduced, the analysis of the interactions indicated a focus on delivering an explanation, without engaging children and building on their prior knowledge. In the readings at Times 2-4, teachers emphasized activating children's background knowledge, and explained new words by making connection that were relevant to children's prior experiences. Further, both teachers but especially Mr. Steve focused on the same words throughout the week and provided children with opportunities to recall words, encouraging them to use the new words in the discussion about the storybook.

The emphasis on supporting vocabulary was evident throughout the year from various other data sources beyond the videotaped activities at Times 2-4. Weekly observations and field notes recorded that teachers constantly emphasized vocabulary during book reading (e.g., through conversations such as the ones presented in Excerpts 3-7, at times also using prompts or objects to explain new words). In their weekly logs, teachers often noted the words on which they focused for the week. For example Ms. Vivian wrote one week: "Had cinnamon for smell – Had them guess first – one said "it's garlic" – Let all smell it. Then learned it was cinnamon." Mr. Steve noted in his log: "Used a puppet to discuss role of a baker. Most of the class said "they cook." Discuss(ed) that a baker bakes foods like cakes, bread, pies, etc. Discussed some of the vocabulary." and "Discussed prior to the reading what "lonely" means. Several kids said things like "he didn't have anyone to play with" or "he didn't have no mom or dad with him."

When in a team meeting about their work on supporting children's vocabulary development in book reading, both teachers were positive about the influence of the repeated book reading approach. Ms. Vivian stated:

> "It's been educational for me just to think about the words… I think sometimes you can just talk and not think about what you're saying a lot, even as a teacher, you're talking to them and you're thinking that, you know, they just know… and they don't. And so it's taught me to be very observant that they may not know this word, what this word means.

> Maybe they don't use this word at home, maybe this is a brand new word to them period. So, it's been good."

In reference to the opportunity repeated book reading provides to focus on the same vocabulary throughout the week, Mr. Steve commented:

> "I try to… like when I ask them what a certain word means, I try to do that every time we read a story, not just do it one time and them pick something else. I try to pick two or three words and ask them every time and the more I do that, usually by Friday a lot of kids are picking up."

In the responses to the final survey about their participation in the repeated book reading program, both teachers identified supporting vocabulary among the strategies they learned about. In her response to the question "What new strategies have you learned by using repeated book reading in your classroom?" Ms. Vivian wrote, "Really implementing and enriching vocabulary. Day to day adding to their comprehension of what is being said/read." Mr. Steve's response also included "work on vocabulary more." Perhaps one of the best ways to capture the influence the repeated book reading program had on how the teachers supported vocabulary development in their classrooms is by considering their own perspective on the changes that ocurred in their teaching. Ms. Vivian reflected:

> "I think the vocabulary was new to me. Just really, purposefully interjecting vocabulary. Now, if they would ask about a word or if they would, you know, maybe if it was like part of our theme or something we maybe would dig a little deeper, but yes, I think that has been a good addition. That is something that I have been able to notice a lot, the different things that they say."

Interactions between Teachers and Children with Disabilities in the Context of Repeated Book Reading

In both intervention classrooms, the use of repeated book reading influenced teachers' interactions with children with disabilities in important ways. These were uncovered through a process of identifying all the interactions between the two teachers and four children in each

classroom in the videotaped readings at Times 1 through 4. The focus children included those with identified disabilities and children about whom the teachers had expressed concern by initiating a process of referral for evaluation for special education services. The identified interactions demonstrated a variety of ways in which teachers and the children interacted during repeated book reading activities. Representative episodes that characterized the different types of interactions observed before (Times 1) and during the intervention (Times 2-4) were selected for close examination using Conversation Analysis.

Before the intervention. In both classrooms, at Time 1, one or two of the focus children were away from the group during each of the three readings, for either part of or the entire activity. In Mr. Steve's classroom, Cayla, a three year old with developmental delay, was held in the lap by the teacher assistant or another volunteer, close to the area in which the activity took place. She entertained herself with the teacher assistant's cellphone or a toy and did not attend to the activity. In Ms. Vivian's classroom, Jack and Gina, were consistently out of the group, playing in other areas of the classroom as the teacher read the book to the class. Jack is a four year old with developmental delay who is dually enrolled in Head Start and an early childhood special education classroom, while Gina is a three year old for whom Ms. Vivian started a referral process for speech and developmental delay. During reading, Ms. Vivian often stopped the activity to redirect the two children as well as others who were not paying attention or disrupted the activity. Management talk was the most frequent type of language interaction between Ms. Vivian and the children with disabilities in her class. This type of interaction occurred in Mr. Steve's classroom as well, as in the episode presented in the excerpt below:

Excerpt 1

1 **Teacher:** Aa:ron (2.6) Anna, if you want me to call your name you need to be on your
2 name (now) (.) okay?

3	**Aaron:**	((walks over to the teacher to get a sticker))
4	**Anna:**	((moves over to her name))
5		(1.0)
6	**Teacher:**	((coughs)) A:ngela
7	**Angela:**	((walks over to the teacher to get a sticker))

This excerpt was extracted from the first reading of *The Kissing Hand* (Penn, 2006). The action took place at the end of the activity when the teacher was passing out stickers to children as they transitioned from book reading to the next activity. Anna had been held by a volunteer throughout the activity and had her back turned to the teacher after the volunteer let go of her to attend to another child. By calling the children's names, Mr. Steve initiated a request for action and had the children come to the front of the classroom to pick up their sticker. When calling the children, he prolonged a vowel in their names as observed in lines 1 and 6, likely to emphasize who was next and allow sufficient time for the children to stand up and come to him. One child was called at a time and it was apparent from Aaron and Angela's actions that children knew they can come up for their sticker when they were called. Neither Aaron nor Angela verbally contributed to the interaction, but they promptly responded by standing up and walking toward the teacher when called. Line 1 includes an additional request for action directed to Anna. The child complied right away and situated herself on a different spot in the circle area, demonstrating that she understood the request. Similar to Aaron and Angela, Anna did not verbally contribute to the interaction. In this episode, the participants' roles are clearly evident, with Mr. Steve being the teacher who initiated requests for the students who readily complied.

In Mr. Steve's classroom, it was common for children with disabilities to be passive participants in group activities. They were seated with the group for the entire duration of the activity, but did not offer them the opportunity to contribute to the discussion. In a few instances, Anna joined other children in providing a choral response to a question. The

management interaction presented in Excerpt 1 was the only instance in which Mr. Steve addressed Anna in the three readings at Time 1.

In Ms. Vivian's classroom, there was one instance in which Jason, a child with speech impairment, was asked a question but did not provide a response. This is presented below:

Excerpt 2

1	**Teacher:**	Chester and his mother gave each other a kissing hand (1.0) Why did they
2		give each other a kissing hand? (.) You tell me why.
3	**Kyle:**	Because they love.
4		(0.8)
5	**Teachers:**	Why did they give a kissing hand Jason?
6		((leans down, places sticker on child's shirt and looks at him))
7	**Kyle:**	Because [they (love) each other.
8	**Dan:**	[Because they love each other.
9		(0.9)
10	**Teacher:**	Because they love- say- because they loved each other?
11	**Child:**	Yeah
12	**Other Child:**	Ye:s
13	**Teacher:**	((walks over to another child)) Why else would they have gave each other a
14		kissing hand? ((moves and places sticker on other child))

After the first reading of *The Kissing Hand* (Penn, 2006), Ms. Vivian stood up from her seat and went around the circle to pass out stickers to the children. In lines 1 and 2 she initiated a request for information by first reviewing an action from the story and then asking the group an open-ended question about the fact she presented. She emphasized that she wanted to hear from the children about why Chester and his mother might have given each other a kissing hand. One child quickly offered a response in line 3. The child's response was not acknowledged by Ms. Vivian who addressed the question again in line 5, this time specifically directed toward Jason. Without waiting for a response from him, she leaned down and placed a sticker on his shirt. Jason did not provide a response, but Kyle offered an answer again, elaborating on his first contribution. Dan provided the same response, overlapping with Kyle. Continuing to stand next to Jason, Ms. Vivian acknowledged the response as correct by repeating it, but without giving

credit to the one who provided it. Her continued attention to Jason and the word "say" in line 10 indicates that she might have expected Jason to repeat the answer. When he remained quiet and the same two children responded to her question again, she moved toward another child asking for other reasons why the characters in the story might have given each other a kissing hand. The interaction in this episode presents Ms. Vivian as the one who requests and evaluates information. Her authority in this role, however, appears to be disputable since questions are not always answered by the child to whom they are addressed. By ignoring the lack of response from Jason she in essence indicates that a response or an acknowledgement of her question was not needed. In Jason's case, he was not provided with sufficient time to answer a question and his lack of participation was received by the teacher as typical since she continued with other children after not receiving a response.

A final type of interaction with children with disabilities during book reading was observed in Ms. Vivian's classroom at the beginning of in intervention. After reading *The Kissing Hand* (Penn, 2006) for the third time, the classroom transitioned to the next activity by answering a question asked by the teacher. Ms. Vivian asked the question of each child individually, calling those who had paid attention to the reading first. Her hesitation in calling a child's names in line 1 indicates that Ms. Vivian took time to consider who might be a good candidate and that Andrea, a child with a speech impairment, had indeed followed the classroom routines. After acknowledging that Andrea had "sat nicely at circle", Ms. Vivian asked her what she liked about the story. Andrea provided a prompt response. Ms. Vivian's slow repetition of the answer in line 6 and her probing question in same line indicate that she may have wanted to clarify Andrea's answer. The nodding accompanying the question suggested that she viewed the answer as valid. When Andrea confirmed her response, Ms. Vivian asked Andrea to justify her

answer. Andrea's response in line 10 was not clear, but may have indicated that the child did not have a reason for her preference. In lines 12-16, Ms. Vivian continued to validate Andrea's response and attempted to find an explanation for her choice. Her questions "would we?" and "what?" and her gaze toward Andrea and Gina indicate the Ms. Vivian tried to elicit their help in answering these questions. Neither of the girls provided a response, but Kyler intervened right away emphasizing his response in line 17. Ms. Vivian showed her acceptance of this response by repeating it with the same emphasis and expanding the answer in lines 18 and 19. Andrea's immediate intervention in line 20 indicates that she was waiting for her turn to ask for permission to go to the bathroom and may have been focused on transitioning to the next activity rather than participating in finding an explanation for her response. In this episode, while requesting information in her role as a teacher, Ms. Vivian was also quick to accept children's responses as significant contributions to the discussion.

Excerpt 3

1	**Teacher:**	Ho:w abo:ut ((looking at children left in the circle area)) (0.5) An<u></u>drea you sat
2		nicely at circle (.) what did you like about our story?
3		(0.7)
4	**Andrea:**	I liked it (.) when (.) the raccoon cried.
5		(0.4)
6	**Teacher:**	<When the rac<u>coon</u> cried?> You liked when he cried? ((nodding))
7	**Andrea:**	Yeah.
8		(0.4)
9	**Teacher:**	Why did you like when he cried?
10	**Andrea:**	(I don't know)
11	**Teacher:**	You don't know (.) you just liked that? ((gestures with palms up, claps hands
12		together and looks up)) (0.3) That's a special part of the story (0.4) We
13		wouldn't <u>have</u> the kissing hand if he didn't cry, would we? (0.6) Mommy
14		needed to give him something special so he would know that (0.3) What?
15		(0.2) What does he know? (.) ((looking at Gina, who was sitting beside her))
16		because he has his kissing hand (.) what does he know?
17	**Kyler:**	<u>Love</u>
18	**Teacher:**	((points to Kyler)) He knows <u>love</u> (0.3) right (.) He knows his mom loves
19		him.
20	**Andrea:**	Can I go wash my hands now?

21 **Teacher:** Yes you ca:n.
22 **Andrea:** ((stands up and walks toward the bathroom))

It was interesting that while four other children before Andrea were asked what they liked about the story and then allowed to go wash their hands, Andrea was the only one asked to reason about her answer. While the teacher appeared supportive of the expressed preference, she may have found it necessary to justify a response that involved expressing preference for a generally negative experience, such as crying. Alternatively, she may have considered this to be a good opportunity to extend discussion around the story and perceived Andrea as being able to reason about her answer. In any case, Andrea's desire to leave the discussion and go to the bathroom to wash her hands indicates that she did not particularly enjoy the extension her question created and was looking forward to transitioning to the next activity.

During the intervention. At Times 2-4, some of the types of interactions observed prior to the intervention continued to be present even as the teachers started using the repeated book reading program. Specifically, management talk directed at the children and interactions focused on redirecting a child's behavior toward the activity continued to be prevalent. Further, while being out of group during the reading was less prevalent than prior to the intervention, especially in Mr. Steve's classroom, Jack in Ms. Vivian's room continued to leave the reading activity throughout the year. Finally, instances in which children did not provide a response to a teacher's question were absent after Time 2 and all children with disabilities were engaged in the activities and contributed either verbally or nonverbally (e.g., pointing, gestures) when asked. The following excerpts present five episodes that are representative of the types of additional teacher and student interactions observed during the intervention. These include showing interest in the activity, providing either a verbal or nonverbal response, and initiating discussion.

In Mr. Steve's classroom, Cayla's absence from the group was initially replaced by interactions in which she showed interest in the activity and continued attempting to provide responses to teacher questions, albeit incomprehensible at times due to her speech impairment. The episode presented in Excerpt 4 shows Cayla displaying interest in the book being read for a second time at Time 2, *Home for Christmas* (Brett, 2011).

Sitting on her assigned spot in the circle time area, by the teacher's right side, Cayla constantly leaned forward to look at the pictures, stood up at times to have a better look, and verbally intervened as the teacher was reading. After Mr. Steve's comment on the character's actions, Cayla repeated part of his utterance in line 3. While her speech overlapped with the teacher's, it is notable that she initiated her contribution during a moment of pause when the teacher was gesturing, which demonstrates her awareness of the general rule of taking turns in speech. After the teacher continued to read the text in lines 4-5, Cayla waited for him to stop and affirmed his contribution saying "Yea" (line 7). The lack of gap in speech after Cayla's utterance and the teacher's comment in line 8 indicates that he may not have anticipated the contribution and did not offer Cayla sufficient time to express herself or did not perceive this as an important contribution for the activity. Mr. Steve did respond to Cayla's third contribution in line 10 when she likely wanted to repeat the animal's name. In a soft voice and looking at Cayla, Mr. Steve affirmed her attempt and repeated the name of the animal. His continued speech in a regular tone was addressed to the classroom and included a question regarding the appearance of the lynx. It is possible that Cayla's inability to pronounce the name of the animal may have directed the teacher's attention to the need to discuss more about the animal with the class in lines 12-17.

Throughout this episode, Cayla presented her interest in the activity through her posture, close attention to the reading, and repetition of Mr. Steve's utterances. Mr. Steve appeared supportive of her interactions and he allowed her to continue to repeat his utterances, intervening to clarify the name of the animal when Cayla was not able to pronounce it correctly. Further, he took the opportunity to explain that the animal looks like a cat, which likely helped Cayla and other children have a better understanding of the new word.

Excerpt 4

1	**Teacher:**	So Rollo left ((gestures with hand)) (.) you know ((slaps knee with hand))
2		(0.8) the otters
3	**Cayla:**	[(Rollo left)]
4	**Teacher:**	(1.4) *It was snowing when Rollo met up with a <u>new</u> friend who was as*
5		*wi:ld as he was.*
6		(0.4)
7	**Cayla:**	Yea ((lays down on stomach next to the teacher and looks up))
8	**Teacher:**	=He met up with a lynx ((Points to book))
9		(0.3)
10	**Cayla:**	Yeah ( )
11		(0.3)
12	**Teacher:**	**º**(Yup) it's called a lynxº ((looking at Cayla)) and it looks kind of like
13		(0.9) a cat, doesn't it?
14	**Child:**	It looks like a cheetah.
15	**Teacher:**	Maybe looks like a cheetah ((looks at child))
16	**Another child:**	It <u>is</u> a cheetah.
17	**Teacher:**	Yup ((looks at child)) (0.2) *Lynx liked to pound and play hide and seek.*

At times 2-4, episodes in which children with disabilities did not provide a response to a teacher's question, such as the one presented in Excerpt 2 were replaced by interactions in which teachers tried to ask simpler questions of some children with disabilities and waited to provide them with an opportunity to respond. Both Mr. Steve and Ms. Vivian also allowed children to provide non-verbal responses at times, by pointing to pictures from the book to support their answer or using gestures. The episode presented in Excerpt 5 is an example of a situation in

which Ms. Vivian asked Jack to respond to a few simple questions aimed at the literal matching perception level.

After the first reading of *A Sick Day for Amos McGee* (Stead, 2010), Ms. Vivian asked each child a question about the story as they transitioned to the next activity. Most of the children were asked questions such as "How do you think the animals felt when they were waiting for Amos to get to work and he never showed up?" or "How do you think the animals made Amos feel?" When Jack's turn came, Ms. Vivian asked him to locate an animal in the book through her question in line 1. After taking some time to look at the pictures in the open book, Jack pointed to one of them. It was not clear what he pointed to, but the fact the Ms. Vivian repeated the question indicates that he did not correctly identify the elephant. After being asked again, Jack took less time to look at the pictures and pointed to another animal. Ms. Vivian corrected him in line 9 and provided the name of the animal to which he pointed. In his next turn, Jack pointed again, this time to two of the animals. Ms. Vivian patiently named the animals he pointed to in line 12. Her labeling of the turtle after Jack pointed to it, presents a moment in which Jack and Ms. Vivian changed roles, with Jack being the one to request the name of the animal in the first turn and Ms. Vivian being the one to provide the name in line 12. In the same line, Ms. Vivian regained her first turn at talk and asked Jack to identify another animal. Jack's unsuccessful attempt was corrected by Ms. Vivian who named the animal. Jack tried again and his correct response was received with satisfaction by the teacher, "There, that's the penguin." She thanked him and asked him to go wash his hands for snack.

Excerpt 5

1	**Teacher:**	Jack (0.5) Jack where's the elephant?
2	**Jack:**	((stands in front of the teacher looking at the book in her lap))
3		(3.5)
4	**Jack:**	That one ((points in book))

5		(0.7)
6	**Teacher:**	Where's the elephant?
7		(1.1)
8	**Jack:**	That one ((points in book))
9	**Teacher:**	That's a rhinoceros
10		(2.4)
11	**Jack:**	(points)
12	**Teacher:**	The elephant, (turtle) (.) Where's the penguin?
13		(2.0)
14	**Jack:**	(points)
15	**Teacher:**	Nope, owl.
16	**Jack:**	(points)
17	**Teacher:**	There, that's the penguin. Thank you. Go wash your hands for snack.

The teacher's goal of obtaining a correct response from Jack is evident in her satisfaction at his accurate identification of the penguin, as well as her giving permission for Jack to go wash his hands as soon as he provided a correct response. Jack's continued attempts to identify the animals named by Ms. Vivian indicated that he was also invested in providing a correct response. He was also able to understand the inaccuracy of his responses and the need to try again even when Ms. Vivian did not directly identify his response as wrong, but rather asked the question again (as in line 6) or provided the actual name of the animal he had pointed to (as in line 9). In this episode, the teacher tried to engage a child with a disability at a level that she perceived he would be able to successfully participate and provided multiple opportunities for him to respond.

One of the most frequent interactions between the two teachers and the children with disabilities in their classroom included instances when the teacher asked a question about the story and the child provided a verbal response. Whereas before the intervention, this was observed only on one occasion in Ms. Vivian's classroom in the episode presented in Excerpt 3, at Times 2-4, such interactions took place frequently in both classrooms. Excerpt 6 presents an

example from Mr. Steve's classroom, in which he interacts with Kyle, a child with an undiagnosed speech impairment.

Excerpt 6

1	**Teacher:**	How does- How does Amos help the owl?
2	**Kyle:**	((raises hand))
3	**Teacher:**	Who wants to tell me that? ((points)) Kyle↑((points to Kyle))
4	**Kyle:**	He re- ead (bo) for owl.
5	**Teacher:**	((nods)) He reads books to the owl beca:use (.) why Kyle?
6	**Kyle:**	=Scared.
7		(0.4)
8	**Teacher:**	((nods)) Because <the owl is a:fraid of the dark> (.) he's scared.

During the third reading of *A Sick Day for Amos McGee* (Stead, 2010), Mr. Steve frequently stopped to ask questions and assist children in retelling the story. All of the four focus children with disabilities were asked to participate by responding to questions. It was apparent that Mr. Steve was purposeful in making sure that all children had an opportunity to contribute to the activity. After asking a question about the story in line 1, Mr. Steve followed up to ask who would like to tell him. Kyle raised his hand to respond as soon as the first question was asked, which demonstrates his awareness of the expectations for classroom participation. After Mr. Steve called his name and gestured toward him to take the next turn, Kyle provided a response in line 4. Mr. Steve repeated his response and nodded in sign of approval, then asked for an explanation of the characters' actions from Kyle. Kyle's immediate response shows that he was closely paying attention to the teacher's evaluation of his contribution. Nodding in acceptance at Kyle's single word response in line 6, Mr. Steve elaborated on his answer using exact words from the text, but concluded by repeating Kyle's synonym of the attribute used in the text in a sign of approval.

Through its evident initiation-response-feedback pattern, this episode is characteristic of typical classroom interactions in which the teacher asks a question, the student responds, and the

teacher provides feedback. It is noteworthy that while the teacher followed his goal of asking questions that assisted with retelling the story and children were expected to follow classroom routines in responding, Mr. Steve appeared to appreciate responses and used the occasion to expand on a child's contributions. By having children answer only after being called, Mr. Steve ensured that all children had an opportunity to contribute to the activity, although only at a time when he, as the teacher, decided to receive contributions.

In Ms. Vivian's classroom, interactions with children with disabilities also included more opportunities for the teacher to ask questions and for the children to provide verbal responses. One notable related type of interaction in both classrooms included instances when children with disabilities showed a desire to respond to a question, but were not given an opportunity. While in Mr. Steve's classroom this may have emanated from the teacher's goal to provide equitable opportunities for participation to all children, in Ms. Vivian's classroom, children with a disability did not have an opportunity to participate at times because of other children's frequent contributions and/or because of classroom management difficulties. Such an episode in presented as an example in Excerpt 7.

Excerpt 7

1	**Teacher:**	Rollo the troll. And he-
2		(0.2)
3	**Andrea:**	I know↑
4	**Jason:**	=Yeah
5	**Rick:**	He's a elf.
6	**Andrea:**	=I know.
7	**Tyrec:**	He had ta be [ni-
8	**Teacher:**	((nods)) [He's kinda of like an elf.
9	**Tyrec:**	=He had to be nice if then he lost his tail.
10	**Teacher:**	=He had to be nice to lose his tail (.) but- but he- he wasn't nice ((shakes
11		head))
12	**Andrea:**	[I know. I know.
13	**Teacher:**	Does anyone re[member [why [he wasn't nice?
14	**Child:**	[ME

15 **Other Child:** [ME
16 **Andrea:** [I know. [Because he said no, [no, no.
17 **Gina:** ((walks up to shelf behind teacher and gets a marker))
18 **Teacher:** ((tries to stop child)) [Gina (.) Gina please go sit down.
19 **Tyrec:** [Because he
20 was mean and he didn't wanted to do-
21 **Teacher:** Oh::
22 **Tyrec:** [And make his bed so he ran away.
23 **Andrea:** [And he said no, no, no.
24 **Teacher:** =Right, he didn't want to make his bed [so he ran away. Okay.
25 **Jimmy:** [No, no, no. ((gestures toward
26 Rick))
27 **Teacher:** So, alright-
28 **Jimmy:** No, no, no ((gesturing with finger))
29 **Teacher:** =Right, yes, he said no, no, no (.) <he did not want (.) [he did not want to
30 help> (1.1) I have- We have our cookies that we decorated and my friends
31 who are at sitting at circle will get their cookies at snack.
32 **Andrea:** [no, no, no

Before starting to read *Home for Christmas* (Brett, 2011) a second time, Ms. Vivian introduced the activity by having the children recall a few essential elements form the story. Her interrupted statement in line 1 was immediately followed by Andrea in line 3, who exclaimed that she wanted to continue talking about the main character. Jason and Rick also immediately contributed to the conversation in lines 4 and 5 after which Andrea again expressed what she knew in an effort to get the teacher's attention and be given an opportunity to respond. A fourth child, Tyrec, also joined the discussion, but abandoned his statement in line 7 to allow Ms. Vivian to respond to Rick, who was the only one of the three who directly provided a statement about the story. Allowing no gap in speech after Ms. Vivian's feedback to Rick in line 8, Tyrec reiterated his previous statement about the character. As soon as Tyrec completed his statement, Ms. Vivian affirmed his contribution by repeating his utterances in a correct grammatical form and extended it by asking another question. In line 12, Andrea attempted to gain Ms. Vivian's attention again, continuing to repeat "I know." As Ms. Vivian was asking the question in line 13, three children, including Andrea, offered to respond even before the teacher finished talking,

overlapping in speech. This time, Andrea also included a response after informing the teacher yet again that she knew the answer. Ms. Vivian did not respond to any of the children since her attention was diverted by Gina who, although playing in a different area of the classroom for part of the activity, rushed through the children seated in the circle area to grab a marker from a container sitting on a cabinet behind Ms. Vivian.

After this interruption, Tyrec offered a response to Ms. Vivian's question overlapping in speech as she tried to redirect Gina. In line 21, Ms. Vivian's attention was redirected to the group as she exclaimed in wonder at Tyrec's statement. This was perceived as an approval by Tyrec who continued to provide detail in line 22. Andrea tried to contribute again by providing the main character's words, "no, no, no" in line 23, but the teacher's feedback was directed toward Tyrec's contribution. Only after Jimmy started gesturing empathetically in lines 25 and 28 and using the same character's words did Ms. Vivian acknowledge this element of the story that had been previously mentioned by Andrea. As Ms. Vivian was responding to Jimmy in lines 29 and 30, Andrea again repeated the character's words, overlapping with the teacher's comment.

Andrea's numerous attempts to contribute to the discussion remained unacknowledged in this episode. The frequent overlapping and lack of gap in speech is indicative of the children's desire to participate in the activity and also their knowledge of facts related to the story after the first reading. However, the same circumstances, along with the management interruption created a rather competitive environment in which children rushed to respond to the teacher's questions, not providing time for their peers to finish their contribution or listening to what they said.

Children with disabilities in Ms. Vivian's classrooms in particular were also observed initiating discussion with the teacher during the book reading, as illustrated in following episode:

Excerpt 8

Teacher: What else is light?
Jimmy: I can (lift) the whole hammer.
Child: =The doo:r.
Teacher: Uh:: ((sour look)) °I [don't think the door's very light°
Tyrec: [I- I- could pick Noah up.
Other Child: [Sho:es
Teacher: Sho:es could be light ['cause we could lift those up pretty easy.
Child: [A door handle.
Teacher: =A door handle ((turns imaginary doorknob)) might be light (.) maybe ((pretends to weigh with hand))
Andrea: [Hey (.) you know what? You know what?
Tyrec: [Our dinosaurs are light.
Teacher: Our paper dinosaurs are light (.) yes ((nods and points to wall))
Andrea: =[You know what? Hey Ms. Vivian.
Tyrec: =[Very very super light.
Teacher: So that means the wind [could blow ((blows on palm)) and it would blow it [away.
((flips arm up))
Andrea: [Ms. Vivian (.) Ms. Vivian [Ms. Vivian
Teacher: [The wind could blow it ((waves))
Andrea: [I have to ask you something.
Teacher: °What Andrea?°
Alexis: Um: [one time-
Teacher: [Noah, put your feet down please (.) be careful with your feet [so you don't hit Jimmy.
Andrea: [You know what?
=You know what?
Teacher: °What?°
Andrea: One time (.) Wanda um picked me: up.
Teacher: Oh rea:lly?.hhh ((looks at book))
Andrea: Yeah↑ It was ea:sy enough.
Teacher: Oh (.) it was↓ easy enough. Yes sometimes we are light. Sometimes like our mommies and daddies can pick us up cause we're not too: heavy (.) sometimes they say, "Oh you're getting heavy↑" cause we're getting bigger↑((pretends to weigh with hand)) we're growing and getting bigger but (.) right now we're kinda light (.) especially like Noah ((points to child)) Coal ((points to child)) they're smaller (.) so they're lighter ((lifts up)) (.) they're lighter than- >than some of us<.

In the second reading of *Someone Bigger* (Emmett, 2004), Ms. Vivian paused to explain the word "light." The episode presented above begins with Ms. Vivian's question directed at the class. Several children provided examples in lines 2-8 and Ms. Vivian provided feedback to some of the children, but not all, likely because some of the response overlapped and she lacked sufficient time. Her use of "could" and "might" in her responses to the children is indicative of her attempt to validate the children's responses as plausible. In one case, she corrected a child by directing stating in a low voice that she did not think the object named was light. In line 11, rather than giving a response, Andrea asked for Ms. Vivian's attention by saying "Hey, you know what? You know what?" Her speech overlapped with Tyrec's who gave another example of a light object. After Ms. Vivian's positive appreciation of Tyrec's answer, Andrea tried to obtain the teacher's attention again, but her speech overlapped with Tyrec's who made a comment following the teacher's feedback on his example of a light object. Rather than following up on Andrea's request, Ms. Vivian continued in line 16 with her goal of explaining the meaning of the word "light" and tried to steer the conversation back to the book.

Overlapping in speech with Ms. Vivian, Andrea called the teacher's name several times and explained that she needed to ask something. Noticing Andrea's insistence, Ms. Vivian responded to her request in a soft voice. After Andrea's contribution in line 32, Ms. Vivian exclaimed "Oh, really" and took a breath as if to continue reading. Only after Andrea followed up on her previous response to explain that she was "easy enough" did Ms. Vivian provide her with more elaborate feedback, making connections between the words "easy" and "light" and extending the classroom discussion to incorporate Andrea's response as valid. In this episode, Andrea's persistence and desire to contribute to the classroom discussion particularly stand out. Notable, however, is also Ms. Vivian's inclination to closely follow her goal for the activity and

only briefly acknowledge Andrea's contribution which initially appeared unrelated to the activity.

In comparing the interactions between the teachers and students with disabilities in their classrooms before and after the start of the intervention, it becomes evident that repeated book reading supported a more active participation in the book reading for all children in the classroom. This was supported not only through the analysis of the videotapes collected at Times 1-4, but also through data collected from other sources. As early as the first month of intervention, Mr. Steve wrote in his reading log: "More students recalled events from the story. I tried to call more children to work on getting more of them involved." and "Called on each child at different times to get everyone involved." Mr. Steve expressed his desire to provide all children with an opportunity to participate in the activity in a team meeting as well. He stated:

> "I call on everybody now. I make them raise their hands and then call them, different kids all the time not just the ones that talk all the time. I try to get everybody to answer one or two questions throughout the story, as I read the story asking everybody. So, everybody is getting a chance and not my three or four kids dominating the conversation."

When completing his reading log, Mr. Steve oftentimes noted that all the children in his classroom had participated in the activity and commented, "Each child took part in retelling the events in the book. Everyone raised a hand to get a turn to tell what was happening" and "Everyone seemed really engaged in the story and helped answer questions/ask questions."

In contrast to Mr. Steve's approach, Ms. Vivian was less consistent in ensuring all children had an opportunity to participate and stated in the same team meeting:

> "It's kind of a group discussion as far as we go. It's a little more… I guess because we have a lot more younger ones so they don't… they're still learning to kind of have patience and raise their hands, so… they kind of like just shout out. "

Referring to the rather loud reading environment in her classroom and the frequent interruptions in the activity, Ms. Vivian stated:

> "I ask them [to be quiet], but a lot of times… I often leave that for like Aura [teacher assistant]. She corrals. She, you know… "be quiet, it's story." Sometimes I do, but that's one of those attention things. "Ok, I've got these 10 listening, if I take two minutes to talk to Gina and explain to her that she needs to be quiet, so the rest of us can hear, I've already lost half the battle. That's how my group is. They're just very, I mean… So guess it's because I don't want to lose them. I don't want to lose them."

She also noted that trying to ignore children who are being disruptive was an attempt to avoid fueling their behavior. Reflecting on Gina's behavior, Ms. Vivian commented:

> "Gina does that attention getting. She's doing that to get attention so most of the time I try to ignore so that I'm not feeding into that and hopefully she'll come back. But… She… She's very smart. You just don't know. She will go and choose to not be at circle, she used to sit at the table and write or whatever, or something quiet, but she doesn't keep it quiet. She plays over there and she gets loud and tries to push the envelope, get other toys, or this, that or the other."

Aware of the need to be consistent and clear in expectation related to classroom behavior, Ms. Vivian stated: "Aura and I… we're really thinking of just being firm. Being a lot more firm with… especially her [Gina]. Ones that… they understand, they're just being defiant. They can do it, she can sit and listen to the story, she just doesn't want to."

Over time, classroom observations and discussions with Ms. Vivian helped better understand her approach toward classroom management. She did not view herself as a strict disciplinarian. A particular day in the classroom stands out as representative. Throughout the year, Ms. Virginia, the cook, has provided support in the classroom, especially with transitions and classrooms management when needed. When Ms. Aura was taking a day off, Ms. Vivian expressed how thankful she was for Ms. Virginia's help with redirecting some of the children and telling them, "Listen to Ms. Vivian, you have to do what Ms. Vivian said." Ms. Vivian

commented that she can't always do that. "I am more motherly, that's how I am" Ms. Vivian clarified.

Nonetheless, Ms. Vivian was of the opinion that all children have gained from the book readings that were taking place in the classroom, even as they were not always directly participating in the entire activity. Regarding Gina, Ms. Vivian stated: "She is getting some, 'cause I'll ask her a question, she'll sit there even if she's over there drawing or playing. At the end of the story I'll ask a question and she, most of the time can answer the question." Referring to Jack, Ms. Vivian explained:

> "Gina or somebody wanting attention will go into the house area with Jack and then it's a big mess. Because Jack wants- Jack needs the seclusion. Jack needs to pull himself out of the circle and he'll sit in dramatic play and he'll listen to the story. But he needs to be alone, he's just sitting there, holding something or rocking and totally zoned out, you would think, but he is listening to the story. He'll say "green" or something like that related to the story. Like we were reading the story about leaves or something one day and he was over in the house and I was asking them questions about the colors or something and he was going "Green, red."

In the final team meeting, when asked to reflect on what the children in their classroom have learned throughout the year and the changes they have noticed, Mr. Steve stated:

> "Some of my lower functioning kids in the class are talking more about the story, you know? They're wanting to answer instead of me having to call so many people. A lot of them are raising their hands because now they want to share. And so if anything it's got them to want to talk more in front of a group. 'Cause some of the kids are kind of shy about… they don't want all that attention on them. So over the school year, it's caused them to let some of that go and be okay with "Hey, it's all right that I tell what I think too." Being able to do all that, taking turns, not arguing with somebody because they think different than you, you know? Being able to understand some of the social skills as well. […] For a lot of the kids I think it developed that social skill of "I don't have to believe what others do, I can have my opinion and that's okay. And I think that made it easier for some of these kids to talk a lot more 'cause they felt more comfortable."

Ms. Vivian noted the children's "love and enjoyment of reading" in her final social validity survey. She explained, "At the beginning, they didn't wanna sit, they didn't wanna do it, you know, they fought me, but now it's like "Will you read me this story?" To exemplify what

the children in her classroom had learned from the repeated book reading activities, Ms. Vivian provided an example of Jack's achievement in connection to the book *Are You Living* (Salas, 2009):

> "Recognition of sounds, rhymes, familiar and unfamiliar situations, like applying and relating it to their own life experiences and real or make-belief or pretend. I think that they've really, through the stories that we've read have gotten a grasp on a lot of them things. Even like the "living and non-living." I remember […] Jack sat in the middle of the sun [on the carpet] and we all took turns naming things around the classroom that were living and non-living. And he pointed out the rug "This sun, not living. This sun not living. This cloud, not living." I said "What's something that is alive? What's something that breaths?" "Dude", his dog. "Dude, Dude living." So I think it realty… I think it was really, really good experience."

Synthesis of Findings

An investigation of the patterns of relationship across both qualitative and quantitative data uncovered four themes that characterized both types of data: (1) Teacher intentionality, (2) Children as active learners, (3) Management style influences implementation, and (4) Impact on classroom teaching.

Teacher Intentionality

The influence of the intervention on the two teachers' manner of supporting children's early literacy development through book reading was evident in both quantitative and qualitative data. The results of the coding and analysis of teachers' language use during repeated book readings at Times 1-4 align with findings from the qualitative analysis closely examining episodes of teacher-child interactions in the context of book reading. Ms. Vivian and Mr. Steve became more intentional in using language that engaged children with both literal and inferential language and more purposeful in supporting vocabulary development.

Before the intervention, both teachers provided limited opportunities for vocabulary learning and engaging children in conversations that supported extended thinking. Results from

quantitative data analysis indicate that, at Time 1, the total number of utterances teachers used decreased from the first to the final reading. Further, readings in both classrooms decreased in the complexity of teachers' language across the readings. In particular, very limited opportunities were provided to engage children at the highest level of abstraction, reasoning about perception. In Ms. Vivian's classroom, a few questions were asked to have children explain story actions or make predictions, but these oftentimes remained unanswered as she did not actively pursue a response from the children. In Mr. Steve's classroom, a high proportion of Level 3 utterances was observed, but most focused only on making connections and comparisons between the text and the children's life experiences and often used closed yes/no questions. Teachers' feedback to children during reading was generally a brief acknowledgement or repetition of the response.

Qualitative analysis of episodes from the readings at Time 1 supports the quantitative data outlining the proportion of utterances teachers used at each level of abstraction. The limited focus on vocabulary development is evident in the scarce number of instances when teachers focused on new vocabulary words across the three readings. Teachers were also brief when introducing new words and focused on delivering an explanation without engaging children and building on their prior knowledge. Further, teachers did not systematically focus on selecting specific key vocabulary or emphasizing words across the three readings.

Children were seldom asked to make judgments and inferences based on information presented in the book or to predict, problem solve, or explain. The use of closed questions further limited opportunities to engage children in extended conversations. Opportunities to actively engage in the reading activities were particularly limited for children with disabilities in both classrooms.

As the intervention started, quantitative data indicated that teachers extended their use of language in book reading activities since the total number of utterances across the three readings increased in both classrooms. Teachers used repeated book reading activities to provide children with more input on the highest level of abstraction, thus engaging them in making predictions, explaining, and problem solving. More diverse opportunities were also provided to use language falling at the third level of abstraction by making judgments or inferences, providing a point of view or identifying similarities and differences. Instances in which children were introduced to new vocabulary were also more prevalent compared to the readings at Time 1. In their feedback to children, teachers became more purposeful in waiting for children to respond and provided feedback that extended responses, asked for clarifications or provided scaffolding for answering more complex questions.

Qualitative analysis of episodes from the readings at Times 2-4 support the finding that teachers began engaging children in extended conversations and emphasizing vocabulary consistently and systematically across the readings. Focusing on the same words throughout the week, teachers provided children with opportunities to recall words and encouraged them to use the new words in classroom discussions about the storybook. Further, as they focused on new vocabulary words, teachers stressed activating children's background knowledge and explained new words by making relevant connections to children's prior experiences within and outside of the classroom. From the analysis of episodes in which teachers interacted with children with disabilities it was evident that both teachers became more persistent in actively engaging children in the book reading activities. They provided all children with opportunities to contribute to the book reading and encouraged them to use various means of expression when appropriate (e.g., pointing, gestures).

Teacher reading logs, observation field notes, and direct quotes from team meetings further support the finding that purposefully teaching vocabulary and asking more question to develop children's inferential language were strategies both teachers gained as a result of participating in the repeated reading program. Results from the quantitative analysis of teacher language during book reading in the two control classrooms further clarified that simply re-reading books does not bring about change in the teachers' use of language. Rather, adopting the repeated book reading approach (see pp. 14-15) assisted teachers in the intervention classroom to provide children with more enriching book reading activities. Mr. Steve and Ms. Vivian became more intentional in using strategies to support inferential language and emphasize vocabulary as a result of participating in the intervention.

Children as Active Learners

Quantitative analysis of pre- and post-interventions child assessment scores indicated that children in intervention classrooms made significantly larger gains in their discourse ability score compared to children in the control classrooms. Children who participated in the book reading intervention also experienced a statistically significant change in their vocabulary development from pre- to post-test, while children in the control group did not experience a significant growth in their vocabulary scores. The coded teacher language and the qualitative analysis of teacher-child interaction episodes provided further insight into children's participation in the book reading activities before and after the intervention.

The proportion of feedback and acknowledgement provided by both teachers increased as the intervention started, indicating that teachers responded more often as a result of children's more frequent contributions. Further, an increase in the proportion of feedback and acknowledgement as children were being reintroduced to the same book was observed, which

indicates that more opportunities for children to actively engage in the activity were provided by repeated exposure to the text. The increase in level 2 utterances in both classrooms, particularly in second and third readings, indicate that children had more opportunities to participate in retelling the story. Prompts such as "Who remembers…" or "What happened…" were often used to engage children in describing information and recalling story actions. Through their feedback and acknowledgement of children's responses, teachers also provided further opportunities to engage in the activity by asking them to clarify responses or to provide further explanation. This is in contrast to the pre-intervention readings, when teachers' feedback was mostly a brief acknowledgement of children's contribution.

Compared to the pre-intervention readings, in the readings at Times 2-4 children had more opportunities to engage with both literal and inferential language. Teachers' purposeful use of questions that asked children to make inferences, judgments, predictions, or problem solving around concepts from the story ensured that children were actively engaged in discussions that extended their understanding of the story. Instances in which teachers' use of inferential language in classroom conversations was prompted by children asking questions about the text were also present and suggestive of the children's high level of engagement in the activity. This contrasts with the pre-intervention readings when such opportunities were either limited or absent. For example, in Ms. Val's classroom, inferential questions remained unanswered at times, while in Mr. Steve's classroom inferential utterances tended to be nested within interactions in which the teacher was providing extensive explanations with little to no input from children.

Findings from the qualitative analysis of teacher-child interaction episodes provide further evidence to support the conclusion that children became more actively engaged in the

activities throughout the intervention. At the beginning of the year, the episodes in which the two teachers introduced new vocabulary words presented children as passive learners and receivers of information. In subsequent episodes, however, children's participation was elicited as new words were being introduced. This provided children with opportunities to express what they knew and make connections to their lives and prior experiences. In addition, second and third readings presented opportunities for children to recall words from previous reading(s) and to use the new words in their contributions to classroom discussions. Children frequently contributed to discussions in an enthusiastic manner and consistently showed a desire to participate in the activity. In Mr. Steve's classroom, the children regularly raised their hands to express their interest in responding to a question, asking a question of their own, or making a comment. In Ms. Vivian's classroom, children's enthusiasm was evident in the animated discussions during book reading in which multiple children contributed with responses as questions were asked.

A shift toward being more active in book reading activities was noticed for children with disabilities as well. Before the intervention, in was not uncommon for children with disabilities to be either outside of the group as books were being read or to be a passive participant in the activity. Moreover, the most prevalent type of language interaction between teachers and children with disabilities involved management talk. A single instance in Ms. Vivian's classroom was observed in which a child with a disability actively contributed to the activity at the teacher's request. As the intervention started, multiple instances were noted in which children with disabilities showed interest in the reading activity and participated by providing a response to a teacher's question. As they provided responses, children were encouraged to point to the book or use gestures to express themselves, which enhanced the opportunities available for

participation. Lastly, children with disabilities were also observed showing interest in initiating discussion during reading and making relevant connections to the content of the book.

Both teachers noted an increased interest from the children in their classrooms to actively participate in book readings and talk about concepts from the book outside of the readings activities. Ms. Vivian's remark about children having developed a "love and enjoyment of reading" particularly stands out as a statement of the positive influence of the repeated book reading program on the children's active engagement with books both within and outside of the reading activities.

Teacher Management Style Influences Implementation

While both teachers in the intervention classrooms adopted the same repeated book reading approach it was evident from both quantitative and qualitative data sources that implementation was influenced by the manner in which each teacher organized their classroom. More specifically, each teacher's approach toward classroom management was reflected in how books were being read. The coding of teacher's language during book reading indicated a higher percentage of management talk in Ms. Vivian's classroom compared to Mr. Steve's classroom. Further, there was a higher proportion of teacher language used for interaction and turn taking in Mr. Steve's classroom (e.g., "Ok… Alright, one more person, anybody else?").

In the first case, Ms. Vivian redirected children throughout the reading activities, calling on them individually and asking them to attend to the story. While management talk did decrease from pre-intervention to subsequent readings, particularly as the children were provided with more opportunities to be actively engaged in the story, interactions focused on classroom management continued to negatively interfere with the course of the activities. In particular,

there were missed opportunities for the group to engage in extended conversations when Ms. Vivian focused her attention on redirecting the behavior of individual children.

In the second case, Mr. Steve used a higher proportion of interaction and turn taking language during activities in his classroom. These utterances were mostly used to provide individual children with a turn to talk and to manage turn taking interactions. In some of the activities, it was notable that the proportion of language focused on interaction and turn taking and management talk increased simultaneously. Since management talk was often used to remind children to raise their hands and wait to be called by the teacher to have a turn in conversation, the positive connection between the two types of interactions becomes evident. Moreover, management talk was at times interwoven with language focused on turn taking as Mr. Steve asked children to raise their hands and explained that doing so would allow everyone to have an opportunity to participate.

The influence of each teacher's management style on the implementation of the intervention was further evident in the close examination of teacher-child interaction episodes. In Ms. Vivian's classroom, children's overlapping contributions made it difficult to acknowledge and provide feedback to everyone. At times, children raised their voice when responding which further contributed to creating a loud atmosphere. While interaction episodes from this classroom often showed vivid enthusiasm on the part of the children to participate in the activity and a responsive teacher, the rapid pace at which interactions occurred lead to some missed opportunities to support children's learning. This resulted, at times, in children being overlooked as they tried to contribute to the discussion. Further, individual children who left the activity at times to play in other areas of the classroom were observed disrupting the course of the reading activities on several occasions.

In Mr. Steve's classroom, children appeared to be aware of the expectation to raise their hand and wait to be called by the teacher in order to contribute to the activity and did so regularly. This contributed to Mr. Steve's goal of providing all children with an opportunity to respond, which appeared to be particularly useful for actively engaging children with disabilities. However, this management style during reading also contributed to creating a medium in which the teacher had the key role of deciding which child had an opportunity to participate and when and of controlling the course of the conversations. Still, Mr. Steve was respectful of each child's contribution and emphasized the importance of each everyone's individual response by going back to a child when they did not provide a response the first time and by encouraging children to listen to their peers. The simultaneous increase in management talk when more talk was focused on interaction and turn taking may indicate that children had a difficult time following this routine at times and had difficulty patiently waiting for their turn and a time to be called by the teacher to respond.

Impact on Classroom Teaching

The repeated book reading intervention impacted teaching in both classroom beyond the book reading activities. As the intervention began, both Mr. Steve and Ms. Vivian started planning other classroom activities around the weekly book they were reading, although their participation in the study did not come with an expectation that they would do so. Both teachers began emphasizing vocabulary and creating opportunities for extended conversations of weekly topics at other times during the day and in various centers of the classroom. Lastly, they both acknowledged the importance of listening to children, activating their background knowledge to support learning, and the essential role of planning in implementing successful learning experiences.

The quantitative coding of teachers' language use during book reading provided some examples of how the intervention may have impacted other aspects of the classroom. One such relevant instance took place after Mr. Steve's introduced the new story at Time 4. He announced, "We have a brand new story this week and it has to do with the zoo. That's why we were working on our masks and stuff today. And this week, we're gonna be learning how to make maps of the zoo. And at the end of the week, on Friday, we're gonna build a zoo." The different activities Mr. Steve planned around the book, in which the main character was Amos McGee, a zookeeper, clearly illustrate his intention to embed the theme of the book throughout the week. Classroom observation field notes and teachers' reading logs record numerous instances in which the teachers planned their weekly activities around the theme and concepts from the book they were reading.

When the class was reading *"I Have a Little Problem", Said the Bear* (Janisch, 2007) Ms. Vivian planned several activities around the theme of the story and related concepts, such as "hibernation." A large painted cardboard box was used to create a bear cave in the quiet area where the children could go hide, rest, and pretend they were bears. As a group, they went on bear hunts around the building and had discussions about what bears do in the winter. Ms. Vivian encouraged the children to use the word "hibernation" in their conversations, explaining that it means a "deep sleep." By the end of the week, many children were able to easily articulate why bears hibernate in the winter (e.g., "they're tired", "there's no food"). To end the week, Ms. Vivian planned a pajama day when the class had hot chocolate, hibernated like bears, and after reading the book shared personal stories of when they were scared, just like bear in the story was afraid of the dark.

For the week when the class was reading *Bug Safari* (Barner, 2006) Mr. Steve planned several activities related to bugs. In the Science area, children explored toy bugs of different shapes and sizes using magnifying glasses. Mr. Steve joined the children in the area and encouraged them to count the number of legs each bug had and directed their attention to the different body parts. In the art area, children were encouraged to draw or create their own bug. The library area included several different books about bugs that the children took time to explore during free play. As they danced as a group, one of their daily routines, Mr. Steve prompted the children to move like different types of bugs and also stop and pause, pretending to be flies on the ceiling.

In their responses to the social validity survey, both teachers noted this aspect of planning classroom activities around the theme of the book. Ms. Vivian explained that she planned extension in dramatic play, quiet areas, and "Incorporated themes and subjects based on main ideas, characters, and scene of stories in all learning areas." Mr. Steve also noted "I developed more activities to support the story." When asked what they enjoyed best about using repeated book reading in their classroom, Ms. Vivian wrote "New stories, new teaching strategies. Expanding the story into the lesson plan. Digging deeper – watching their comprehension and vocabulary skills increase" while Mr. Steve noted "Everything honestly especially once I got used to it."

Notes from the regular team meetings with the teachers provided further insight into the teachers' perspective on the impact of the repeating book reading intervention on their classroom teaching. Reflecting on the change that he experienced, particularly related to planning and preparing for activities, Mr. Steve stated:

> "I think for me just making me think more about the story in general. What questions I'm gonna, where we stop and focus our discussions on and also my activities. How can

> I create science, math, dramatic play, block area, you know, whatever are in the classroom, how can I tie an activity into the story in each of those areas or a few of them. Just how I plan. Before I might flip through the book real quick to make sure, are there any words that I can't say very well or just get a quick gist of what the story is about whereas now I am sitting down and looking thought it a lot more and so I'm preparing better, especially for story time, 'cause that's the one time of the day when you have their undivided attention. The rest of the day, at free play, you have their attention a little bit, but they're also, they can see their best friends over here playing this, so I wanna hurry and get done with this so I can go over there, whereas story time, they're all right there. They're all right there, ready to listen, ready to go, if you're not on it and know what you're doing, they're not gonna get out of it as much as they could have. So I really try to do that a couple days before. On Friday I will look through the book and start thinking "Okay, you know, maybe we could make a craft based on this part of the book or let the kids write a story, let them develop their own little story based on the character and things that happened, which we do a lot know. I try to do some kind of book every week, at least once a week, where they make their own story."

Ms. Vivian also noted the importance of thinking ahead of time about questions to ask during book reading. Further, she explained how this differs from her previous approach to asking questions:

> "The questions we asked before, we asked them on purpose. But now there's a deeper purpose. There's a purposeful questions there, like we were asking those questions before to give them a chance to be a speaker or to see if they knew… whatever. But now it is a little bit more like their personal thought, what are they thinking?"

Further, Ms. Vivian emphasized the opportunity extended conversations provided for children to express their feeling. "It opens up an opportunity for them to share their feelings, especially when you ask "What would you do if you were treated like that?", she explained.

Mr. Steve also explained how stories could be used for more authentic assessment and progress monitoring, "Maybe there's a week with a story that ties into a Galileo[1] skill and I can use that as a way gauge do they really know this versus just sitting down one-on-one and asking, maybe they don't understand it, but after hearing it in the story, it helps them." He also emphasized the opportunity the repeated book reading program provided to focus on concepts

[1] The program's progress monitoring system.

that he otherwise may not have introduced in his classroom due to lack of resources and an understanding of how more complex concepts could be introduced to young children. He explained:

> "We got to do a little bit more as far as science that maybe I hadn't done in the past because I wasn't sure of how to introduce it. Or, the book you got for us was a really good one that helped with that, whereas we didn't have very much as far as the living and non-living. What we have access to here at school is zero and the library… it's more the teenager-adult books about living and nonliving. The one you got for us was perfect."

Both teachers agreed with the value of having children ask more questions, which was something they both noticed during the repeated reading activities. Mr. Steve noted that he valued children's questions for the opportunity they provided to understand how additional classroom experiences could be planned to support areas of need:

> "Sometimes we assume they know this or that, so we steer away from those things because we assume they know it, but then when they ask something specific, "Okay, they don't know it as much as I thought." It redirects my focus in a different way that maybe I wouldn't have gone to at all, or maybe as frequently."

Ms. Vivian noted that children's interest in the book extended beyond the book reading activity and was pleasantly surprised to observe the impact of book related discussion at other times during the day. She presented the following interaction in a team meeting, and expressed how it had caused her to extensively think about the impact of their class discussion during the reading of *What Will the Weather Be Like Today?* (Rogers, 1989):

> "A child was waiting for his mom at the end of the day "and he said to me "You know, what if it stormed every day?" We didn't ask that question at circle, we asked about rain, and snow and hot. It was like it was really on his mind. "Ms. Vivian, really, what if it stormed every day?" and I said "I don't know, I might be scared if it stormed every day. "A tornado might come. " "Oh no, a tornado, have you ever been in a tornado?" and he goes "No!" Then I said what would you do if you were in a tornado? And he was able to tell me […] I thought about it a lot this weekend. Wow, that was actually… I mean he is one of the older and he is very bright, but still… That was a very good question."

Reflecting on the value of seeing children ask questions and be interested in the story, Ms. Vivian related this to adults' appreciation of reading and explained:

> "It tells me that they were intrigued, they want to know more, they're caught on a hook. You know, when you read a good book, I just finished The Hunger Games series a few months ago, you can't put down, you wanna know what is happening next, why did this happen or what. I think that's how it is with them. They're hooked. You captured something in them. They wanna know more, they wanna know more and I think that that's why we do our job."

CHAPTER 5

DISCUSSION

In their classic study, *Meaningful Differences in the Everyday Experiences of Young American Children*, Hart and Risely (1995) observed over 40 families and used longitudinal data to illuminate how language interactions within the home influence children's language learning. The authors presented the case of Inge, a 23 months-old girl and her mother. The one-hour observation portrayed a caring, concerned, and nurturing mother, who manifested her affection for her daughter by holding and kissing her, while also holding her to certain standards for appropriate behavior. The mother repeated Inge's attempts to pronounce words and described things that were happening in the environment, but did not engage her daughter in a conversation, nor did she elaborate on Inge's initiations. Most feedback to Inge from the mother was of corrective or critical nature and more than 50 child initiations did not receive a parental response (Hart & Risely, 1995). Clearly, these types of interactions are not representative of all families from less economically advantaged homes. However, Inge's experiences help to highlight the importance of having access to rich early language opportunities and raise a flag about the value of providing all children with such opportunities.

It is well acknowledged that while all children have opportunities to develop critical language skills within their homes and communities, the frequency of these experiences can vary greatly (Hart & Risley, 1995; Heath, 1983). It can also be the case that children have opportunities to develop language skills that are valued within their communities, but these may not correspond to what is emphasized within the schools. Heath's (1982) work describing how children learn to use language structures specific to their community environments clearly illustrated this instance. Some children, for example, may be raised to engage in conversations

with adults as equal partners from an early age, while others are taught to listen and be respectful of others. Unfortunately, the consequences of having diverse opportunities to learn and use language may be differentially reflected in the children's success with literacy and academic achievement in school. Later in life, early language experiences may impact children's ability to secure the skilled jobs that are available in our increasingly technological society, jobs that emphasize critical thinking, problem solving, and having the tools to continually access knowledge.

Even as children's trajectories of language learning may vary, preschool classrooms have the vital role of providing all children with experiences to support the development of a broad range of early literacy skills. To become good readers, children need to acquire a variety of early literacy skills, including skills related to decoding text, but more importantly skills that will support reading comprehension, such oral language that also supports critical thinking and problem solving. Yet, despite the increased emphasis in early literacy in preschool, preschool classroom studies reveal that teachers tend to emphasize code-related skills in their teaching and focus less on engaging children in rich conversations that enhance vocabulary, conceptual knowledge, and children's use of abstract language (Dickinson & Porche, 2011; Dickinson et al., 2009; Hindman & Wasik, 2008). Since teacher support for extended classroom discourse is a particularly robust predictor of later achievement in literacy, continued efforts to enhance the quality of classroom discourse and teachers' interactions with children are essential (Dickinson et al., 2006). This is particularly relevant in classrooms serving children at-risk for reading difficulties, whose home environments may provide limited opportunities to engage in extended conversations (Hart & Risley, 1995; Heath, 1983).

The purpose of this study was to examine the effectiveness of a repeated book reading intervention and its impact on teachers' language and children's early literacy development. Specifically, this study investigated the change in teachers' language use following a repeated book reading intervention and measured children's outcomes for vocabulary and inferential language skills from participating in a 28-week intervention. Two Head Start teachers and the children in their classroom participated in the intervention by reading a book three times each week following the repeated book reading approach, while two teachers and their classrooms constituted a control condition in which books continued to be read "as usual." A pretest-posttest quasi-experimental group design was used to investigate the effect of the repeated book reading intervention by assessing the language and literacy outcomes of children who participated in repeated book reading compared to those who engaged in book reading "as usual." The design further enabled the researcher to investigate the influence of the intervention on teachers' language use during book reading by videotaping and analyzing book reading activities at four different times throughout the year.

Findings indicated that, in the intervention classrooms, teachers extended their use of language during book reading. For both teachers, the average number of utterances across the three readings increased from the beginning to the end of the study. While third readings prior to the intervention resulted in the lowest number of utterances, there was an increase in the total number of utterances as a book was being re-read at Times 2-4. Further, using the repeated book reading approach enabled teachers to engage children in language interactions on the highest level of abstraction and provided more diverse opportunities to use abstract language (e.g., making inferences, judgments, and learning new words, and making connections to their lived experiences). In contrast, in the control classrooms, teachers' total number of utterances

remained relatively stable from the beginning to the end of the year. Further, pre- and post-intervention data did not demonstrate a change in teachers' use of inferential language or support for vocabulary learning.

Overall, these findings indicate that re-reading books in itself does not bring about change in the teachers' use of language. Prior to the start of the intervention, all four teachers consistently used literal language across multiple readings, but had difficulties engaging children in inferential language interactions. Becoming familiar with the repeated approach to book reading and strategies to support vocabulary development and inferential language skills assisted teachers in the intervention classroom in providing their children with book reading activities that enriched their language skills. As a result of the intervention, children in the two intervention classrooms registered significant gains in their discourse ability scores compared to the children in the control condition. Further, they experienced significant growth in their vocabulary compared to their scores at the beginning of the year, growth that was not evident in the control classrooms. These findings provide evidence that teachers can learn to effectively use repeated book reading to support children's vocabulary and inferential language skills.

A qualitative analysis using conversation analysis complemented the quantitative teacher language and child outcome data, providing a fine-grained description of how the intervention influenced teacher-child interactions during reading. This qualitative description provided a lens for closely examining how participants themselves experienced the intervention. In this manner, findings from the quantitative data were enhanced by an in-depth description of how the use of strategies to promote vocabulary development and engage children in extended conversations impacted the nature of language interactions between teachers and children. Of specific focus were teachers' interactions with children with disabilities.

Findings revealed that, prior to the intervention, little emphasis was placed on vocabulary. Mr. Steve and Ms. Vivian seldom noted new vocabulary for children and when they did, words were either briefly introduced or children were provided with an extensive explanation that was ineffective in supporting children's learning. This finding was evident in the quantitative findings on teachers' language use. The qualitative analysis provided additional understanding of the teachers' practice, the strategies they used to support learning, and children's response. This close examination illustrated how the intervention enabled the teachers to become more attuned to children's knowledge of specific words and their understanding of provided explanations. Most importantly, children were encouraged to become active participants in the construction of knowledge rather than passive recipients. In their interactions with children with disabilities, teachers' pre-intervention emphasis on managing children's behavior expanded to include a variety of language interactions in which children began showing interest in the book and actively participated in the discussion. This finding suggests that when teachers use effective strategies to engage children and support learning for all children, children with disabilities benefit and become active participants.

The use of a mixed-methods design allowed for an investigation of patterns that emerged across the quantitative and qualitative data providing an opportunity to better understand each type of data and draw more informed conclusions about the effectiveness and feasibility of the intervention. A first emerging pattern related to the change intervention teachers registered in their intentionality about supporting early literacy development. The intervention appeared to influence Mr. Steve and Ms. Vivian's view of themselves as teachers who supported children's learning and early literacy development. The positive results of the intervention support the growing awareness in the field of early childhood education about the importance of teachers

being mindful of how they plan and deliver instruction (IRA & NAEYC, 1998). Further, this finding suggests that teachers can become more intentional in their teaching as a result of professional development focused on promoting the use of strategies to support language and literacy development. A second pattern related to children's transition toward a more active participation in book reading activities. As the intervention proceeded, children became more likely to ask questions and contribute to classroom discussion. The growth in children discourse ability and vocabulary scores, supported by their active participation in discussions as illustrated in the qualitative data, indicates that such participation is supportive of language and literacy growth. Therefore, preschool educators should strive to create environments that are conducive to extended conversations about the book they read and encourage children to think critically, make connection, predictions, problem solve, and explain their understanding.

Teachers' management style influenced how the intervention was implemented in their classroom. In Ms. Vivian's room, classroom management issues often interfered with learning opportunities. Teacher-child interactions focused on classroom management decreased as the year progressed; there were also attenuating circumstances with new children joining the classroom mid-year. Yet, Ms. Vivian's management style clearly influenced how the intervention was delivered. Her self-description as being more "nurturing" toward the children suggests that her approach to classroom management was rooted in her beliefs and how she perceived herself as a teacher. Quite the opposite, in Mr. Steve's classroom, an orderly progression of each activity in which children raised their hands and waited to be called to participate also influenced the implementation of the intervention. On the one hand, this provided all children with the opportunity to actively participate in the activity, including children with disabilities. However, children engaged in the activity only when called and this

limited opportunities to support naturally emerging conversations. These findings highlight the need to consider how interventions designed to support language and literacy development can be best delivered while considering the existing experience, values, beliefs, and skills that teachers bring with them.

A final pattern revealed the impact of the intervention on classroom teaching in general. While the purpose of the intervention was to enable teachers to use effective strategies to support vocabulary and rich conversations that support language learning in the context of book reading, teachers extended their use of these practices across the day and into other learning areas. Increasingly, the teachers planned additional activities to support and extend concepts from the books used in the intervention. Both teachers reported noticing more active engagement on the part of the children, which prompted them to consider how to further enhance their learning. At team meetings the teachers reflected about this and considered how the intervention was being implemented in their classroom, which was probably conductive to supporting this process of extending the impact of the intervention to other classroom aspects. Considering the positive influence of this extended impact on classroom practice on classroom teaching and children's learning, it is important to consider how teachers can be provided with opportunities to reflect on their teaching. This may be particularly valuable when teachers are being introduced to new practices that have the potential to positively influence their work beyond the restricted contexts in which they may be introduced.

At the end of the study, when queried about their perspectives on the intervention, both teachers reported having had a positive experience with implementing the intervention in their classroom. Further, they both acknowledged learning to use new practices to support children's early literacy development. Both teachers noted that using the repeated book reading approach

at the beginning of the year was not easy for them. They noted the change it introduced to their classroom routine and the need to become comfortable using new teaching strategies. Nonetheless, both Ms. Vivian and Mr. Steve were committed to the using the intervention and continued to do so consistently throughout the year. It is therefore important when implementing such interventions to consider teachers' readiness to embrace new approaches to teaching as they are likely to influence the outcome of the intervention (Chen & McCray, 2012; Mihai, Butera, & Friesen, submitted).

Connections to Current Literature

Confirming findings from other studies, this intervention demonstrates that inferential language skills can be effectively supported in young children (van Kleeck, 2008), since after participating in the repeated book reading intervention, children registered significant growth in their discourse ability scores. The intervention further aligns with previous studies by showing that while preschool children can make inferences and use abstract language, preschool classroom do not consistently support the development of these skills. As in previous studies (e.g., Dickinson, 2003; Massey et al., 2008), prior to the intervention (i.e., at Time 1), the four teachers in the present study missed out on many opportunities to support more complex language skills while reading to the children in their classroom. This was evident even as teachers reported regularly using book reading in their classrooms to support early literacy development. As previously described in the literature, without intervention teachers often do not make optimal use of book reading to promote thinking and solidify children's understanding (Dickinson, 2001b; McKeown & Beck, 2003; Schickedanz & Collins, 2012; Schneider & Gorsetman, 2009).

As previously noted in other classrooms serving children from low-income families (Massey et al., 2008), classroom management interactions were frequent in all four classrooms. Through the qualitative analysis of teacher-child interaction episodes, this study further elucidated that language interactions focused on classroom management have the potential to directly limit opportunities to engage children in extended conversations. Prior to the intervention, the teachers' tendency to dominate conversations rather than engage children as active participants in the discussion was evident, similar to other studies that lament how classroom management generally characterizes teacher-child language interactions (Dickinson, 2003; Dickinson et al, 2011). For example, recall Mr. Steve's extensive explanation of the word "possum" and his scolding of the child who attempted to interrupt.

This study contributes to the body of research examining the value of book reading for supporting inferential language skills in several ways. First, the intervention was implemented by teachers rather than trained researchers (e.g., van Kleeck et al., 2006), which provides a beginning understanding of how teachers can be supported to intentionally target the development of inferential language skills in their classrooms. This aspect is essential considering that, in time, interventions implemented by classroom teachers may result in more sustainable outcomes and impact on children's development than interventions delivered by highly trained researchers. Second, the intervention was implemented in the context of whole classroom book reading, which is one of the most commonly used activities in preschool classrooms to support early literacy development. This suggests that the intervention could be implemented in most preschool classrooms, since the majority of teachers report reading books to the children in their classrooms. Third, most studies specifically focused on examining how teachers support inferential language skills have been descriptive and examined naturally

occurring activities (e.g., Tompkins, Zuker, Justice, & Binici, 2012; Zucker et al., 2010). The present intervention study provides evidence that teachers can be supported in their efforts to intentionally embed these skills in preschool classroom activities and presents a model for guiding these efforts. Fourth, to examine children's growth in using literal and inferential language skills, the present research used a measurement tool specifically designed to assess these skills (i.e., Blank et al., 2002). Compared to other studies which have used measures of vocabulary to determine the impact of teachers' use of inferential language (e.g., Zucker et al., 2010), the present study used a measure directly aligned to the targeted constructs (e.g., children's literal and inferential language skills).

Fifth, this intervention provides much needed evidence that book reading can effectively be used as a vehicle to improve meaning-focused early literacy skills beyond vocabulary development. As revealed by the NELP (2008) report, more research is needed to support the positive effects of activities such as book reading on a variety of oral language skills since much research to date has focused on vocabulary outcomes (see p. 24). Lastly, results from this study support findings from the research literature indicating that children's early literacy development is best supported when children are provided with ample opportunities for rich language interactions with adults (Lennox, 2013; McKeown & Beck, 2003; Wasik & Neuman, 2009). As previously noted, at the beginning of the study, none of the teachers were systematic in supporting vocabulary and engaging children in conversations that extended their thinking around concepts from the books being read. Nonetheless, as teachers became intentional about supporting vocabulary and making comments and asking questions that elicited inferential language, children in the intervention group registered gains in their early literacy skills compared to the control group. This study contributes to the growing body of knowledge

focused on helping teachers to become more intentional in planning instruction that supports essential early literacy skills that are infrequently studied in preschool classrooms (e.g., inferential language skills).

Implications for Practice and Teacher Professional Development

The findings of this study have important implications for practice, particularly for supporting early literacy development in preschool classrooms serving children at-risk for reading difficulties. Research indicated that children from low-income families are more likely to experience difficulties with reading by the time they reach fourth grade (National Center for Education Statistics, 2011), including difficulties with comprehension (Administration for Children and Families, 2010a). Since preschool age children have the ability to develop skills that support later reading comprehension, such as inferential language skills (Lennox, 2013; Neuman, 2010), preschool classrooms should ensure that children are provided with adequate opportunities to develop these critical skills. The present study provides evidence that preschool classrooms can successfully provide such opportunities to develop children's vocabulary and abstract language skills, and informs early childhood practices as to how these skills can be supported. Further, this research provides evidence for a model of supported book reading that can be applied in early childhood classrooms to promote preschoolers' early literacy development.

Teachers in this study became more intentional in supporting children's language and literacy development. This was evident in their use of strategies to support vocabulary and extend conversations, as well as in their systematic planning and mindfulness about how children's learning could be supported beyond the context of the book reading activity. It is important to note the role of coaching and support in this study. To achieve similar result,

interventions must include providing teachers with support to develop intentionality in supporting early literacy development. In the present study, teachers were provided with frequent feedback on their teaching and had opportunities to reflect on their practice through the regular team meetings. It may be important to consider that the intervention acknowledged teachers' preference for certain curricular themes and books were selected to complement their ideas. This likely validated the teachers' independence and sustained their involvement in the project. Mr. Steve in particular noted in one of the team meetings toward the end of the intervention that he might not have continued to participate in the study if his ideas hadn't been considered and if the intervention had proved to be too rigid (e.g., use of scripted curriculum).

While the training and subsequent coaching and team meetings provided teachers with knowledge and skills needed to implement the intervention, teachers were also provided with sample lesson plans to use in their activities. These lesson plans detailed how activities could be implemented and provided examples of questions and comments the teachers could use to extend children's understanding of the book and support vocabulary. Naturally occurring language interactions are difficult if not impossible to script, but the lesson samples appeared effective as a bridge to eventually independently develop opportunities to extend discussion and support vocabulary. When teachers have limited experience engaging children in rich conversations during book reading, they find it difficult to spontaneously engage in such language interactions (van Kleeck, 2008). This was initially the case with the two teachers in this study, in particular Mr. Steve, who feared that he was asking "the same question over and over again" in the first weeks of the intervention. Gradually, both teachers became more confident, relying less on the lesson samples, asking their own questions and emphasizing vocabulary they considered to be particularly relevant for the children in their classroom. It is important that future interventions

consider the level of support teachers need when implementing activities, as well as how teachers can be encouraged to take ownership of the intervention while respecting fidelity of implementation.

While this study focused on whole classroom book reading, the benefits of conducting activities in small groups are well acknowledged (Wasik, 2008). When reading books in a small group children are provided with more opportunities to actively engage and have closer interactions with the teacher. Whole classroom instruction is more likely to lead to management difficulties when teachers attend to individual children, which was evident in present study. Whole classroom activities are also described as an instructional format in which the balance of power leans toward the teacher and the children have more of a "reactive voice" rather than ample opportunities to engage in classroom discourse (Berk & Winsler, 1995, p. 116). In the present study, whole classroom book reading was used considering the limited support within the classrooms for using small groups with only one teacher and one teacher assistant. It is important to consider how teachers can be supported to read books in a variety of instructional structures, including small groups and with individual children. This would be particularly relevant for attending to the individual needs of children with disabilities.

This study also contributes to the professional development literature by providing evidence that teachers can learn to use interactive reading strategies, support vocabulary development, and ask more-open ended questions as they read books to children (e.g., Blamey et al., 2012; Milburn et al., 2013; Wasik & Bond, 2001; Wasik, Bond, & Hindman, 2006). In this study, it became apparent that professional development is more effective when it takes into account all the factors that influence a teacher's readiness to use a new practice (e.g., knowledge, skills, and dispositions). In the two intervention classrooms, teachers' implementation of the

intervention was influenced by their classroom management style, their dispositions toward what constitutes effective teaching, and their previous knowledge and skills related to supporting early literacy development. This perspective is aligned with Chen and McCray's (2012) Whole Teacher Approach to professional development, which considers the role a teacher's knowledge, attitudes, and practice play in professional development.

Limitations

The mixed-methods design employed in this study enabled the researcher to determine the effectiveness of a repeated book reading intervention and its impact on teacher language use, teacher-child language interactions, and children's early literacy development. The intervention was implemented in only two preschool classrooms, which limits generalization, and the conclusions that can be drawn from the findings. Further, a convenience sample of teachers who volunteered to implement the intervention in their classroom was used due to accessibility and in complying with the recommendation of the EPHS administration. Therefore, replication of this study with larger randomized samples is needed before findings from this research can be generalized to other preschool classrooms.

It is important to note, however, that the researcher took measures to ensure that participants in the two conditions were comparable, which is an essential quality indicator in quasi-experimental research (Gersten et al., 2005). This was ensured by considering teacher's professional experience, level of education, the classroom environment each teacher provided for supporting early literacy development, as well as the characteristics of the children in their classrooms (e.g., presence of disability).

Nonetheless, there were some difference between the two conditions related to the complexity of conducting research in classrooms serving children with disabilities and the

difficulties that Head Start programs may be confronted with due to lack of resources. A difference between the two conditions was reflected in differences between the severity of the children's disability. In the control classrooms, most children with an IEP had a speech and language impairment, while each of the intervention classrooms also included a child with developmental delay. Another aspect that differentiated the two conditions was that Ms. Jane, one of the control teachers, taught two classrooms of nine children each rather than a regular size classroom. One classroom met in the morning and one in the afternoon, for the same amount of time as all the other classrooms in the program. This arrangement was determined by the administration of EPHS because of the small size of the physical classroom. If anything, these differences strengthen the impact of the intervention. In Ms. Vivian's classroom, for examples, several children consumed most of the teacher assistants time.

The researcher's weekly presence in the experimental classrooms helped support the teachers in their implementation of the intervention and contributed to a more in-depth understanding of how the intervention influenced other aspects of the classroom. Yet, it is likely that being observed regularly and the desire to please the researcher may have influenced the teachers to consistently use repeated book reading in their classrooms and apply the strategies associated with the intervention.

While the assessors who evaluated the children at the beginning and the end of the study were trained special education doctoral students with experience in working with children and implementing assessments, not all were blind to the goals of the intervention and the children's assignment to groups. This may have influenced assessors and may weaken the validity of the testing results.

Lastly, a common limitation in classroom based research is for analyses to be conducted at the student level rather than the classroom level. It is argued that Type 1 error is increased when analyses are based on individual student scores given that students are nested in classrooms assigned to a control or experimental condition (Blair, Higgins, Topping, & Mortimer, 1983). Further, when the student is used as the unit of analysis classroom effects are not taken into consideration. In the present study, using the classroom as a unit of analysis would have resulted in a small sample size (n = 2 classrooms in each condition), which would have limited the possibility to conduct statistical analyses. Larger scale studies with a higher number of classrooms in each condition that allow the use of statistical analyses at the classroom level are needed to replicate the validity of the findings from this study.

Recommendations for Further Research

Findings from this study demonstrate that preschool teachers can be supported to use practices that enhance children's vocabulary and discourse ability skills. Two major directions for future studies derive from these results. First, larger scale randomized studies using the repeated book reading intervention are needed to replicate the findings from this research and allow for generalization of findings to other preschool classrooms. Extending coding to include children's language might provide a better understanding of how teachers' literal and inferential language is related to children's responses. Second, research is needed to determine what type of professional development opportunities would be most effective to train teachers to use the repeated book reading framework employed in this study. The literature presents mixes results for professional development initiatives focused on teachers' use of practices that support meaning-focused skills. For example, Powell et al. (2010) implemented a one-semester professional development intervention focused on improving Head Start teachers' use of

evidence-base practices to support both oral language and code-focused skills. Study results indicated that, compared to control teachers, teachers who participated in the intervention showed gains in practices used to promote code-focused skills, which was accompanied by positive effects on children's letter knowledge, blending skills, writing, and concepts about print. However, the intervention did not show gains in teachers' use of practices to support vocabulary development and use of language during large group activities or free time play, as well as no effects on children's vocabulary.

Similarly, in Milburn and collagues' (2013) study professional development aiming to enhance preschool teachers' ability to facilitate conversation during book reading did not impact educators' use of strategies to support word learning. Nonetheless, other studies, such as Wasik and colleagues' (2006) year-long professional development intervention focused on facilitating conversation during book reading yielded positive results in children's receptive and expressive vocabulary outcomes. More research is needed to better understand what features of professional development are most likely to enhance teachers' ability to support children's meaning-focused skills. Based on the length of the present study, as well as that of the study conducted by Wasik and colleagues (2006), it is likely that longer interventions in which teachers are provided with regular coaching may lead to the best results. Further, it is possible that interventions focused specifically on supporting language development rather than a broad array of early literacy skills, as in the Powell and colleagues (2010) study, is more likely to help teachers learn to use practices that support meaning-focused skills.

An avenue to extend the findings from this study would be to analyze the extratextual talk that takes place before, during, and after reading and in an attempt to understand how it fosters literal and inferential language skills. In a previous study, Zucker and colleagues (2012)

found that extratextual talk before, during, and after reading was associated with children's expressive vocabulary, preschool letter knowledge, and kindergarten receptive vocabulary. In another study, teachers' talk before, during, and after shared reading had differential effects on receptive and expressive vocabulary. Teachers' talk about vocabulary after reading benefited children's expressive vocabulary, while the placement of teacher talk did not impact children's receptive vocabulary. Untangling how talk before, during, and after reading supports literal and inferential language skills would provide an understanding of how activities can be best structured to support language and literacy development.

Although it was beyond the scope of this study, it would be important to better understand how repeated book reading can be used with different types of books since book genre may influence the early literacy skills that teachers emphasize when reading. For example, when reading rhyming books, such as Someone Bigger (Emmett, 2004), teachers in this study emphasized the repetition of the recurring words. Previous research demonstrated that more extratextual talk occurs when adults read informational rather than narrative genres (e.g., Price, Bradley, & Smith, 2012; Price, van Kleeeck, & Huberty, 2009), yet teachers spend limited time discussing informational texts in their classrooms (Zucker et al., 2010). Future research might explore how teachers can be encouraged and supported to use a variety of book genres to support children's early literacy development.

Future research might also investigate how the repeated book reading approach could be used with small groups or with individual children. While this would likely present added benefits, particularly for children with disabilities, future studies might explore the feasibility of using various instructional groupings within the constraints of the preschool classroom (e.g., only one lead teacher and a teacher assistant). Lastly, while the results from this study are

encouraging particularly considering the growth children in the intervention classrooms experienced in their discourse ability score, it would be important to understand how this experience will influence their future reading ability. As similar studies continue to be implemented to enhance preschoolers' inferential language skills, longitudinal studies should follow-up to investigate the impact on children's later reading achievement, an important goal of preschool early literacy interventions.

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Appendix A
Schedule of Activities

Time Frame	Research Activities
Aug. 30, 2013- Sept. 13, 2013	Recruiting participants and obtaining informed consent
Sept. 16, 2013 – Oct. 11, 2013	Pretest data collection: Child assessments Videotaping of three repeated book readings in each classrooms (Time 1)
Oct. 7, 2013	Teacher training
Oct. 8, 2013 - May 16, 2014	Implementation of the intervention Weekly classroom visits Dec. 10-13: Videotaping of three repeated book readings in the intervention classrooms (Time 2) Mar. 4-7: Videotaping of three repeated book readings in the intervention classrooms (Time 3)
Apr. 14, 2014- May 11, 2014	Posttest data collection: Child assessments Videotaping of three repeated book readings in each classrooms (Time 4)

Appendix B

Examples of Repeated Book Reading Activities

First Reading

A Sick Day for Amos McGee by Philip C. Stead

Materials

A Sick Day for Amos McGee by Philip C. Stead

Key Vocabulary Words

friendly, uniform, amble, chess, tortoise, handkerchief, rhinoceros, allergies, zookeeper

Description of Activity

1. **Before Reading**
   a. Introduce *main ideas*: This book tells the story of Amos McGee, a zookeeper, who is friendly and kind to animals and always makes time to visit them. One day the animals waited and waited, but their friend Amos did not come to visit so they decided to find out what happened to him.
   b. Show *front cover/ back cover/ title*: Read the title and ask the children to identify the characters on the front cover. Point out the Amos may be feeling sick because he has a red nose and is wearing pajamas. Ask children if they think the characters are being friendly as they play the game together and why (e.g., smiling, waiting patiently).
   c. Give *clues to vocabulary*: Share that the book has many examples of being friendly and being kind. Ask them to look carefully as they read for how Amos is being friendly. Also, share that there are a few pages without words in which they will get to tell the story.
2. **While Reading**
   a. Insert *vocabulary support*: Act or point to illustrations that clarify vocabulary. For example, point to the piece of cloth that Amos is using when reading "handkerchief."
   b. *Support/ extend comprehension*: As you read, make comments in 3-4 key points in the story to model thinking and promote children's understanding. This is particularly important with pages that do not have words as the children can tell the story. Concentrate on Amos's feelings and motivations. For example, comment "I am thinking that the tortoise is very slow and Amos is letting it win the race", then ask "Why do you think that Amos is letting the tortoise win?" As you read, make additional comments and then ask questions, "How do you think Amos felt when the animals came to visit?"
3. **After-Reading**
   a. *Ask questions that promote continued thinking*: For example, why did the animals go visit Amos? Ask for examples of how they saw Amos being friendly to animals at the zoo. Have children share how they can you be kind to their friends.

Tips for Addressing Universal Design for Learning for all Children

1. Multiple means of representation
   - Use the pictures, verbal explanation, and pointing to explain new vocabulary words
2. Multiple means of expression
   - Let the children respond by pointing or by using choral responding following the teacher's model
3. Multiple means of engagement
   - Ask engaging questions that prompt the children to predict what will happen next or make connections to their lives and experiences.

Second Reading


A Sick Day for Amos McGee by Philip C. Stead

Materials

A Sick Day for Amos McGee by Philip C. Stead

Key Vocabulary Words

friendly, chess, uniform, tortoise, handkerchief, rhinoceros, allergies, zookeeper

Description of Activity

1. **Before Reading**
   a. *Review main ideas/vocabulary*: Remind children that they have read this book before and they will remember some of the things that happened. Ask if they remember what happened to Amos and how the animals helped him.

2. **While Reading**
   a. Insert *vocabulary support*: Continue to emphasize vocabulary by offering more verbal explanation. For example, after reading that Amos and the elephant play chess, explain that chess is a board game that you play on a checkerboard with 16 pieces that have names like king and queen.
   b. *Support/ extend comprehension*: As you read, stop to make comments and ask questions to extend thinking. Focus on the other characters. For example, after reading that Amos always makes time for his friends, have children consider all the animals that he is friendly towards. Point out that the animals must have been waiting for Amos but he did not come, "Why is the owl scratching its head? Why is the bird wiping a tear on the rhinoceros's face?" When Amos does not show up for work one day, comment that you think they will go and visit him but you wonder how they will get there. Ask the children "Why were the animals waiting for the bus?" When animals get to Amos's house, wonder aloud what they will want to do with him since he is feeling sick. "Why didn't Amos and the tortoise race like they always did?"

3. **After-Reading**
   a. *Ask questions that promote continued thinking about the story*: What do you think Amos would have done if the animals hadn't come to visit him when he was sick? What other things could someone do to take care of a sick friend? Ask the children to think about other ways of being friendly and whom they could be friendly towards today. Share an example of what you might do and then have them share their ideas.

Tips for Addressing Universal Design for Learning for all Children

1. Multiple means of representation
   - Use of pictures, verbal explanation, and pointing out of words for story retelling
2. Multiple means of expression
   - Have children respond chorally and individually
3. Multiple means of engagement
   - Extend vocabulary and events in story to those familiar to children.

Third Reading

A Sick Day for Amos McGee by Philip C. Stead

Materials

A Sick Day for Amos McGee by Philip C. Stead

Key Vocabulary Words

friendly, uniform, chess, tortoise, handkerchief, rhinoceros, allergies, zookeeper

Description of Activity

1. **Before Reading**
   a. Review the *main ideas/vocabulary*: Remind the children that they have read this book two times before and ask them to recall the title of the story. Showing the cover of the book, ask the children what other details are important for the story and discuss them.

2. **While Reading**
   a. Integrate a *guided reconstruction of the story*: Retell the story events and focus on the problem of the story by reading some of the text and having the children reconstruct part of the story, particularly the wordless pages. Carefully ask a few focused questions that elicit children's responses. For example, "We all remember what happened to Amos McGee when he woke up one morning, don't we? Who would like to share with us?" Showing selected illustrations ask the children "What's happening here?" and follow-up to ask what will happen next. Have the children not only recall, but also explain events in the story and the characters' thoughts and feelings. Ask questions to prompt children as needed. For example, "Why did Amos decide to stay at home?", "Why did the animals decide to go visit Amos?", "Why didn't Amos run races with the tortoise like they always did?"
   b. Continue to emphasize vocabulary: For example, does anyone remember what chess is? (i.e., a boardgame). Work to connect word meanings to contexts that are familiar to children and encourage children to use new vocabulary words in their responses. "Sometimes we need to use a handkerchief or a tissue when we have a cold so we don't spread germs to our friends. When have you had to use a handkerchief?", "What other people wear uniforms at work?" (have children think about the dress up clothes in the dramatic play area).

3. **After-Reading**
   a. Ask questions that promote continued thinking about the story: For example, why did Amos miss work when he was sick? Have they ever had to miss school like Amos missed work? Why? Ask the children why they think the animals went out of their way to be friendly to Amos when he was sick? Why is being friendly important?

Tips for Addressing Universal Design for Learning for all Children

1. Multiple means of representation
   - Use pictures, verbal explanations, and pointing out of words for story retelling
2. Multiple means of expression
   - Have children respond chorally, individually, or act out the story
3. Multiple means of engagement
   - Extend vocabulary and events in story to those familiar to children

First Reading

"I Have a Little Problem", Said the Bear by Heinz Janisch

Materials & Equipment

"I Have a Little Problem", Said the Bear by Heinz Janisch

Key Vocabulary Words Associated with the Activity

problem, shrugged, worried, dread, sighed

Description of Activity

1. **Book Introduction**
   a. Introduce *main ideas*: This book tells the story of a bear who has a little problem. The bear tries to tell others about it, but they are all in such a hurry to help that they do not listen to the bear to find out what his problem really is.
   b. Show children the *front cover/ back cover/ title:* Ask how the title and the pictures may give clues to the bear's little problem. "What does the bear have on?" Ask the children if they think that the bear might need these items to solve his problem.
   c. Give *clues to key vocabulary*: Tell children that there are several words in the story that relate to feelings. Explain that "worried" means you are thinking about something bad that might happen. If you don't want something to happen you may feel "dread", which means you are very worried.
2. **While Reading**
   a. *Insert vocabulary support*: Tell children that "shrugged" and "sighed" are words that describe what you might see someone do when they are worried. Demonstrate by asking children to imitate you.
   b. *Support/ extend comprehension:* In 3-4 essential points in the story, pause to make comments that model extended thinking focusing on the bear's feelings and motivations. For example, after reading about a few of the bear's attempts to tell others about his problem, you may comment "I am thinking that it must be hard when you are trying to explain your problem and no one listens to you" and then ask questions to extend children's understanding "How do you think the bear is feeling when no one is listening to him?" Also, "The bear was afraid of sleeping alone in his cave, so I am thinking he must have liked the fly's solution to come sleep in his cave. Why does the bear say that he feels better after the fly offers to move in with him?"
3. **After-Reading**
   a. *Review story sequence*: Using the pictures in the book, ask the children about the bear's problem, his thoughts/emotions throughout the book, and how the story ended.
   b. *Ask questions* to promote continued thinking: For example, "What was the bear's problem?", "Why did the bear have to stay alone in his cave all day long?" (Discuss that bear hibernate in the winter).

Tips for Addressing Universal Design for Learning for all Children

1. Multiple means of representation
   - Use of pictures in book and verbal descriptions to illustrate concepts.
2. Multiple means of expression
   - Letting children respond by pointing, using choral responding following the teacher's model
3. Multiple means of engagement
   - Questioning techniques used during story reading

Second Reading

"I Have a Little Problem", Said the Bear by Heinz Janisch

Materials

"I Have a Little Problem", Said the Bear by Heinz Janisch, different props (e.g., pair of cardboard wings, scarf, hat, necklace with a charm, glasses, jar of honey, pair of boots)

Key Vocabulary Words

problem, shrugged, worried, dread, sighed

Description of Activity

1. **Book Introduction**
   a. Review *main ideas*/*vocabulary*: Remind children that the book is about a bear who has a little problem and everybody is trying to help but no one is listening to him. Show the children the items the bear is given by each character and ask if they remember why each was supposed to help.

2. **While Reading**
   a. Insert *vocabulary support*: Continue to emphasize vocabulary while reading by giving more verbal definitions. For example, the bear "shrugged" which means he raised his shoulders because he didn't know why the hatter was giving him a hat.
   b. *Support/ extend comprehension*: During reading, stop to make comments that model extended thinking and then ask questions to help children make inferences. In this reading, focus on the other characters' thinking. For example, "I am thinking that the doctor looked at the bear and thought the bear needed some vitamins. Why do you think the doctor thought the bear needed vitamins when he looked at him?", or "None of the things the characters were giving the bear seemed to be of help with his problem. Why do you think they gave him things he didn't need?" Review the items the characters gave the bear and have the children explain how each of the objects was supposed to help (e.g., wings, hat, vitamins). Also, "What is the fly's problem and how does she solve it?"

3. **After-Reading**
   a. Review *story sequence*: Show children the items and review how the different animals tried to help bear.
   b. *Ask questions that promote continued thinking*: For example, discuss with the children if they ever felt worried about going to sleep at night? What did they do to solve their problem? Do any of them have a special friend like the fly who makes them feel better at night?

Tips for Addressing Universal Design for Learning for all Children

1. Multiple means of representation
   - Use of pictures, verbal explanation, gestures, and objects for story retelling
2. Multiple means of expression
   - Having children respond chorally and individually
3. Multiple means of engagement
   - Extending vocabulary and events in story to those familiar to children

Third Reading

 *"I Have a Little Problem", Said the Bear* by Heinz Janisch

Materials & Equipment

"I Have a Little Problem", Said the Bear by Heinz Janisch, different props (e.g., pair of cardboard wings, scarf, hat, necklace with a charm, glasses, jar of honey, pair of boots)

Key Vocabulary Words Associated with the Activity

problem, shrugged, worried, dread, sighed

Description of Activity

1. **Book Introduction**
   a. Review the *main ideas/vocabulary*: Remind the children that they have read this book two times before and ask them to recall the name or title of the story. Show the cover of the book and ask the children what details are important for the story and discuss them. "What is the bear wearing?"
2. **While Reading**
   a. Integrate a *guided reconstruction* of the story: Retell the story events and focus on the bear's problem by reading some of the text and having the children reconstruct parts of the story, particularly the dialogue between the characters. Use the items gathered in the second read of the story to help the children act out the story. Carefully ask a few focused questions that elicit children's responses. For example, "We all remember what the inventor gave the bear, don't we? Who would like to tell us about this?" Follow-up to ask what will happen next and have the children not only recall, but also explain events in the story and the character's actions. "Why did the inventor give him a pair of wings?" Showing selected illustrations ask the children "What's happening here?" and follow-up to ask what will happen next.
   b. Continue to *emphasize vocabulary*: For example, does anyone remember what "shrugged" means? Connect word meanings to contexts that are familiar to children and encourage them to use new vocabulary words in their responses. "We sometimes shrug when someone asks us something and we don't know what to respond." Have the children demonstrate sighing and shrugging. "What do these words tell us about how someone is feeling?"
3. **After-Reading**
   a. *Ask questions that promote continued thinking about the story*: Ask the children how the bear and the fly are feeling at the end of the story and why. "What could the bear have done when the characters were giving him things he didn't need?", "What do you think the bear would have done if he hadn't found anyone to listen to him?", "Why does sharing your problems sometimes help?

Tips for Addressing Universal Design for Learning for all Children

a. Multiple means of representation
   - Use of pictures, verbal explanation, gestures, and objects for story retelling
b. Multiple means of expression
   - Having children respond chorally and individually
c. Multiple means of engagement
   - Extending vocabulary and events in story to those familiar to children

First Reading

Hey, Little Ant by Phillip and Hannah Hoose

Materials

Hey, Little Ant by Phillip and Hannah Hoose

Key Vocabulary Words

friend, squish, crack, giant, mate, beneath, rude, crook

Description of Activity

1. Before Reading

a. Introduce *main ideas*: This is the story of a boy who wants to squish an ant, but the ant wants to be his friend. She tries to convince him not to squish her and the little boy doesn't know what to do in the end. Let's see if we can help him decide.
b. Show *front cover/ back cover/ title*: Discuss the front cover and what the children notice pointing out the size of the boy compared to the ant. Ask what the boy and the ant may be talking about.
c. Give *clues to key vocabulary*: Ask what it means to be a friend and tell them to listen to who wanted to be a friend in this story. Explain that "mate" is another word we can use for friend, just like "pal" or "buddy."

2. While Reading

a. Insert *vocabulary support*: Use the list above and highlight words when read by pointing to illustrations (e.g., crack) or acting them out (e.g., squish, beneath, or giant).
b. *Support/ extend comprehension*: As you read, make comments in 3-4 key points in the story to model thinking and promote children's understanding. Concentrate on the boy and the ant and their feelings and motivations. For example, after reading the page where the ant starts pleading with the boy comment "The ant is really begging the boy to not squish her and let her go instead" and then ask "How do you think the ant might be feeling?" As you read, make additional comments and then ask questions "Why did the boy think that he and the ant are very different?", "How were the boy and the ant the same?", "Why do ants pick up crumbs and chips?", "How do you think the boy would feel if the ant were a giant and he was tiny?" "What do you think the ant would have done if she was big and boy was small?"

3. After-Reading

a. *Ask questions that promote continued thinking*: "Why do you think the boy wanted to squish the ant?" Have the children answer the final question and provide an explanation "What do you think that kid should do? Why?"

Tips for Addressing Universal Design for Learning for all Children

d. Multiple means of representation
   - Use the pictures, verbal explanation, and pointing to explain new vocabulary words
e. Multiple means of expression
   - Let the children respond by pointing or by using choral responding following the teacher's model
f. Multiple means of engagement
   - Ask engaging questions that prompt the children to predict what will happen next or make connections to their lives and experiences.

Second Reading

 *Hey, Little Ant* by Phillip and Hannah Hoose

Materials

Hey, Little Ant by Phillip and Hannah Hoose

Key Vocabulary Words

friend, squish, crack, giant, mate, beneath, rude, crook

Description of Activity

1. Before Reading

a. *Review main ideas/vocabulary*: Remind children that they have read this book before and ask if they remember some of the things that happened. Review key vocabulary words, such as friend and squished (also act it out).

2. While Reading

a. *Insert vocabulary support*: Continue to emphasize vocabulary by stopping to offer more definitions. For example, "to be rude means to not be polite" Make connection to children's lives and experiences related to the key vocabulary (e.g., "Would it be rude or polite if someone walked into our classroom and didn't say hello?"
b. *Support/ extend comprehension*: As you read, stop to make comments that model extended thinking and then ask questions to help children make inferences. In this reading, focus on the other characters in the book. For example, "Here is the ant helping her nest mates. What do you think would happen to the other ants if the boy decided to squish her?", "Why does the boy's mom think that the ant is a crook?" Also, "The story says the boy's friends squish ants every day. What do you think they'll say if the boy decides to squish the ant? What might they say if he decides to be friends with the ant and not squish it?"

3. After-Reading

a. *Review story sequence*: Discuss what the boy thought about the ant at beginning, when he understood more about the ant, and what they think he did at the end.
b. *Ask questions that promote continued thinking about the story*: "What would you do if you saw an ant in a crack on the sidewalk like the boy in the story? Why?" Have several children contribute to the conversation and help compare their responses.

Tips for Addressing Universal Design for Learning for all Children

1. Multiple means of representation
   - Use of pictures, verbal explanation, and pointing out of words for story retelling
2. Multiple means of expression
   - Have children respond chorally and individually and use gestures as relevant
3. Multiple means of engagement
   - Extend vocabulary and events in story to those familiar to children

Third Reading

Hey, Little Ant by Phillip and Hannah Hoose

Materials

Hey, Little Ant by Phillip and Hannah Hoose

Key Vocabulary Words

friend, squish, crack, giant, mate, beneath, rude, crook

Description of Activity

3. **Before Reading**
   a. *Review the main ideas/vocabulary*: Remind the children that they have read this book two times before and ask them if they recall the title of the story and what the book was about. Showing the back cover of the book, ask the children what details are important for the story and discuss them (e.g., the ant is smaller than the boy's eye).
4. **While Reading**
   a. Integrate a *guided reconstruction of the story*: Retell the story events and focus on the problem of the story by reading some of the text and having the children reconstruct part of the story, including the dialogue between the boy and the ant. Ask a few focused questions that elicit children's responses. For example, "We all remember what the boy thought about doing when he first met the ant. Who would like to remind us what they were talking about here?" Showing selected illustrations ask the children what is happening in the pictures. Have the children not only recall, but also explain events in the story and the characters' thoughts and feelings. Prompt children with questions as needed. For example, have them explain what the ant wanted (e.g., to be friends, not be squished) and why the boy had a hard time treating the ant like friend. Discuss how the boy and the ant were the same (e.g., they both have a family, they both have feelings, they both get hungry, they both read books) and how they were different (e.g., their size).
   b. Continue to *emphasize vocabulary*: Encourage children to use the key vocabulary words when reconstructing the story. For example, does anyone remember what it means to be rude? Work to connect word meanings to contexts that are familiar to children and encourage children to use new vocabulary words in their responses. "Sometimes we use different words for our friends, like "pal" or "mate." Ask a few children who is their best mate or buddy.
5. **After-Reading**
   a. *Ask questions that promote continued thinking about the story*: Point out that the boy and the ant might have become friends in the end even if they were very different. Engage the children in a conversation about having friends that are different than themselves. For example, "How can our friends be different than us?" (prompt as needed; they may look different, be younger/ older) "Why is it important to be nice to people who are different?"

Tips for Addressing Universal Design for Learning for all Children

1. Multiple means of representation
   - Use pictures, verbal explanations, and pointing out of words for story retelling
2. Multiple means of expression
   - Have children respond chorally, individually, or act out the story
3. Multiple means of engagement
   - Extend vocabulary and events in story to those familiar to children

Appendix C
Books Included in the Repeated Book Reading Program

Week	Date	Book Title
1	Oct 8-11	*A Color of His Own* by Leo Lionni
2	Oct 15-16	*The Apple Pie Tree* by Zoe Hall
3	Oct 22-25	*A Leaf Can Be* by Laura Purdie Salas
4	Oct 29-Nov 1	*The Old Lady Who Was Not Afraid of Anything* by Linda D. Williams and Megan Lloyd
5	Nov 5- 8	*The Scarecrow's Hat* by Ken Brown
6	Nov 12-15	*Fletcher and the Falling Leaves* by Julia Rawlinson
7	Nov 19-22	*What Will the Weather Be Like Today?* by Paul Rogers
8	Nov 26-27	*Feast for 10* by Cathryn Falwell
9	Dec 3-6	*The Mitten* by Jan Brett
10	Dec 10-13	*Home for Christmas* by Jan Brett
11	Dec 17-20	*Jingle Bells* by Iza Trapani
12	Jan 14-17	*How Do Dinosaurs Go to School?* By Jane Yolen
13	Jan 21-24	*Stella, Queen of the Snow* by Marie-Louise Gay
14	Jan 28-31	*"I Have a Little Problem", Said the Bear* by Heinz Janisch
15	Feb 4-7	*Walter the Baker* by Eric Carle
16	Feb 11-14	*The Very Lonely Firefly* by Eric Carle
17	Feb 18-21	*I Wish that I Had Duck Feet* by Dr. Seuss
18	Feb 25-28	*Yertle the Turtle* by Dr. Seuss
19	March 4-7	*Someone Bigger* by Jonathan Emmett
20	March 11-14	*Inch by Inch* by Leo Lionni

21	March 18-21	*Are You Living?* by Laura Purdie Salas
22	April 1-4	*Fletcher and the Springtime Blossoms* by Julia Rawlinson
23	April 8-11	*The Tiny Seed* by Eric Carle
24	April 15-18	*Bug Safari* by Bob Barner
25	April 22-25	*The Listening Walk* by Paul Showers
26	April 29-May 2	*Hey, Little Ant* by Phillip Hose
27	May 6-9	*A Sick Day for Amos McGee* by Philip Stead
28	May 13-16	*Toy Boat* by Randall de Sève

Appendix D
Fidelity of Implementation Measure

Instructions for Completing

I. Complete first six items on the observation sheet (i.e., Teacher name, date, time Start – end, book title, and whether it is a first, second, or third reading of the book).

II. Observe the teacher and children for the duration of the activity. Make notes in the comments section of the protocol regarding:

1) The implementation of effective instructional strategies for the repeated book reading using the following observable teacher behaviors:

Before Reading – explaining the main problem, eliciting predictions from the cover/title, giving clues to key vocabulary, asking questions about the characters and the problem (for 2nd/ 3rd read), asking children to recall the problem and the solution (for 2nd/ 3rd read)

During Reading – providing vocabulary support, asking questions and making comments to support/extend comprehension

After Reading – asking questions to promote continued thinking about the story

2) The implementation of the 3 principles of UDL using the following observable teacher behaviors:

b. Multiple Means of Representation

* Multiple ways to simultaneously receive or perceive information including auditory, visual, and with concrete objects

* Multiple forms of communication including different formats (i.e. pictures, signs, verbal, gestures) and levels of complexity (i.e., defining words, repeating and restating concepts; breaking communication into discrete components).

* Multiple levels of comprehension of the key concepts by providing concrete explanations to more complex and expanded verbal descriptions. An example is the teacher modeling instructions while verbally describing them.

c. Multiple Means of Engagement

* Use of effective strategies for arousing children's interest such as following the child's lead; providing choices; balancing between novel and the familiar; and making meaningful connections to children's prior experiences.

* Use of effective methods for sustaining children's attention and persistence by monitoring the difficultly/complexity concepts presented such that children are not bored but challenged yet not frustrated; providing appropriate levels of feedback and encouragement; balancing active movement with quiet observation; and recruiting child initiated contributions to the discussion.

d. Multiple Means of Expression

* Providing children with multiple ways in which to make a physical response including verbal responses; gestures; pointing; drawing and/or writing.

* The acceptance of multiple levels of responding including length and complexity of the response.

* The provision of scaffolding to support responding including a range of independent responding, choral responding, responding following a peer's response; and responding following an adult model.

Rating	Description of Rating
1 - Low Implementation	**Before Reading:** • Starts reading without explaining the main problem/idea • Fails to ask children to make predictions from the cover/title • Key vocabulary not introduced or reviewed (for 2nd/ 3rd read) • Misses the opportunity to ask questions that prompt children to recall the characters, the problem, and solution (for 2nd/ 3rd read)
	During Reading: • Reads without explaining new vocabulary or provides incorrect or confusing explanations • Fails to ask questions or make comments to support/extend children's comprehension
	After Reading: • Fails to ask questions to extend children's comprehension outside the story and to make connections to their lives and experiences
2 – Average Implementation	**Before Reading:** • Very briefly explains the main problem/idea • Asks simple labeling questions to assist children with making predictions from the cover/title • Key vocabulary may be briefly introduced or reviewed (for 2nd/ 3rd read), but there may be a missed opportunity to ensure comprehension • Asks simple labeling questions to prompt children to recall the characters, the problem, and solution (for 2nd/ 3rd read)
	During Reading: • Briefly explains new vocabulary by pointing to illustrations or providing verbal explanations that may not best assist children with understanding the new words. • Asks one or two questions or makes comments to support/extend children's comprehension
	After Reading: • Asks one or two questions to extend children's comprehension outside of the story and to make connections to their lives and experiences. There may be a missed opportunity to engage children to make meaningful connections.
3 - High Implementation	**Before Reading:** • Clearly explains the main problem/idea • Asks a variety of open-ended and direct questions that assist children with making predictions from the cover/title • Creates meaningful opportunities to introduce or review (for 2nd/ 3rd read) key vocabulary, checking for children's comprehension • Asks a variety of open-ended and direct questions to prompt children to recall the characters, the problem, and solution (for 2nd/ 3rd read)
	During Reading: • Uses a variety of strategies to explain new vocabulary and considers whether it is a 1st, 2nd, or 3rd reading: pointing to illustrations, using

	dramatic gestures and voice modulation (as appropriate), and using short phrases or sentences • Asks multiple questions and makes comments throughout the reading to support/extend children's comprehension
	After Reading: • Asks meaningful questions to extend children's comprehension outside of the story and to make connections to their lives and experiences.

e. At the end of the activity, make an estimation regarding the level of implementation of each of the three UDL principles using the following 3 point scale:

Rating	Description of Rating
1 - Low Implementation	• For representation - little or no effort to provide instruction, questions, expectations, and learning opportunities in a variety of formats and at different complexity levels • For engagement - Little or no effort to provide a range of strategies for arousing children's attention and curiosity; and little or no effort to address maintenance of engagement by providing a range of levels of scaffolding, repetition and appropriate challenges • For expression - little or no effort to provide a range of formats for child responding, demonstration of what they know, and opportunities to express their ideas
2 – Average Implementation	• For representation - makes some efforts to provide instruction, questions, expectations, and learning opportunities in a variety of formats and at different complexity levels • For engagement – makes some efforts to provide a range of strategies for arousing children's attention and curiosity; and some effort to address maintenance of engagement by providing a range of levels of scaffolding, repetition and appropriate challenges • For expression - some efforts to provide a range of formats for child responding, demonstration of what they know, and opportunities to express their ideas
3 - High Implementation	• For representation – routinely and effectively provides instruction, questions, expectations, and learning opportunities in a variety of formats and at different complexity levels • For engagement –routinely and effectively provides a range of strategies for arousing children's attention and curiosity; and for maintenance of engagement by providing a range of effective levels of scaffolding, repetition and appropriate challenges • For expression – routinely and effectively provides a range of formats for child responding, demonstration of what they know, and opportunities to express their ideas

Fidelity of Implementation Checklist

Teacher: **Date:** **Time Start:** **Time End:** **Book title:** **1st 2nd 3rd read of the book**				
Before	**Level of Implementation**	Low implementation 1	Average Implementation 2	High Implementation 3
	Notes:			
During	**Level of Implementation**	Low implementation 1	Average Implementation 2	High Implementation 3
	Notes:			
After Reading	**Level of Implementation**	Low implementation 1	Average Implementation 2	High Implementation 3
	Notes:			
UDL	**Level of Implementation Representation**	Low implementation 1	Average Implementation 2	High Implementation 3
	Level of Implementation Engagement	Low implementation 1	Average Implementation 2	High Implementation 3
	Level of Implementation Expression	Low implementation 1	Average Implementation 2	High Implementation 3
	Notes:			

Appendix E

Repeated Book Reading Program Log

October

Week	Book Title	Checkmark Completed Activities		Date	Notes/Comments
Week 1	*A Color of His Own*	1st Reading			
		2nd Reading			
		3rd Reading			
Week 2	*The Apple Pie Tree*	1st Reading			
		2nd Reading			
		3rd Reading			

Week 3	*A Leaf Can Be*	1st Reading			
		2nd Reading			
		3rd Reading			
Week 4	*The Old Lady Who Was Not Afraid of Anything*	1st Reading			
		2nd Reading			
		3rd Reading			

Appendix F

Teacher Perspectives on the Repeated Book Reading Program

Your perspectives on using the repeated book reading program in your classroom this year are very valuable. They will inform the usefulness of the program and how other teachers may use it in to support the language and literacy development of children in their classrooms. Please answer the following questions by choosing an answer on the five-point scale:

1- Strongly Disagree
2- Disagree
3- Neutral
4- Agree
5- Strongly Agree

1. Repeated book reading is a useful activity for supporting preschool children's early literacy development.

1 2 3 4 5

2. Using repeated book reading in my classroom this year was enjoyable.

1 2 3 4 5

3. Children in my classroom enjoyed participating in repeated book reading activities.

1 2 3 4 5

4. Using repeated book reading in my classroom at the beginning of the year was easy for me.

1 2 3 4 5

5. Repeated book reading in my classroom became easier as the year progressed.

1 2 3 4 5

6. Using repeated book reading in my classroom helped children develop their early literacy skills.

1 2 3 4 5

7. Implementing the repeated book reading program in my classroom this year was effective.

1 2 3 4 5

8. I will use repeated reading in my classroom in the future.

1 2 3 4 5

Please provide a brief response to the following questions:

1. How did the repeated book reading program influence how you planned other activities in your classroom this year?

_____

_____

_____

_____

_____

2. What new strategies have you learned by using repeated book reading in your classroom?

_____

_____

_____

_____

_____

3. What do you think the children in your classroom learned through the repeated book reading activities?

_____

_____

_____

_____

_____

4. Do you think the children enjoyed the repeated book reading activities? How do you know?

_____

_____

_____

_____

_____

5. What did you like best about using repeated book reading in your classroom this year?

_____

_____

_____

_____

_____

6. What challenges did you encounter with using the repeated book reading program?

_____

_____

_____

_____

_____

7. What suggestions do you have for improving the repeated book reading program?

_____

_____

_____

_____

_____

Appendix G
Transcription Notation

The following transcription notation system developed by Jefferson (2004) and commonly used in conversation analysis research was used to transcribe the data:

( )	Inaudible talk. The length of the space between parentheses indicates length of utterance
(book)	Transcriber's best guess for talk
(( ))	Transcriber's description of nonverbal actions
[word]	Overlapped speech
=	Latching or no gap between speech
(0.5)	Number of seconds or tenths of seconds of elapsed time in silence
(.)	Minimal pause between utterances
word	Emphasis
WORD	Greater emphasis
hello::	Stretching of the preceding sound, the more colons, the longer the stretching
word-	Cut-off
word.	Stopping fall in tone
word,	Continuing intonation
word?	Rising intonation
word!	Animated tone
↑	Rising intonation
↓	Falling intonation
°word°	Quiet speech
<word>	Slower speech
>word<	Faster speech
hhh	Outbreath
.hhh	In-breath
w(h)ord	Breathiness as in laughter or crying
word	Teacher reading from the book

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EDUCATION

2015 Ph.D. *Indiana University*, Bloomington, IN
Department of Curriculum and Instruction
Major: Special Education
Minor: Early Childhood Education

2008 M.A. *University of Bucharest*, Bucharest, Romania
Human Resources Management, Department of Sociology and Social Assistance

2006 B.A. *Ovidius University of Constanta*, Constanta, Romania
Special Education, Department of Psychology and Educational Sciences

PROFESSIONAL EXPERIENCE

2010-Present **Associate Instructor**
Instructor and Field Experience Supervisor
Indiana University, Bloomington, IN.

2011-2014 **Research Assistant**
Institute of Education Sciences
Children's School Success Plus (CSS+) – An Experimental Study of an Early Childhood Education Model
Co-Investigators: Eva Horn, Susan Palmer, Joan Lieber, and Gretchen Butera
Indiana University, Bloomington, IN.

2009-2010 **Pre-K Substitute Teacher**
Newark Preschool Council Head Start Program, Newark, NJ.

2006-2008 **Special Education Teacher** for children with moderate to severe disabilities, ages 3-7.
Special Education School No.1, Constanta, Romania.

2002-2006 **Early Childhood Teacher** for children ages 3-7.
Navodari School District, Romania.

PROFESSIONAL PUBLICATIONS

Refereed Journal Publications:

Mihai, A., Friesen, A., Butera, G., Horn, E., Lieber, J., & Palmer, S. (in press). Teaching phonological awareness to all children through storybook reading. *Young Exceptional Children.* Advance online publication http://yec.sagepub.com/content/early/2014/05/21/1096250614535221.full.pdf?ijkey=SdsK29pzWrzwzDu&keytype=ref

McMullen, M. B., Yun, N., **Mihai, A.**, & Kim, H., (accepted). Continuity of care in birth to 3: Perspectives of teachers, parents, and administrators. *Early Education & Development.*

Mihai, A., Butera, G., & Friesen, A. (under review). Examining the use of curriculum to support change in early literacy instruction: A multiple case study of Head Start teachers.

Manuscript in Preparation:

Butera. G., **Mihai, A.,** Vaiouli, P., Friesen, A., Clay, J., Palmer, S., Horn, E., & Lieber J. (in preparation). Effects of a comprehensive curriculum on the early literacy skills of at-risk preschoolers.

Book Chapters:

Butera, G., Friesen, A., **Mihai, A.**, & Vaiouli, P. (in press). Partnering with families to support children's school success. In E. Horn, S. Palmer, G. Butera, & J. Lieber (Eds.), *Children's school success: A framework for inclusive early education.* Baltimore, MD: Paul H. Brookes Publishing Co.

Lieber, J., Friesen, A., Palmer, S., Drang, D., **Mihai, A.**, Clay, J, & Vaiouli, P. (in press). Understanding foundational components of challenging curriculum content. In E. Horn, S. Palmer, G. Butera, & J. Lieber (Eds.), *Children's school success: A framework for inclusive early education.* Baltimore, MD: Paul H. Brookes Publishing Co.

GRANTS

2013 Research Assistant, *Enhancing Early Literacy Teaching in Head Start: The Effects Repeated Book Reading*. Administration for Children and Families, Office of Planning, Research and Evaluation; Early Care and Education Research Scholars: Head Start Graduate Student Research Grants (P.I. Gretchen Butera), $25,000, (not funded).

2013 Research Assistant, *Enhancing Early Literacy Teaching in Head Start: The Effects Repeated Book Reading*. Dean's Office, School of Education, Indiana University (P.I. Gretchen Butera), $12,000 (funded).

PROFFESIONAL PRESENTATIONS

National and International Presentations:

Mihai, A., & Butera, G. (2014, October). *Supporting preschoolers' early literacy development through a repeated book reading approach.* Session presented at the 30th Annual International Conference on Young Children with Special Needs and Their Families, St. Louis, MO.

Mihai, A. Butera. G., Clay, J., Vaiouli, P., & Friesen, A. (2014, April). *Supporting children's early literacy skills in a meaningful context: The effects of a comprehensive curriculum.* Paper presented at the American Educational Research Association Annual Meeting, Philadelphia, PA.

Friesen, A., Butera, G., Clay, J., **Mihai, A.**, & Vaiouli, P. (2014, April). *Initiating family literacy projects within a Head Start community: A two-year qualitative study.* Paper presented at the American Educational Research Association Annual Meeting, Philadelphia, PA.

Mihai, A., Butera. G., & Friesen, A. (2014, April). *Effects of a comprehensive curriculum on the early literacy skills of at-risk preschoolers.* Session presented at the annual Council for Exceptional Children Convention & Expo, Philadelphia, PA.

Palmer, S., Horn, E., Lieber, J., & **Mihai, A.** (2014, April). *Focus on Implementation for challenging curricula: Issues for early childhood staff.* Session presented at the annual Council for Exceptional Children Convention & Expo, Philadelphia, PA.

Mihai, A., Butera, G., Vaiouli, P., & Friesen, A. (2014, February). *The effects of a comprehensive curriculum on the early literacy skills of children in Head Start: Implication for providing a balanced early literacy instruction*. Opening Night Poster Symposium: Access to Early Intervention for Children and Families Experiencing Poverty, presented at the 9th biennial Conference on Research Innovations in Early Intervention, San Diego, CA.

Mihai, A., Butera, G., Friesen, A., Clay, J., Vaiouli, P., & Kang, J. (2013, October). *Supporting change in early literacy instruction: The importance of teacher perspectives.* Session presented at the 29th Annual International Conference on Young Children with Special Needs and Their Families, San Francisco, CA.

Horn, E., Classen, A., **Mihai, A.**, Kang, J., Lieber, J., & Butera, G. (2013, October). *Understanding implementation fidelity in the context of changing teachers' teaching.* Poster presented at the 29th Annual International Conference on Young Children with Special Needs and Their Families, San Francisco, CA.

Horn, E., Palmer, S., Lieber, J., Butera, G., Classen, A., & **Mihai, A.** (2013, October). *Understanding universally designed curriculum for children with disabilities: Children's School Success.* Session presented the 29th Annual International Conference on Young Children with Special Needs and Their Families, San Francisco, CA.

Mihai, A., Butera, G., & Friesen, A. (2013, April). *A model for building intentional teaching for early literacy.* Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA.

Friesen, A., Butera. G., **Mihai, A.** & Clay, J. (2013, April). *Intentional early literacy instruction within inclusive preschool classrooms: The CSS+ literacy model*. Session presented at the annual Council for Exceptional Children Convention & Expo, San Antonio, TX.

Butera, G., **Mihai, A**., Friesen, A, & Horn, E (2012, October). *Initiating and sustaining a meaningful teacher-researcher collaboration in a preschool curriculum design*. Session presented at the 28th Annual International Conference on Young Children with Special Needs and Their Families, Minneapolis, MN.

Friesen, A., Butera, G., **Mihai, A**. & Palmer, S. (2012, October). *Supporting evidence-based early literacy development through home-based projects: A collaborative research study*. Session presented at the 28th Annual International Conference on Young Children with Special Needs and Their Families, Minneapolis, MN.

Friesen, A., Butera, G., & **Mihai, A.** (2012, June). *Family literacy projects: Initiating meaningful family involvement within a Head Start program.* Poster presented at Head Start's 11th National Research Conference, Washington, DC.

Mihai, A., Butera, G. D., & Friesen, A. (2012, April). *The impact of implementing a comprehensive literacy curriculum on teachers' understanding of early literacy*. Paper presented at the American Educational Research Association Annual Meeting, Vancouver, Canada.

Horn, E. M., Butera, G., Friesen, A., Lieber, J., Kang, J., **Mihai, A.**, Palmer, S. B., Drang, D., & Goodman-Jansen, G. (2012, April). *Infusing STEM into early childhood curricula.* Session presented at the 90th annual Council for Exceptional Children Convention & Expo, Denver, CO.

Palmer, S., Horn, E., Lieber, J., Butera, G., Friesen, A., **Mihai, A.**, & Parks, S. (2012, February). *Children's School Success Plus (+): A development project*. Poster presented at the Conference on Research Innovations in Early Intervention, San Diego, CA.

McMullen, M. B., **Mihai, A.**, & Wood, L. D. (2011, April). *The UN convention on the rights of the child.* Panel discussion at the American Educational Research Association Annual Meeting, New Orleans, LA.

Regional and Local Presentations:

McMullen, M. B. & **Mihai, A.** (2013, April*). "It's like, you know, we become family": What parents, teachers, and administrators say about the benefits of continuity of care with infants and toddlers.* Session presented at Indiana Early Childhood Conference, Indianapolis, IN.

Clay, J. C., Butera, G., **Mihai, A.** & Vaiouli, P. (2013, April). *Use of goal attainment scale in early childhood classrooms*. Presented at the Special Education Research Seminar, Indiana University, Bloomington, IN.

Butera, G., **Mihai, A.**, Vaiouli, P., & Clay, J. C. (2013, February). *Early literacy in Head Start: Fidelity of implementation.* Presented at the Curriculum and Instruction Research and Creative Activity Symposium, Indiana University, Bloomington, IN.

McMullen, M. B., **Mihai, A.,** Yun, N. R., & Kim, H. (2013, February). *Relationships that last: Experiences on continuity in birth to three care and education practices.* Presented at the Curriculum and Instruction Research and Creative Activity Symposium, Indiana University, Bloomington, IN.

Mihai, A., Butera, G. D., & Friesen, A. (2012, March). *The impact of implementing a comprehensive literacy curriculum on teachers' understanding of early literacy*. Presented at the Special Education Research Seminar, Indiana University, Bloomington, IN.

Butera, G. D., **Mihai, A.**, & Friesen, A. (2012, February). *Initiating and sustaining a meaningful teacher-researcher collaboration in a preschool curriculum design: Lessons from the first two years of the CSS+ project*. Presented at the Curriculum and Instruction Research and Creative Activity Symposium, Indiana University, Bloomington, IN.

HIGHER EDUCATION TEACHING

Courses taught at Indiana University:

Fall 2014	K352: Educating Students with Learning Disorders, Instructor Special Education Program
Summer 2014	K548: Families, School and Society (hybrid course), Instructor Special Education Master's Program
Fall 2013	K352: Educating Students with Learning Disorders, Instructor Special Education Program
Fall 2012	E352: Teaching and Learning for All Young Children, Instructor Early Childhood Program

Spring 2012 E353: Early Intervention K-3, Instructor
Early Childhood Program

Fall 2011 E352: Teaching and Learning for All Young Children, Instructor
Early Childhood Program

Spring 2011 K305: Teaching Exceptional Learners in Elementary School, Instructor
Special Education Program

PRESERVICE TEACHER SUPERVISION

Spring 2011 K495A: Early Field Experience in Elementary Education, Urban Placement
Spring 2015 Teaching All Learners Program, Indiana University

Fall 2010 K495B: Early Field Experience in Special Education, Local Placement
Teaching All Learners Program, Indiana University

PROFESIONAL SERVICE

March 2015 Professional Development for Infant-Toddler and Preschool teachers at the *Bloomington Developmental Learning Center*, Bloomington, IN.
2014 2015 American Educational Research Association Annual Meeting proposal reviewer
Jan 2014 – present Guest Reviewer, *Young Exceptional Children*
Sept 2013– present Guest Reviewer, *Journal of Teacher Education*
Jan 2012 – Dec 2013 Member of the *Young Exceptional Children* Student Editorial Board

UNIVERSITY SERVICE

April 2014 Member of the Award for Excellence in Mentoring Selection Committee, Indiana University School of Education, Bloomington
2011-2012 Special Education Ph.D. Committee, Indiana University, Bloomington
2011 Teaching All Learners Program E-portfolio Taskforce, Indiana University, Bloomington

AWARDS

2015 Outstanding Associate Instructor Award, Indiana University, School of Education, Bloomington, IN.
2014 Graduate Travel Award, Curriculum and Instruction, Indiana University, Bloomington, IN
2013-2014 Council of Exceptional Children, Division for Research, Doctoral Student Scholar
2013 Graduate Travel Award, Curriculum and Instruction, Indiana University, Bloomington, IN

2012	Graduate Travel Award, Curriculum and Instruction, Indiana University, Bloomington, IN
2011	American Educational Research Association EE/CD SIG Graduate Student Travel Award
2010-2014	Faculty Doctoral Fellowship, School of Education, Indiana University, Bloomington, IN
2002-2006	Merit-Based Scholarship, Ovidius University of Constanta, Constanta, Romania
2005	Teacher Recognition Award, Navodari School District, Romania
2002	Certificate of Professional Competence in Teaching Pre-K through Elementary School Children, Constantin Bratescu Pedagogical High School, Constanta, Romania.

TRAINING/ PROFESSIONAL DEVELOPMENT OPPORTUNITIES

2013 *Writing an Application for an IES Grant: A Workshop*, American Educational Research Association Annual Meeting, San Francisco, CA.

PROFESSIONAL AFFILIATIONS

Council for Exceptional Children (CEC)
The Division for Early Childhood (DEC)

American Educational Research Association (AERA)
Early Education and Child Development Special Interest Group
Teaching and Teacher Education Division

International Reading Association (IRA)

National Association for the Education of Young Children (NAEYC)
Indiana AEYC, South Central Chapter

TEACHING CERTIFICATION

State of Indiana Professional Educator's License #10132172
Intense Interventions (P-12)
Mild Intervention (P-12)