Title: Measuring Preschool Teachers' Perceived Competency and Knowledge of Oral Language Development

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Abstract/Summary

Research has demonstrated the impact of early oral language development on a child's later reading comprehension. Additionally, research has suggested that teachers' knowledge of effective practices in literacy plays an important role in students' ability to learn to read. The problem is that preschool teachers' knowledge of strategies for developing language is unknown because there is no known instrument for assessing preschool teachers' knowledge of these strategies. The research questions for this study examined the development of an instrument to measure preschool teachers' perceived competency and knowledge of strategies for language development. Chall's reading stage theory was used as the theoretical foundation. This quantitative, nonexperimental study was conducted using a descriptive, cross-sectional design. After a prepilot review of the instrument by literacy experts, a pilot study was completed using a convenience sample of 250 teachers who volunteered to answer the questions on the instrument. Reliability statistics demonstrated a high level of internal consistency for Section 2, promoting extended discourse ($\alpha = .86$) and low levels of internal consistency for the other two sections of the instrument. Further analysis of Section 2 revealed a positive moderate effect size of 0.53, indicating significant variability in test scores between high and low performing teachers. Use of the instrument developed through this study supports social change by providing early childhood professionals information to understand teachers' instructional decisions, determine professional development to increase teachers' knowledge, and inform preschool teachers' pre-service preparation.

Subject/Keywords: Education, Preschool teachers, Preschool teacher training, effective preschool practices, reading development

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This is to certify that the dissertation by

Dian Prestwich

has been found to be complete and satisfactory in all respects,
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2012

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Measuring Preschool Teachers' Perceived Competency and Knowledge of Oral Language Development

by

Dian Teer Prestwich

M.Ed., Lesley University, 2003

B.S., Northwestern State University, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Dedication

This dissertation is dedicated to my Dad, Bruce Teer, who passed away 3 years into my quest to earn a PhD. Many years ago, my Dad encouraged me to reach my full potential in school with a little bribe I will never forget, a promise of $100 if I made all As on my report card. That was all I needed for encouragement, and not long after, I brought home a perfect report card. Though neither he nor I realized it at the time, the feeling I had in that moment of reaching my full potential would last me a lifetime.

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Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

Despite the growing body of research on best practices for teaching children to read, statistics on illiteracy remain alarming. Approximately 20% of children across the nation will struggle with reading at some point in time prior to third grade, which means that more than 10 million children in the United States are not learning to read at proficient levels (Bursuck et al., 2004). Since 1992, statistics for fourth grade average reading scores on the National Assessment of Educational Progress have shown an increase of only four points, from 217 to 221 (National Center for Education Statistics, 2009). According to the National Center for Education Statistics (2010), 67% of fourth grade students read at or above a basic level. Students scoring at the basic level are only able to make simple inferences, locate information in the text that supports their own simple conclusions, and interpret the meanings of words as they are used in the text. Even more concerning, only 33% of fourth grade students have demonstrated competency of challenging subject material to score at a proficient level. In order to score at the proficient level, students must interpret texts, drawing conclusions and making evaluations based on their understanding of the text, in addition to those aspects included in the description of working at the basic level (National Center for Education Statistics, 2010).

A recent report from the Institute of Education Sciences (2010) defined reading comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (p. 5). The panel noted that

in addition to five other critical skills and knowledge, "vocabulary knowledge and oral language skills help readers understand the meaning of words and connected text" (p. 6). As the literature review in Chapter 2 confirms, early oral language development is related to later reading comprehension. Furthermore, it is not clear as to whether or not early childhood educators have knowledge of the connection between early oral language and later reading comprehension. Based on reports of low performance, it would seem that the nation's schools are failing to meet the challenge of teaching children to read. However, research demonstrates that struggling readers can learn to read if provided high-quality instruction by knowledgeable teachers (Mathes et al., 2003).

Existing research demonstrates the importance of oral language development and the longitudinal impact of early language on later reading comprehension (McGill-Franzen, 2010; Neuman, 2010; Vellutino, Tunmer, Jaccard, & Chen, 2007). Although early literacy achievement is linked to code related conditions of reading instruction, later literacy achievement and comprehension in the upper elementary grades and beyond is more closely linked to language ability (Neuman, 2010). Contrary to this knowledge, preschool teachers do not often engage in activities that support oral language development in the early years (Dickinson, McCabe, & Essex, 2006; Dickinson & Tabors, 2002; McGill-Franzen, Lanford, & Adams, 2002).

Problem Statement

In the past ten years, research such as the Report of the National Reading Panel (National Institute of Child Health and Human Development, 2000) on teaching children to read and the Report of the National Early Literacy Panel (National Center for Family

Literacy, 2008) summarized effective practices for teaching children to read. Similarly, federally funded reform efforts such as Reading First supported nearly 5,000 schools across the nation in implementing scientifically research-based reading instruction for students in kindergarten through third grade. At the preschool level, since 2002, the federally funded Early Reading First grant was awarded to more than 200 local education agencies and organizations in order to support the development of early childhood centers focused on early language, cognitive, and reading skills.

Despite the evidence on teaching children to read and the many reform efforts at the preschool level, the problem remains that preschool teachers' knowledge of strategies for developing oral language in the preschool classroom is not known, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. Only recently have researchers begun to examine teachers' knowledge (Cunningham, Zibulsky, & Callahan, 2009; Lane et al., 2009; Moats & Foorman, 2003), but there has yet to be an emphasis on early oral language development and whether or not preschool teachers have the knowledge of the type of instruction that should take place in preschool classrooms. Cunningham, Zibulsky, and Callahan (2009) stated that teachers "may need to recognize their skill deficits before beginning to benefit from professional development" (p. 501). Determining the state of preschool teachers' perceived competency and actual knowledge is critical to providing effective professional development and understanding the instructional decisions that teachers make.

Also central to the problem investigated in this study is whether or not years of experience or number of hours of recent professional development in early literacy are

related to teachers' perceived competency and actual knowledge. The level of teachers' education and type of certification are not strong predictors of increased achievement of students in early literacy (Connor, Son, Hindman, & Morrison, 2005, as cited in Piasta et al., 2009). In the state of Colorado, teachers in the Colorado Preschool Program must have at least a baccalaureate degree in Early Childhood Education/Child Development and 3 years of full-time experience working with children. A graduate degree in Early Childhood Education/Child Development may be substituted for 3 years of teaching experience. This study further examined two additional characteristics of teachers including years of experience and number of hours of recent professional develoment in early literacy.

Research Questions

This quantitative, nonexperimental study was guided by the following research questions:

1. Is there a difference in preschool teachers' knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language by total number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?
2. Is there a difference in preschool teachers' perceived knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language by total

number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?

3. What is the relationship between preschool teachers' perceived knowledge and actual knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language?

Purpose of the Study

A review of the literature determined that there is an abundance of research on effective practices for teaching children to read. However, researchers do not know whether preschool teachers have the knowledge necessary for helping children develop early oral language skills. The purpose of this study was to develop an instrument that may be used to examine and describe the perceived level of knowledge and actual knowledge level of preschool teachers regarding strategies that support oral language development in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words.

For this study, I examined both perceived knowledge and actual knowledge. Perceived knowledge of teachers demonstrates whether or not teachers are aware of what they do and do not know while the knowledge portion of the instrument reveals the areas of knowledge that teachers do not possess regarding strategies for oral language development. People in general are likely to seek knowledge in a particular domain when they are actually aware of their own knowledge deficits in that domain. Similarly, teachers are more likely to be receptive to new information when they are aware that it is

information they do not already know (Cunningham & Stanovich, 2004). Therefore, improvements to both preservice and inservice training for preschool teachers are dependent on knowing both perceived and actual knowledge of teachers.

Theoretical Framework

The theoretical framework for this study was drawn from Chall's (1996b) reading stage theory as it relates to the connection between early oral language development and later reading comprehension in children. Chall theorized that learning to read is a process involving six stages. Stage 0, the prereading stage, is the stage at which a child begins to acquire knowledge of oral language. Stage 1 builds on the knowledge gained in Stage 0 as children begin to connect letters to sounds. This stage is focused on the alphabetic principle and decoding. Children who are at this stage of reading development will begin to recognize differences in printed words. During Stage 2 of Chall's reading model, children become proficient in their decoding abilities, thus gaining fluency with basic words. Stage 2 readers also begin to make connections to previous knowledge and build a sight word base that contributes to their speed of reading text (Chall, 1996b).

The final three stages of reading development differ from the first stages in that children begin to read for a new purpose--reading to learn versus learning to read. Stage 3 readers use their own experiences to gain a clear understanding of what they read. In addition, a foundation of vocabulary and an understanding of text structure are important if children are to be successful at this stage in the reading process. The next stage in the model is directly connected to the abilities developed in Stage 3. During Stage 4, readers encounter complex text that includes "more than one point of view" (Chall, 1996b, p. 23).

Readers at this stage begin to construct new knowledge as they move into the final stage of the reading process. Once at Stage 5, readers are able to discriminate among the pieces of a text, selecting only that which is pertinent to the reader's purpose. Higher levels of thinking are involved at this stage, including "analysis, synthesis, and judgment" (Chall, 1996b, p. 24).

Chall's stages build on each other, with one stage providing prerequisites for the next. Children who do not develop the appropriate skills at each developmental stage will be at risk for reading failure. Though ages are not necessarily attached to each stage, the critical skills of each stage should be mastered early in order to give the learner the best possible opportunity to become a reader (Chall, 1996a). Early literacy skills such as vocabulary development are critical to later reading success (Beron & Farkas, 2004; Christ & Wang, 2010; Foster et al., 2005; Hemphill & Tivnan, 2008; Serry, Rose, & Liamputtong, 2008). In a study of high-poverty schools, Hemphill and Tivnan (2008) found that children who began first grade with lower vocabulary skills continued to show deficits in reading comprehension through the duration of the study which ended when children were in third grade. Similarly, in a review of literature pertaining to the early identification of at-risk readers, Serry, Rose, and Liamputtong (2008) found that early warning signs of failure to learn to read may expose themselves as phonological or oral language deficits, and these deficits can have an effect both early on in the process of reading acquisition or later as reading tasks get more difficult and complex.

This study focused on the development of Stage 0 and its connection to later literacy achievement in children, specifically reading comprehension. Stage 0, also

known as the prereading stage, begins at birth, and spans the time from birth through the child's first exposures to formal schooling. During this stage, children acquire knowledge of language and its syntax. As discussed later in the literature review of Chapter 2, children who are read to at home and are surrounded by a language-rich environment will develop skills at Stage 0 at a more proficient level than children in language-poor environments. For those children that come from rich language environments, learning at Stages 1 and 2 is less difficult (Chall, 1996b). Research also demonstrates that oral language development at Stage 0 is more closely correlated to later literacy achievement in Grade 3 and beyond than to early literacy achievement in the primary grades (Chall, 1996a, 1996b; Cutting, Materek, Cole, Levine, & Mahone, 2009; Hemphill & Tivnan, 2008; Kendeou, Van Den Broek, White, & Lynch, 2009). It is at Stage 3 and beyond that a child's everyday experiences begin to play a key role in the ability to read and understand (Chall, 1996a).

As a former teacher and Reading First coach, I experienced firsthand the instructional emphasis that is often placed on phonics instruction in preschool and kindergarten classrooms. Though this instruction is necessary for early literacy achievement, preschool teachers may not fully understand the importance of oral language development in the early years and its relationship to later reading comprehension. Teachers who do not fully understand the connection between oral language and reading comprehension perceive their role in a different way than those teachers who do understand the connection, and these two groups will make different instructional decisions. For this study, Chall's reading stage theory served as a basis for

developing the instrument with support from more current theories of reading development (Ehri, 1999; Ehri & Williams, 1996; Gough & Tunmer, 1986; Scarborough, 2001).

Definition of Terms

The key terms used in the study are defined as follows:

Comprehension: The RAND Reading Study Group defines reading comprehension as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (as cited in Honig et al., 2008, p. 609).

Decoding: Translating a word from print to speech by using knowledge of sound-symbol correspondences; also the act of sounding out new words (Moats & Hennessy, 2010).

Discourse: "Speaking and writing at length; discussion of a subject" (Moats & Hennessy, 2010, p. 99).

Direct instruction: Teaching which includes defining the concept to be taught, guiding students through application of the concept, and providing guided practice so that mastery can be achieved (Moats & Hennessy, 2010).

Emergent literacy (*also, emerging literacy, early literacy*): The beginning awareness and understanding of letters and their sounds which typically begins at the age of 4 or 5 years old. Awareness continues to mature as children develop oral language skills, continue to gain awareness of the sound structure of language, and begin to find meaning for symbols in their environment (Paulson et al., 2001).

Explicit: "Fully and clearly explained; transparent" (Moats & Hall, 2010, p. 94).

Expressive vocabulary: "Words that a person uses in writing or speaking" (Moats, 2009, p. 87).

Fluency: Oral reading of text with speed, accuracy, and prosody (National Institute of Child Health and Human Development, 2000).

Morphology: "The rules of word formation" (Paulson & Moats, 2010, p. 113).

Oral language: "The ability to produce or comprehend spoken language, including vocabulary and grammar" (National Center for Family Literacy, 2008, p. viii).

Orthography: "A writing system for representing language" (Moats & Hennessy, 2010, p. 101).

Phoneme awareness (also, phonemic awareness): Thinking about and manipulating the phonemes in words, demonstrating a higher level of phonological awareness (Paulson & Moats, 2010).

Phonics: "The study of the relationships between letters and the sounds they represent; also used as a descriptor for code-based instruction in reading" (Moats & Hennessy, 2010, p. 101).

Phonological awareness: "The awareness of the sound structures of language; the ability to reflect on and consciously manipulate syllables and sounds of speech" (Paulson & Moats, 2010, p. 113).

Phonology: "The study of the sound system of a language and the rules used to put sounds together to make words" (Paulson & Moats, 2010, p. 21).

*Pragmatics: "*The system of rules and conventions for using language and related gestures in a social context" (Moats & Hennessy, 2010, p. 101).

Prosody: "The rhythmic and intonational aspect of spoken language" (Paulson & Moats, 2010, p. 114).

Receptive vocabulary: Words for which a person understands the meanings when encountering them in reading and listening (Moats, 2009).

Semantics: "The study of word and phrase meanings" (Paulson & Moats, 2010, p. 114).

Syntax (also, syntactic): "The system of grammatical rules that govern permissible word order in sentences" (Paulson & Moats, 2010, p. 115).

Systematic: Instruction that includes routines followed in a step-by-step manner in order to emaphasize the systemic nature of the information (Moats & Hall, 2010).

Vocabulary: Words that a person understands and uses in a language (Paulson & Moats, 2010).

Whole language: An instructional philosophy of reading that does not emphasize phonology and phonics, but emphasizes learning to read words as wholes through meaningful encounters with text (Moats & Hall, 2010).

Assumptions

In this study, I assumed that an instrument could be developed to produce valid and reliable scores while assessing preschool teachers' perceived competency and actual knowledge of strategies for developing oral language in the preschool classroom. I assumed that participants would complete their own survey instrument without

referencing materials or assistance from others. I also assumed that participants would answer honestly on all tasks: (a) perceived competencies, (b) knowledge questions, and (c) demographic information (e.g., years of experience and recent training).

Limitations

Participants completed the perceptions and knowledge instrument at one point in time. Therefore, the results were limited to one point in time only. Reliability and validity data was limited to the use of the instrument in the prepilot and pilot studies. Participants were not randomly selected, limiting the ability to generalize to a larger population. Participants were all preschool teachers in the state of Colorado in Colorado Preschool Programs, limiting the ability to generalize to other locations and types of preschool programs. Participants self-reported demographic information including years of teaching experience and number of hours of professional development related to early literacy completed in the last 2 years; therefore, there was potential for self-report bias.

Delimitations

In order to meet the purpose of the research, the pilot study was delimited to include: (a) preschool teachers in the state of Colorado, (b) facilities participating in the Colorado Preschool Program, and (c) licensed, public preschool facilities in the state of Colorado.

Significance of the Study

Learning to read is paramount for continued success in school and in life. In order to teach all children to read in the elementary grades, teachers must be knowledgeable of best practices and the research on how children learn to read. Additionally, as revealed in

the literature review later in Chapter 2, children must acquire basic literacy skills as early as possible to increase the likelihood for continued success as a reader. This study is significant because it contributes to the existing research on teachers' perceptions and knowledge by focusing on preschool teachers and strategies for supporting oral language development.

The development of effective professional development for teachers is dependent on knowing teachers' current knowledge and their perceived understanding of the topic. Often, teachers do not know what they do not know, so they may not be clear on which professional development opportunities they should seek. Similarly, improvement of teacher preparation programs is dependent on knowing the gaps in teachers' knowledge, as well as understanding what is necessary for teachers to apply knowledge to make informed instructional decisions. Recent studies have examined teachers' perceptions and knowledge of English phonology and orthography (Cheesman et al., 2009; Mahar & Richdale, 2008; Moats, 2009; Moats & Foorman, 2003; Piasta et al., 2009). However, there has not been an emphasis on preschool teachers and oral language development in the early years. This study fills a gap in the research by developing an instrument to examine preschool teachers' perceived competencies and actual knowledge of strategies for oral language development in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. The results of the study may be used by everyone involved in the educational arena, including policy makers, researchers, professors in higher education, state level coordinators and grant managers, district level administrators, and school level personnel

to improve the training and continued support that preschool teachers receive. The results of the study contribute to positive social change by providing an instrument that may be used in future research studies. Data obtained from the instrument may be used to better understand teachers' decision making processes in the preschool classroom, to inform how preschool teachers are prepared for the classroom experience, and to determine what type of future professional development should be offered.

Summary

In Chapter 1, I presented an introduction to the study, developed the problem being addressed, listed the questions to be answered, and stated the purpose of the research. I described the theoretical framework which guides the study and gave definitions for all key terms. I also listed the assumptions, limitations, and delimitations of the study. To conclude Chapter 1, I provided the significance of the study, including a description of how the study contributes to positive social change. In Chapter 2, I provide a review of the literature including a history of reading theories and related instructional methods, what is known about oral language development, and a synthesis of the literature on teacher preparation. In Chapter 3, I describe methodology including study design, participant selection and sample, instrumentation and materials, data collection and analysis, and participant protection. In Chapter 4, I describe the process used to collect and analyze the data in addition to the results of the data analyses. Finally, in Chapter 5, I present a summary and interpretations of the study findings in addition to implications and recommendations to improve the training and ongoing support that preschool teachers receive.

Chapter 2: Literature Review

Introduction

The growing body of research on literacy instruction has demonstrated that the early years are the most significant years for teaching children to read. Mathes et al. (2003) found that children who are behind in reading skills at the end of first grade remain behind at the end of third grade. Students who are poor readers at the end of third grade have very little chance of catching up with their peers without intensive intervention (Mathes et al.). In fact, Foorman et al. (1998) found that "74% of children who were poor readers in Grade 3 were poor readers in Grade 9" (p. 37). Similarly, in a longitudinal study of 55 children from first to fourth grade, Juel (1988) found that "good readers in first grade had a .88 chance of staying good readers in fourth grade while poor readers in first grade had a .87 probability of remaining poor readers" (p. 440). The acquisition of early language and literacy skills is necessary for continued success in the development of reading proficiency.

A meta-analysis conducted by the National Reading Panel (National Institute of Child Health and Human Development, 2000) summarized the research on reading instruction and found that phonemic awareness, phonics, fluency, vocabulary, and comprehension are necessary components of effective literacy instruction. Similar work by the National Early Literacy Panel (National Center for Family Literacy, 2008) summarized the research on learning to read in the early years in order to determine which early literacy skills are most predictive of later literacy achievement. Eleven variables were found to be moderately to strongly correlated to reading achievement

including alphabet knowledge, phonological awareness, rapid automatized naming of letters/digits, rapid automatized naming of objects/colors, writing/writing name, phonological memory, concepts about print, print knowledge, reading readiness, oral language, and visual processing. For all but two of these variables, the correlation was stronger when the outcome was tested at the end of the kindergarten year. Oral language and rapid automatized naming of letters/digits were the two exceptions. Oral language was found to be more strongly correlated to literacy achievement at the end of first and second grade (National Center for Family Literacy, 2008). Studies that analyze the correlation between oral language and literacy achievement at the end of third grade have shown similar results (Cutting et al., 2009; Hemphill & Tivnan, 2008). Contrary to this knowledge, early childhood teachers may not fully understand the importance of oral language and its impact on later literacy achievement. It seems that the focus on early skill development including phonemic awareness and decoding has cast a shadow over the importance of oral language development (Dickenson & Tabors, 2001).

For this study, I conducted a thorough search of scholarly journals, government publications, texts, and electronic databases such as EBSCOhost, ERIC, and Academic Search Premier. I also used relevant websites such as the U. S. Department of Education website. The keywords used to conduct this search included *literacy, reading instruction, oral language, emergent literacy, professional development, National Literacy Panel, teacher effectiveness, elementary education, preschool, phonemic awareness, phonics, decoding, vocabulary, early reading, struggling readers, teacher knowledge, knowledge*

assessment, knowledge questionnaire, beginning literacy, reading acquisition, language, and cognitive development. The search was limited to peer-reviewed journals.

The review of the literature includes research related to the proposed methodology and is organized in the following manner: (a) a discussion of reading theories, (b) a comparison of instructional philosophies for teaching children to read, (c) an overview of research on the development of oral language, and (d) an analysis of research on the role of teacher preparation.

Reading Theories

Chall

First published in 1967, Chall's *Learning to Read: The Great Debate* (1996a) was one of many contributions to come in the never-ending war over best practices in reading instruction. By 1996, when the 3rd edition of Chall's book was published, there would be a growing body of evidence to support what was, in 1967, only a report of a 3-year study by the Carnegie Corporation. From the synthesized evidence, Chall theorized that learning to read happens over time, through a series of predetermined stages of literacy development, as described previously in Chapter 1. Central to the purpose of this study is the prereading stage, or Stage 0 in Chall's description of the reading stages, because this stage is typical of preschool through late kindergarten.

In order to come to a consensus about how learning to read takes place, Chall's research consisted of an evaluation of studies conducted during the period of time from 1967 to 1996. The research debate among reading experts, as described by Chall, began over whether the code emphasis or meaning emphasis approach was best practice. Code

emphasis supporters believed that children need to learn the alphabetic code prior to learning to read. Meaning emphasis supporters believed that learning to read takes place while emphasizing the comprehension or understanding of what is read. Despite the evidence to support a code emphasis approach, this debate continued into the 1980s, giving way to meaning emphasis teaching approaches such as whole language and literature based reading instruction (Chall, 1996b). Code based and meaning based instructional approaches are further examined later in this chapter.

During the 1980s, cognitive and developmental psychologists joined the debate and found that word recognition and decoding skills were vital to a child's reading ability. Chall (1996a) summarized the findings and contended that study results began to emphasize phonemic awareness and its correlation to a child's ability to learn the alphabetic code. Continuing into the 1990s, the body of evidence supported the code emphasis approach, at least for children in their earlier years of schooling. In essence, it was determined by Chall that the reading process is developmental, and children do benefit from instructional approaches that support the stages of development in reading (Chall, 1996a). Since Chall's research of the 1990s, a number of theories have emerged that support Chall's findings and extend on her work, including the research of Scarborough, Ehri, Gough, and Tunmer.

Scarborough

Scarborough (2001) investigated language to literacy connections in an effort to determine contributors of reading disabilities and identify children as early as preschool that are at risk for developing a reading disability. Scarborough confirmed Chall's

research, demonstrating how important the early years are when a child is learning to read. Through an analysis of existing research, Scarborough (2001) determined that "early differences in the sorts of verbal abilities that make up the comprehension strands, most notably vocabulary, sentence/story recall, and concepts of print, have also been reliable predictors of later reading" (p. 100). When children enter formal schooling with weak verbal and literacy skills, they are more likely to have difficulties learning to read than their more experienced counterparts. Similar to Chall's findings, Scarborough (2001) discovered that when children begin preschool, they must have developed some language and vocabulary in order to be ready for formal phonological and phonemic awareness instruction. Therefore, children with better developed vocabularies perform better in preschool on phonemic awareness activities (Metsala, 1999). Essentially, oral language is the foundation on which other skills are developed.

Similar to Chall's findings, Scarborough's research demonstrated that the process of learning to read is developmental. Scarborough (2001) used a rope model to show how reading ability develops. The two main strands of the rope; word recognition and language comprehension, are interwoven, and each of these two main strands contains many more strands within them. These strands are interwoven to demonstrate that word recognition and language comprehension take place at the same time. The smaller strands of the language comprehension section of the rope include background knowledge, vocabulary, language structures, verbal reasoning, and literacy knowledge. The smaller strands of the word recognition section of the rope include phonological awareness, decoding, and sight recognition. Becoming a skilled reader, according to Scarborough

(2001), involves increased automaticity of the word recognition strands and increasingly strategic use of the language comprehension strands within the rope model. Central to the purpose of this study, Scarborough's (2001) reading theory depicted vocabulary as being interwoven with background knowledge, verbal reasoning, language structures, and literacy knowledge; therefore, vocabulary plays a critical role in reading comprehension. The idea that vocabulary is significant for reading comprehension is further developed later in this chapter.

Ehri

Another theory that supports Chall's initial work is the theory of word reading developed by Ehri. In order to describe the process that children go through when learning to read print, Ehri (2005) theorized four phases: prealphabetic, partial alphabetic, full alphabetic, and consolidated alphabetic. The prealphabetic phase is most similar to Chall's Stage 0. Children at this phase have no knowledge of letter to sound correspondences; therefore, they rely on visual clues to support their ability to read words. For example, children begin to recognize the word *stop* because of the shape and color of a stop sign that is seen often in their environment. At this point in learning to read, children are not using letters, sounds, and blending abilities to read the word. Instead, children at this phase are nonreaders and will only pretend to read books that they have heard often and will use pictures throughout books to support their pretend reading. Reading stories aloud to children is important at this point because it expands their vocabulary and background knowledge and helps children become familiar with the syntax of written language (Ehri, 1999). On the contrary, "readers who have

impoverished experiences or poor memories for information about the world may lack the vocabulary and background knowledge to interpret some kinds of texts" (Ehri & Williams, 1996, p. 234). Therefore, Ehri and Williams (1996) stressed the importance of building vocabulary and background knowledge as early as possible and throughout the process of learning to read.

Ehri's reading phases are similar to Chall's reading stages; however, Ehri's phases suggest a more fluid process from one component to another in the progression of learning to read. Most pertinent to this study, Ehri's description of Stage 0 supports the research about the importance of early literacy experiences, as described later in the literature review. Ehri and Williams (1996) described Stage 0 as emergent reading which takes place in the preschool years. Children gain early reading skills at this phase in the process by "listening to storybooks read by parents, by learning to name alphabet letters, [and] by seeing labels and signs marking objects and places in their environment" (p. 234). Most importantly, children begin to gain an understanding of how our language works, and background knowledge is gained as early as this phase in the process. Additionally, as children have more experiences listening to stories read to them, they are introduced to more complicated patterns in our language and differences between spoken and written language (Ehri & Williams, 1996). Understanding spoken and written language, or language comprehension, becomes extremely important as children develop as readers, as Gough and Tunmer (1986) confirmed in their theory of reading development.

Gough and Tunmer

Gough and Tunmer (1986) theorized a simple view of reading in order to describe the process that must take place in order to develop reading comprehension. Similar to Scarborough's rope model, Gough and Tunmer's theory proposed that reading comprehension takes place when both decoding and language comprehension abilities are strong (decoding x language comprehension = reading comprehension). For children with strong decoding but poor language comprehension, reading comprehension is weak. The same is true for a child that has strong language comprehension but poor decoding skills. The child must be able to read the words fluently and accurately in order to have reading comprehension.

Language comprehension and reading comprehension are not the same. Language comprehension includes "receptive vocabulary, grammatical understanding, and discourse comprehension" (Catts, Adlof, & Weismer, 2006). Language comprehension, unlike reading comprehension, relies on oral language rather than print. Reading comprehension; however, is dependent on the reader to read the words and derive meaning from them. The Connecticut Longitudinal Study (Foorman et al., 1997) confirmed Gough and Tunmer's work while also supporting the notion that language comprehension becomes even more important and decoding ability becomes less important for reading comprehension as children age. In this unprecedented longitudinal study, a sample of 445 kindergarten students were randomly selected from Connecticut public schools and followed for more than 20 years. In first grade, the proportion of variance in reading comprehension accounted for by decoding was 79%. The proportion

of variance decreased to 69% in second grade, 59% in third grade, 53% in fourth grade, 49% in fifth grade, 48% in sixth and seventh grade, and 40% in eighth grade. These findings demonstrated that while decoding is extremely important for reading comprehension in first grade, the relationship between decoding and reading comprehension weakens as other subskills of comprehension become more important across time (Foorman et al., 1997). Unfortunately, misinterpretation of findings such as these may lead teachers to believe that a balance of decoding and comprehension instruction is necessary to achieve maximum results. Instead, Chall's reading stages and Ehri's reading phases indicate at which point in time during the process of learning to read that particular subskills should be emphasized. The subskills of word recognition (phonological awareness, decoding, and sight recognition) outlined in Scarborough's rope model and Gough and Tunmer's simple view of reading should be emphasized early during reading development while vocabulary and comprehension are important throughout the process. The next section of this chapter describes how these reading theories have been used in the debate over the most effective instructional approaches for teaching children to read.

The Reading Wars

Code Versus Meaning Approach

For over a half-century, researchers have argued over which instructional approach is most effective at teaching all children to read at proficient levels. At one end of the spectrum are believers in a strong code oriented approach. Teachers who emphasize the reading code will include attention to phonics based instruction in which

children learn to manipulate the sounds in words by blending, segmenting, deleting, and replacing sounds (Chall, 1996a). At the same time, children learn the letter-sound correspondences so they can decode words on their own. Recognition of high frequency words is also taught. Instruction in the code is taught early while continuing to increase a child's vocabulary. Later on, children focus on increasing fluency while developing higher levels of comprehension (O'Conner, Fulmer, Harty, & Bell, 2005). An approach such as this one is typically referred to as a bottom up approach to teaching reading (Cutting et al., 2009). Bottom up approaches are in line with the reading theories of Chall, Scarborough, Ehri, Gough, and Tunmer described earlier in this chapter.

At the other end of the instructional spectrum are believers in a strong meaning oriented classroom. Often described as the whole language method, the idea is that "children learn to read and write in a manner similar to how they learn to speak" (Shaw, Dvorak, & Bates, 2007). The emphasis of instruction is on "recognizing entire words as the meaningful units of reading" (Sousa, 2005, p. 63). Children in whole language approach classrooms spend ample amounts of time reading because "experiencing words in context leads to greater improvement in word reading than experiencing words out of context" (Sousa, 2005, p. 65). The belief is that when children encounter difficult words in text, they can use semantics and syntax to determine the words. Though followers of the meaning based approach regard phonics as important, they determined that phonics did not need to be explicitly taught (Sousa, 2005).

In a meaning oriented classroom, students "have extensive engagement with authentic literature and have the opportunity to learn new vocabulary" (Mathes et al.,

2003, p. 460) so that the instructional emphasis is more on gaining understanding of text than analysis of individual words. Comprehension strategies such as making inferences, identifying the main idea, and summarizing are practiced (Mathes et al., 2003). This approach to teaching reading is referred to as a top down approach (Cutting et al., 2009), and the three cueing systems play a central role in this type of instruction. Adams (1998) wrote about the three cueing systems in *Literacy for All Issues in Teaching and Learning*, trying to trace the original research to support the notion of the three cues but not succeeding in documenting scientific literature to support the method. Essentially, teachers using the three cues direct children to the visual, semantic, and syntactic clues in order to determine unknown words. This format for teaching is not in line with the theories of Chall, Scarborough, Ehri, Gough, and Tunmer because the phonological processor is not emphasized, and systematic and explicit phonics instruction is deemed unnecessary. The word recognition strands in Scarborough's rope model and decoding, as in Gough and Tunmer's simple view of reading are not emphasized. Instead, children are taught to rely on a number of strategies for figuring out unknown words including picture clues and context clues (Pressley et al., 2001; Routman, 1996; Smith, 1979; Weaver, 1994).

Although there is great conflict between the reading stage theories and the whole language approach in regards to decoding instruction, language comprehension is emphasized in both the top-down and bottom-up approaches to teaching reading. As mentioned previously, language comprehension is the oral version of comprehension. Language comprehension includes, at a minimum, "receptive vocabulary, grammatical

understanding, and discourse comprehension" (Catts et al., 2006, p. 280), all of which make up oral language development. The next section provides an overview of what is known about the development of oral language, how oral language development relates to later reading comprehension, and the environmental contributors of oral language development.

Oral Language Development

Despite the disagreement over which instructional philosophy is best, research continues to point to the importance of oral language development at an early age and its impact on a child's ability to comprehend text in later years (Catts, Fey, Zhang, & Tomblin, 1999; Cutting & Scarborough, 2006; Cutting et al., 2009; Dickinson & McCabe, 2001; Guo & Harris, 2000; Hart & Risley, 1995; Hemphill & Tivnan, 2008; Kendeou et al., 2009; Lonigan, Burgess, & Anthony, 2000; Mehta, Foorman, Branum-Martin, & Taylor, 2005; NICHD, 2005; Storch & Whitehurst, 2002; Vellutino et al., 2007). Both the code and meaning based instructional approaches described previously value the contribution of oral language development, and more specifically, vocabulary development, to the process of learning to read and later reading achievement. According to the National Institute for Literacy (2010), "young children's ability to use language and to listen to and understand the meaning of spoken and written words is related to their later literacy achievement in reading, writing, and spelling" (p. 2). Furthermore, oral language development includes critical skills that begin to develop as early as infancy and continue to develop when formal schooling begins in preschool (Storch & Whitehurst, 2002).

Oral language includes semantic, syntactic, and conceptual knowledge (Storch & Whitehurst, 2002). According to Paulson and Moats (2010), oral language includes five structural components: phonology, semantics, morphology, syntax, and prosody. It is the semantic structure of oral language that includes vocabulary development, consisting of both expressive and receptive vocabulary. According to Hart and Risley (1995), "a vocabulary is the stock of words available to a person or a language community" (p. 6). The National Center for Family Literacy (2008) defined oral language as the "ability to produce and/or comprehend aspects of spoken language, including vocabulary and grammar (semantics and syntax)" (p. viii). A child's vocabulary consists of words that the child can use (expressive) and/or understand (receptive), or all known words (Hart & Risley, 1995). The development of language preceeds learning to read print; therefore, language development contributes to a child's ability to learn to read in the early years, and its importance increases as a child ages.

Oral Language to Literacy Connections

A growing body of research demonstrates the role of early language development on later reading comprehension ability (Catts, Fey, Zhang, & Tomblin, 1999; Cutting & Scarborough, 2006; Cutting et al., 2009; Dickinson & McCabe, 2001; Foorman et al., 1997; Guo & Harris, 2000; Hart & Risley, 1995; Hemphill & Tivnan, 2008; Kendeou et al., 2009; Lonigan, Burgess, & Anthony, 2000; Mehta et al., 2005; NICHD, 2005; Storch & Whitehurst, 2002; Vellutino et al., 2007). In a quantitative study of 300 children from first through third grade, using correlational and multiple regression analyses, Hemphill and Tivnan (2008) found that while basic early literacy skills such as phonemic

awareness and decoding decreased in effect on reading achievement over time, vocabulary continued to be a strong predictor of reading comprehension through third grade. These results remained consistently strong even after controlling for gender and ethnicity. Similarly, Mehta et al. (2005) conducted a study of 1,350 children in 127 classrooms in Grades 1-4 in order to determine the relationship between word reading, spelling, comprehension, and general language competence. The researchers found that literacy achievement and language levels were correlated, and literacy achievement in the first to fourth grade classrooms could be predicted by the vocabulary and language proficiency scores of each classroom.

When tests of a broader scope of oral language skills were considered, the findings were similar. Roth, Speece, and Cooper (2002) examined the relationship between structural language, metalinguistics, and narrative discourse and a child's ability to comprehend text that is read in kindergarten, first, and second grade. Results showed that semantic knowledge was a predictor of reading comprehension in second grade and that phonological awareness was not a predictor. For children with reading disabilities, the connection between oral language skills and reading comprehension remains strong. Cutting et al. (2009) found that children with reading disabilities "showed weaknesses in vocabulary and inferential language" (p. 48). Similar to Gough and Tunmer's simple view of reading, study results demonstrated that children experiencing reading difficulties may not just have deficits in basic reading skills such as decoding, but instead, children may have deficits in the higher level skills associated with reading comprehension ability, including vocabulary.

Children may be identified as early as preschool and kindergarten for reading disabilities based on assessments of language ability (Catts et al., 1999). In an epidemiologic longitudinal study, Catts et al. (1999) found that over 70% of the children with reading disabilities in second grade also showed language deficits as early as preschool or kindergarten. In fact, as children aged, there was a stronger relationship between a child's score on measures of vocabulary and reading comprehension assessments in later grades (Cain et al., 2004; Tannenbaum, Torgesen, & Wagner, 2006; Vellutino et al., 2007). Vellutino et al. (2007) tested a hypothesis of relationships between the underlying skills of word identification and language comprehension. Correlations between each component--reading comprehension, language comprehension, and vocabulary--were significant and strong, ranging from the lowest of .51 (vocabulary/reading comprehension) to the highest of .79 (reading comprehension/language comprehension). Cain et al. (2004) confirmed these results in a separate longitudinal study of the relationship between component skills of reading comprehension, working memory, and verbal ability. Children were tested at three points in time at the average ages of 7.53, 8.62, and 10.64. When children were the average age of 7.53 years, correlations between expressive vocabulary and reading comprehension were not significant and low at .22; however, at the average ages of 8.62 and 10.64 years, the correlations between expressive vocabulary and reading comprehension were significant and higher at .52 and .63, respectively (Cain et al., 2004). This study confirmed previous research that the relationship between vocabulary and reading comprehension gets stronger as children age. Therefore, it is important to determine

specific ways in which language development, and more specifically, vocabulary development, can best be supported in children as early as possible.

Environmental Contributors

Researchers have examined the environmental contributors of language development, in both home and childcare environments, in order to better understand why children struggle with acquiring literacy skills (Caspe, 2009; Cunningham & Stanovich, 1997; Dickinson & McCabe, 2001; Dickenson & Tabors, 2001; Foster, Lambert, Abbott-Shim, McCarty, & Franze, 2005; Guo & Harris, 2000; Hart & Risley, 1995; Hoff, 2003; Kainz & Vernon-Feagans, 2007; Merlo, Bowman, & Barnett, 2007; Weigel, Martin, & Bennett, 2005). The characteristics associated with growing up in a home of poverty have been found to negatively impact a child's oral language development. Kainz and Vernon-Feagans (2007) investigated data from 1,913 children involved in the Early Childhood Longitudinal Study-Kindergarten Cohort and revealed that "children from families that experienced persistent low income across the early years of elementary school had lower reading scores at kindergarten entry" (p. 418). Similarly, in a study of 325 families, Foster et al. (2005) investigated three family level constructs; socioeconomic status, social risk, and home learning, in order to determine the relationship between these variables and children's emergent literacy and social functioning. Social risk factors included exposure to violence, depression on the part of a caregiver, social support provided to the parent, and primary caregivers' level of mastery. For this study, mastery was defined as "a dimension of personal coping that refers to the degree to which one has a sense of personal control over one's life-chances rather than

holding to a fatalistic view of reality" (Foster et al., 2005, p. 15). Home learning variables observed included reading to children, promoting enrichment experiences, providing learning activities, and having books in the home. The researchers found that all three family level constructs; socioeconomic status, social risk, and home learning, were significantly and directly related to both emergent literacy and social functioning.

Moreover, research has demonstrated a correlation between a child's vocabulary size, parental education, and the quality of the child's environment (Cunningham & Stanovich, 1997). There are specific differences in the types of vocal interactions that take place in the homes of low-socioeconomic families. Hoff (2003) found that children from economically advantaged homes had more advanced language skills than their counterparts from economically disadvantaged homes. In a well known study by Hart and Risley (1995), social class differences were found to be significant indicators of the differences between the amount and type of speech that took place between parents and children. Parents from higher social classes engaged children in conversations whereas parents from lower social classes were less likely to engage in conversations and more likely to spend time giving directions and orders (Evans, 2004). Children from low socioeconomic status families were also more likely to live in homes where there was tension and stress due to the lack of money and resources. Consequently, these children were less likely to experience the necessary positive parent-child interactions that contribute to a child's development of language (Aikens & Barbarin, 2008; Guo & Harris, 2000).

Dickinson and Tabors (2001) also investigated the home environment of children living in poverty for evidence of specific contributors to language development when children were 3, 4, and 5 years old. This longitudinal study used both quantitative and qualitative methods of data collection, and descriptive, correlational, and regression analyses were used on the data. During the home visits, the investigators observed parents and children during book reading, playtime, and mealtime.

During book reading, parents were observed using two types of talk; immediate and nonimmediate. Immediate talk focused on basic recall of events happening in the story. On the contrary, nonimmediate talk required children to use information from the story for higher level thinking such as inferring, generalizing, predicting, and connecting story events to personal experience. Forty-three to 60% of the observed talk during book reading was immediate talk whereas only 11% to 18% of the talk involved nonimmediate talk. Most notably, results of the study showed that it was the nonimmediate talk that was associated with later literacy achievement (Dickinson & Tabors, 2001).

Observations during playtime revealed three types of talk; pretend talk, nonpretend talk, and nontoy play talk. Pretend talk included "talk with pretend elements and a nonliteral approach to features in the immediate environment" (Dickinson & Tabors, 2001, p. 62). Nonpretend talk "maintained a literal approach to actions and toys" (Dickinson & Tabors, 2001, p. 62). Nontoy play talk included information not relevant to the play taking place. Data analyses revealed that nontoy play talk made little to no contribution to the early literacy skills of the children and took place rarely, just more than 10% of the time observed. On the contrary, pretend talk when the children were 4

years old had a moderate positive relationship with the children's performance on tasks of emergent literacy which included writing concepts, letter recognition, story and print concepts, sounds in words, and environmental print (Dickinson & Tabors, 2001).

During mealtime, two types of talk were observed; narrative talk and explanatory talk. Children engaged in narrative talk were either sharing stories of an event from the past or in the future. "Explanatory talk was defined as talk that requested and/or made some logical connection between objects, events, concepts, or conclusions" (Dickinson & Tabors, 2001, p. 86). Both narrative and explanatory talk were positively correlated with the language and literacy measures used in the study. Children performed better on the Peabody Picture Vocabulary assessment, which required children to match a word with a picture, when they were exposed to more explanatory talk at the ages of 4 and 5 years old. Similarly, more narrative talk during mealtimes at age 5 was associated with higher scores on the receptive vocabulary test at the same age. Greater amounts of narrative talk during mealtimes at age 4 were also associated with better scores on story comprehension assessments (Dickinson & Tabors, 2001).

Overall, the study demonstrated that particular types of conversations, whether during book reading, playtime, or mealtime, gave children the opportunity to be exposed to new words, or what the authors referred to as rare words. To further investigate the use of rare words, the researchers examined the relationship between the density of rare words used during the three conversational settings and the children's performance on the Peabody Picture Vocabulary Test. There was a positive relationship between the variables, demonstrating that conversational talk which included rare words did

contribute to a child's vocabulary development. A closer look at this relationship also revealed that informative uses, or times in which the adult supported the child in understanding the word, were also positively correlated with vocabulary scores (Dickinson & Tabors, 2001).

Similar results were found with sample participants not living in poverty. Weigel et al. (2005) used both quantitative and qualitative methods to examine the home literacy environment of children and the influences on language development, investigating four home components: (a) parental demographics, (b) parental literacy habits, (c) parental activities, and (d) parental reading beliefs. A significant positive correlation was found between parental demographics and both receptive (.30) and expressive (.31) language. In addition, a significant positive correlation was found between parental reading beliefs and receptive (.32) and expressive (.26) language. The positive relationships between parental literacy habits and children's receptive (.34) and expressive (.25) language were also significant. This study demonstrated that parents' reading behaviors and beliefs were associated with children's expressive and receptive language abilities. Children performed at higher levels when their parents were models of literate behaviors and valued literacy and language skills.

As demonstrated in the Home-School Study of Language and Literacy Development, children are more able to develop oral language vocabularies when their family members take part in conversations often. In fact, "the number of words that an infant hears each day is the single most predictor of later intelligence, school success, and social competence" (Straub, 1999, p. 80). Guo and Harris (2000) found "that cognitive

stimulation in the home is by far the most important influence mediating the effect of poverty on such development" (p. 442). Similar findings from Merlo, Bowman, and Barnett (2007) confirmed that the greatest differences in reading achievement between children from low and high socio-economic homes were the result of differences in the home environment and parenting styles and abilities. Children in the study that lived in richer social and emotional environments and were provided with more positive nurturing experiences were more likely to improve their reading abilities (Merlo et al., 2007).

In addition to the home setting, children acquire oral language through their interactions at school, as early as preschool (Dickinson & Smith, 1994; Weigel et al., 2005). In a report for teachers, The National Institute for Literacy (2010) stated that "the more caregivers intentionally make time for talking and sharing experiences, the more support there is for children's language development and later reading comprehension success" (p. 13). Book reading is one way that preschool teachers may assist children in acquiring oral language skills (Dail & McGee, 2011; Dickinson & Smith, 1994; National Institute for Literacy, 2010). Reading books to children supports vocabulary growth when teachers take time to explicitly state the meanings of words both in and out of the context of the book they are reading. The National Institute for Literacy (2010) suggested that preschool teachers should "use rich vocabulary and support children in developing a deep understanding of the meaning of words – providing multiple definitions and examples, connecting new words to concepts children already know" (p. 6). Using a mixed-methods design for data collection and analysis during a 4-year professional development project, Dail and McGee (2011) found that decontextualized language during read alouds,

or what Dickinson and Tabors (2001) referred to as nonimmediate talk, was most effective at enhancing children's oral language. Robbins and Ehri (1994) also found that exposures to stories read aloud in kindergarten helped children to build vocabulary knowledge. In their study of 51 kindergarteners, Robbins and Ehri (1994) discovered modest effects on vocabulary growth when children were read aloud a story at least twice and had opportunities to hear unfamiliar words throughout the story. Other language skills, such as syntactics, were developed when children were active participants, discussing the story before, during, and after reading (Dickinson & Smith, 1994).

Weigel et al. (2005) also examined the relationship between the childcare environment and a child's literacy and language development. They investigated four main components of the environment: (a) teachers' demographics, (b) teachers' literacy habits, (c) teachers' activities, and (d) teachers' reading beliefs. From randomly selected childcare centers, teachers volunteered to complete interviews and self-administered questionnaires. Children were also assessed for language and literacy skills including print knowledge and expressive and receptive vocabulary. The highest correlations were between children's expressive language and teachers' reading beliefs (.44). Although the correlations were lower, there was still a positive significant correlation between receptive language and two teacher components; demographics (.29) and reading beliefs (.38). Furthermore, children's expressive language was also positively correlated with teachers' demographics (.28), literacy habits (.24), and activities (.24). This study demonstrated that teachers' reading beliefs, activities, and habits are associated with children's expressive and receptive language (Weigel et al., 2005).

Contributing to the research on child care environments, Dickinson and Tabors (2001) summarized the findings from the childcare observation portion of the Home-School Study of Language and Literacy Development. Similar to their observations of the home environment summarized earlier in this chapter, the researchers investigated the types of interactions and conversations that took place in the preschool environment during book reading, playtime, and mealtime. In order to determine the most effective types of talk taking place during these situations in the classrooms, researchers used both quantitative and qualitative methods of data collection.

During book reading, a variety of styles were observed, but the most effective style included both analytical and interactive talk before, during, and after reading a book. Positive correlations were found between the teacher's use of questions that included words such as why, how, and when and scores of receptive vocabulary at the end of kindergarten. Additionally, story comprehension was related to book reading opportunities that included interactive and reflective conversations (Dickinson & Tabors, 2001).

Observations of play time also revealed several key findings. Teachers were most effective when they engaged children in conversations and did not become overly involved in conversations with one child. Varied use of vocabulary and challenging conversations were positively related to children's later development. Similar to the findings from the home observations, the use of rare words was beneficial to children's oral language development. Children whose teachers talked less and encouraged them to talk more had higher scores on kindergarten assessments (Dickinson & Tabors, 2001).

Mealtimes were also observed in order to determine the most effective style for mealtime and which circumstances allowed for more nonpresent talk, or talk about past or future experiences. In classrooms in which teachers were stationary and not moving throughout the classroom during meals, children engaged in more nonpresent talk. This type of conversation between the teacher and children required a child to rely on language in order to communicate. Furthermore, "children's exposure to nonpresent talk during mealtimes when they were in preschool predicted their performance on literacy tasks when they were in kindergarten" (Dickinson & Tabors, 2001, p. 219). Mealtimes were also found to be good opportunities for the use of rare words to extend children's vocabulary use and exposure (Dickinson & Tabors, 2001).

As described above, the interactions that take place in preschool classrooms have an impact on children's oral language development. Therefore, it is important that every preschool classroom is staffed with a teacher that is knowledgeable of the role of oral language development on literacy achievement. Thus, the final section of this chapter explores the importance of teacher preparation including what is known about the contributions of knowledgeable teachers and how professional development for teachers can make an impact on the field of education.

Teacher Preparation

Knowledge

Recent research has documented the importance of knowledgeable teachers and the impact that teachers have on students' success in school and a child's ability to learn to read (Corrigan, 2011; Cunningham et al., 2009; Darling-Hammond, 2000; McCutchen

et al., 2002; McCutchen et al., 2009; Mather et al., 2001; Moats & Foorman, 2003; Piasta et al., 2009; Podhajski et al., 2009; Shaw et al., 2007; Walpole, Justice, & Invernizzi, 2004; Wilkins, 2008). Teachers play a tremendous role in whether or not children learn to read. "Teacher expertise, more than any other variable, accounts for increases in student achievement in reading and other academic areas" (Walpole et al., p. 277). Darling-Hammond (2000) found that student achievement increased when there was an increase in teachers' knowledge of the content they were teaching and when teachers were more familiar with the learning styles of the students they were teaching. Similarly, in a study of mixed-methods design, Piasta and colleagues (2009) found that in first grade classrooms where time was spent directly teaching decoding and teachers had more specialized code-related knowledge, students had stronger gains in word reading. On the contrary, in classrooms with less knowledgeable teachers and similar amounts of time spent directly teaching decoding, students had weaker gains in word reading. Most notably, researchers observed less knowledgeable teachers giving students inaccurate information when teaching students to decode.

Without proper knowledge of how children learn, teachers may not be fully prepared to teach the varying types of students in their classrooms (Walpole et al., 2004). Cunningham, Zibulsky, and Callahan (2009) stressed the importance of knowledgeable teachers and suggested that teachers must understand the connection between early oral language experiences and the reading process. The authors specifically identified vocabulary, syntactical awareness, pragmatics, phonological awareness, and phonemic awareness as critical knowledge for teachers. Similarly, a report from The International

Dyslexia Association (Moats et al., 2010) identified key knowledge and standards for teachers of reading. The authors suggested that teachers need knowledge of the continuum of oral language development including semantic, syntactic, and pragmatic skills.

Despite what research suggests as important for teachers to know, studies have demonstrated that teachers may lack this knowledge (Corrigan, 2011; Cunningham, Zibulsky & Callahan, 2009; Mather, Bos, and Babur, 2001; Moats & Foorman, 2003). In a study of 38 teacher candidates in their junior and senior years of a teacher preparation program, Corrigan (2011) found that instructional decisions and the type of talk used during interactive read-aloud activities were dependent on the teacher candidates' level of vocabulary "diversity and sophistication" (p. 1). Specifically, Corrigan (2011) measured the breadth of vocabulary used by the teacher, lexical diversity of the books and teacher talk, and lexical sophistication of both the books and teacher talk. While "lexical diversity refers to the range of words used without repetition in a text or discourse, lexical sophistication refers to how rare the words are in a text or discourse" (p. 6). The receptive vocabulary of preservice teachers was found to be modestly correlated with teacher talk diversity and discourse. Preservice teachers who scored higher on tests of receptive vocabulary tended to choose books with more vocabulary diversity and sophictication. Thus, the knowledge of teachers in the domain of receptive vocabulary impacted both instructional decisions and the level of discourse in the classrooms. Similarly, Mather and colleagues (2001) examined the knowledge level of inservice and preservice teachers in relationship to the structure of the English language using the Teacher Knowledge

Assessment: Structure of Language (TKA:SL). Teachers were asked questions about specific language structures including blends, digraphs, diphthongs, phoneme counting and manipulation, counting syllables, blending, and segmenting. Using a quantitative research design, Mather et al. (2001) found that mean scores were low for both inservice and preservice teachers; 68% and 50% respectively. Teachers' perceptions were also measured using an adapted version of a perceptions survey developed by DeFord in 1985. The adapted version, Teacher Perceptions Toward Early Reading and Spelling (TPERS), categorized teachers' answers into one of two categories; explicit, code based instruction or implicit, meaning based instruction. Teachers rated statements from 1-6, with 1-3 demonstrating a range of disagreement with the statement and 4-6 demonstrating a range of agreement with the statement. Inservice teachers felt more positively about explicit, code based instruction, with an overall mean rating of 5 while preservice teachers' responses to explicit code based statements averaged between mild agreement and agreement with the statements. Given that teachers scored low on the knowledge assessment but rated explicit, code based instruction positively, results showed that there was a discrepancy between what teachers believed and what they actually knew.

Moats and Foorman (2003) conducted a similar study of 50 kindergarten, first, and second grade teachers and examined their knowledge of phonology and orthography. Teachers struggled when the questions required analysis of speech to print concepts such as describing how many phonemes are in the word "know." Counting syllables, identifying prefixes and suffixes, and phoneme matching were also difficult for the teachers. In the same study, 103 third and fourth grade teachers had difficulty identifying

final blends in words, describing the difference between a consonant blend and two or three letter graphemes that represented one speech sound, and analyzing decoding errors in a student's oral reading fluency sample (Moats & Foorman). These studies consistently demonstrated that teachers' knowledge about the structures of the English language was not adequate for teaching children to read.

Nonexperimental research for the purpose of characterizing teachers' knowledge and beliefs typically uses a cross-sectional design, and survey instruments are often used (Courtland & Leslie, 2010; Hawken, Johnston, & McDonnell, 2005; Lynch, 2009; Lynch, 2010; Mather et al., 2001; Moats & Foorman, 2003; Nathanson, Pruslow, & Levitt, 2008). A questionnaire survey was used by Nathanson et al. (2008) to determine preservice and inservice teachers' attitudes and habits related to reading. Questions on the survey were open-ended, and scoring of answers was based on a 5-point rubric. A similar process was used by Hawken, Johnston, and McDonnell (2005) in their examination of the views and practices of Head Start preschool teachers. Questionnaires designed to gather information about emergent literacy were mailed to participating teachers after a review by experts in early childhood. Another study by Lynch (2010) used a questionnaire to determine teachers' beliefs about the print knowledge of their students and teachers' beliefs about parental involvement including parents' knowledge, interest, and engagement pertaining to literacy related activities. The cross-sectional format of all three studies described above allowed the researchers to survey a large number of teachers in a short amount of time including as many as 747 teachers in the study by Nathanson et al. (2008).

Professional Development

However inadequate teachers' knowledge may be, research also demonstrates that professional development for teachers is beneficial, increasing teachers' knowledge base and changing their instructional decisions (McCutchen et al., 2002; Shaw et al., 2007). McCutchen and colleagues (2002) examined teacher knowledge, practice, and student learning in a mixed methods study. Teachers were given the Informal Survey of Linguistic Knowledge developed by Louisa Moats in order to measure teachers' knowledge of phonological awareness and phonics skills. General knowledge of teachers was measured with a cultural literacy test, including questions from Social Studies and Science. Classroom practice was observed and coded according to the skills being taught, the literacy activity being conducted, the textual context, and the group context. Students were assessed multiple times during the year in order to measure phonological awareness, listening comprehension, orthographic fluency, and word reading. Although teachers in both the control group and experimental group had very low levels of knowledge of phonological awareness at pretest, the experimental group did increase their phonological knowledge after professional development. It was also determined that teachers receiving professional development in specific aspects of linguistics spent more instructional time on those aspects of language development than teachers in the control group not receiving professional development. Similarly, when teachers were trained on elements of orthography and comprehension activities, they began to spend more time instructing in those areas.

Similar to McCutchen's research, Shaw, Dvorak, and Bates (2007) conducted a mixed methods study in which 52 undergraduate students were trained in a reading methods course. Teachers' beliefs were measured using the Theoretical Orientation to Reading Profile, also known as TORP (DeFord, 1985), self-efficacy was measured using the Teachers' Sense of Efficacy for Literacy Instruction Scale, also known as TSELS (Johnson & Tschannen-Moran, 2003), and teachers' knowledge was measured using an "instructor made open-ended short-answer questionnaire asking students to document their knowledge about reading and to describe their personal reading practices" (Shaw, Dvorak, & Bates, 2007, p. 231). Average scores favored the phonics and skills-based approaches at both pre and post test rather than the whole language philosophy. However, similar to the results of the study by Mather, Bos, and Babur (2001), despite teachers' beliefs about instruction at both pre and post test, teachers' knowledge of effective practices was limited, and their own personal reading practices were not in agreement with a phonics or skills-based approach at pretest. After the methods course; however, teachers' answers on the post test of knowledge and personal reading practices changed to include more phonics and skills-based approaches. For example, prior to the course, one participant viewed phonemic awareness instruction as important, and four participants viewed direct instruction as important. These numbers increased from one to 10 and four to 12 by the end of the methods course (Shaw, Dvorak, & Bates, 2007). These results confirmed previous studies that professional development and training for teachers does impact the beliefs, knowledge, and instructional practices of teachers.

Summary

In Chapter 2, I provided a synthesis of the research associated with reading theories and related instructional methods. I also defined oral language development and explored related research. Finally, I analyzed the research on teacher knowledge and professional development.In Chapter 3, I provide information regarding the methodology used in this study, including design, participant selection and sample, instrumentation and materials, data collection and analysis, and participant protection.

Chapter 3: Research Method

Introduction

For this study, I focused on developing an instrument to measure preschool teachers' perceived knowledge and actual knowledge of strategies for developing oral language in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. In this chapter, I include a description of the study design, participant selection and sample, instrumentation and materials, data collection and analyses, and participant protection. As I described in Chapter 1, the research questions were:

1. Is there a difference in preschool teachers' knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language by total number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?
2. Is there a difference in preschool teachers' perceived knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language by total number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?
3. What is the relationship between preschool teachers' perceived knowledge and actual knowledge of strategies involving (a) engaging in dialogic reading, (b)

promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language?

Study Design

I conducted this quantitative, nonexperimental study using a descriptive, cross-sectional research design. I chose this design for several reasons. Nonexperimental studies are appropriate when at least one of the variables is an attribute variable that cannot be manipulated (Johnson & Christensen, 2004). For this study, I did not manipulate teachers' perceived knowledge and actual knowledge. Also, descriptive designs are used when the purpose is to describe a phenomenon (Johnson & Christensen, 2004). In this study, I describe preschool teachers' perceived knowledge and actual knowledge of strategies for developing early oral language in the preschool classroom. According to Johnson and Christensen (2004), descriptive research is not focused on "how to ferret out cause-and-effect relationships but rather on describing the variables that exist in a given situation, and sometimes, on how to describe the relationships that exist among those variables" (p. 347). For this study, the problem is that preschool teachers' knowledge of oral language development strategies is not known, and descriptive research was the best method to use to gather this information and determine the relationship between actual knowledge and perceived knowledge. Also, using a cross-sectional design, I was able to collect data at one point in time, from many people in a short amount of time (Johnson & Christensen, 2004). Although a weakness of the cross-sectional design is that time order cannot be established (Johnson & Christensen, 2004), I did not conduct the study for this purpose.

Nonexperimental studies are often used as a foundation for future experimental studies. Although there have been studies conducted to measure teachers' perceptions and knowledge about literacy instruction in general, as I discussed previously in the literature review (Darling-Hammond, 2000; Mather, Bos, & Babur, 2001; McCutchen et al., 2002; Piasta et al., 2009; Shaw, Dvorak, & Bates, 2007), there are no known studies that examine preschool teachers' perceived knowledge and actual knowledge of strategies for oral language development in the preschool classroom. Examining teachers' perceived competency levels may offer explanations for teachers not seeking professional development in a particular domain, thus explaining a lack of knowledge in that area. Determining teachers' actual knowledge is also necessary for providing appropriate professional development opportunities and determining what type of experimental studies should be conducted in the future. In the last chapter, I discuss suggestions for future research.

In this study, I examined two variables related to teacher demographics, including teachers' total number of years experience teaching preschool and the number of hours of professional development related to early literacy completed by each teacher in the last 2 years. In addition, I examined teachers' perceptions of their knowledge and teachers' actual knowledge of strategies for developing oral language in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. I conducted several analyses to examine differences between the variables while testing a number of hypotheses, including whether or not there were significant differences between the means of teachers' scores for perceived competency

and knowledge based on the two demographic variables; hours of professional development completed in the last 2 years and teachers' years of experience. I selected a multivariate analysis of variance (MANOVA) to determine whether the differences were due to chance. I did not select a multiple regression for this study as its purpose relates to significant relationships between variables rather than significant differences. I describe each hypothesis later in this chapter.

Participant Selection and Sample

In order to pilot the instrument and gather reliability and validity data, I used a convenience sample of preschool teachers in the Colorado Preschool Program (CPP) who volunteered to participate in the study and were teaching in CPP preschools in the state of Colorado during the 2011–2012 school year. "The Colorado General Assembly established the CPP in 1988 to provide a high quality early childhood education program and family support services to at-risk preschool-age children in Colorado" (Colorado Department of Education, 2011, p. 2) The program serves the most needy and at-risk population of children in Colorado during the year prior to kindergarten, or when children are 4 years old. However, some 3-year-olds may be served if they display at least three risk factors. Eligibility factors are defined in statute for the CPP (as listed below), and screening methodology for each risk factor is determined at the local level. Local advisory councils may also prioritize the risk factors, and not all risk factors have to be used when qualifying children for the program. During the 2009–2010 school year, the following characteristics described the population of 20,160 children served by the CPP:

- 83% were eligible for free/reduced cost lunch

- 46% were in need of language development (including children learning English as a second language and children who exhibit language development delays)
- 33% were identified as needing social skills
- 29% had a parent/guardian that did not complete high school
- 15% received assistance as neglected or dependent children
- 12% relocated often (based on parent report)
- 11% had an unmarried teenage parent
- 9% were homeless
- 6% had drug or alcohol abuse in the family
- 4% had an abusive adult in the home

Of the 178 school districts in Colorado, 169 had CPP slot allocations (Colorado Department of Education, 2011).

For this study, I used convenience sampling because I lived and worked in the state of Colorado and was most interested in gaining information about CPP teachers. Although generalizations could not be made to an entire population with convenience sampling (Johnson & Christensen, 2004), using alternative random sampling techniques such as probability sampling may have resulted in a sample size that was too small if too many of the selected participants from the population chose not to participate. The sampling population and sampling frame included all CPP preschool teachers teaching in the state of Colorado during the 2011-2012 school year. Teachers of grades K-12 and preschool teachers not in CPP were not eligible for participation in this study. I used a

multistage, clustering procedure (Creswell, 2003) to obtain participants from 169 CPP participating school districts and the Charter School Institute in Colorado. First, I identified preschool directors through a list of names and emails on the Colorado Department of Education website. All of this information was in public domain. Next, I contacted preschool directors by email and asked them to forward a series of invitation and reminder emails to preschool teachers in their preschool centers. Through the forwarded emails, I invited preschool teachers in CPP schools to participate and reminded the teachers of participation deadlines.

There were approximately 1,200 preschool half-day classrooms involved in CPP in 2011-2012. These classrooms each had one teacher that taught both the morning and afternoon sessions. Therefore, the population of preschool teachers in CPP was approximately 600. To determine sample size, I used a confidence level of 95% and a confidence interval of 5%. I determined the approximate sample size needed was 234.

For the purpose of this study, I did not include in the sample the children in the preschool classrooms and their achievement data. The purpose of this study was to develop an instrument proven to be reliable and valid for measuring preschool teachers' perceived knowledge and actual knowledge of strategies for oral language development. Most importantly, the development of the instrument fills a gap in the research and contributes to future research endeavors which may also include achievement data from participating teachers' classrooms.

Instrumentation and Materials

Before developing the instrument, I conducted a review of electronic databases and relevant publications, including Mental Measurements Yearbook Test Review Online, the Test Collection at ETS, Measures for Psychological Assessments, Handbook of Family Measurement Techniques, and Tests and Measurements in Child Development: A Handbook. Through the review, I determined that although there were separate tools for measuring teachers' perceptions and knowledge, there was not a single measurement tool that provided a measure of both teachers' perceived and actual knowledge and emphasized early childhood and strategies for developing oral language in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. Therefore, for the purpose of this study, I created an instrument based on a review of the literature (Appendix A). An expert review panel provided feedback on the validity of the questions, and I made suggested changes prior to piloting the instrument with the CPP teachers.

For the pilot of the instrument, I collected data using an internet survey program, and I analyzed the data as described later in this chapter. The instrument was self-administered (Fink, 2006). Using an internet survey method was appropriate because teachers completed the instrument at one point in time. Additionally, the self-administered computerized survey offered advantages such as gaining a larger sample size in a short period of time, and the computerized instrument only accepted suggested answers, so there were fewer opportunities for error. Using the instrument, Teachers' Knowledge of Oral Language Development (TKOLD), I gathered three types of

information: teachers' knowledge, teachers' perceived knowledge, and demographic information about the participants.

Teachers' Knowledge

The majority of the questions on the instrument assessed preschool teachers' knowledge of strategies for developing oral language in the preschool classroom. I developed the questions based on the review of literature in Chapter 2 pertaining to the most effective strategies for assisting preschoolers in developing early oral language skills. I grouped the questions into three main categories: engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. Questions 1 through 9 focused on engaging in dialogic reading, Questions 12 through 20 related to promoting extended discourse, and Questions 23 through 31 focused on the use of specific vocabulary and rare words in the preschool classroom.

For the knowledge portion of the instrument, I designed the questions in a multiple choice format with one correct answer and three incorrect answers per question. I scored questions answered correctly one point and questions answered incorrectly zero points. Experts in the field of literacy education and early childhood reviewed the questions to determine validity, and I made adjustments to the questions accordingly prior to administering the instrument to preschool teachers. I used Cronbach's alpha to determine whether or not the questions had internal consistency. Additionally, I used factor analysis to examine relationships among variables and corrected item analysis to ensure that every question correlated positively with the final score.

Perceived Knowledge

As described in the literature review, teachers may not know what they do not know. Cunningham et al. (2009) stated that teachers "tend to overestimate what they know, creating a potential obstacle for seeking additional knowledge" (p. 487). Therefore, the instrument for this study included questions to measure teachers' perceived level of competency after answering each of the three sections of knowledge questions. The first question asked teachers to rate their own knowledge from zero to six (*poorly* to *very well*). The second question asked teachers to rate their own knowledge from zero to six (*well below average* to *well above average*), in comparison to other preschool teachers that answered the questions. To measure perceived knowledge, I designed the questions using a semantic differential approach (Johnson & Christensen, 2004) with a seven-point bipolar rating scale with contrasting adjectives (*poorly* to *very well* or *well below average* to *well above average* in this study). The semantic differential approach has been proven to collect valid and reliable data in studies of perceptions and attitudes (Emmerson & Neeley, 1998; Oles & Bolvin, 1972) in the field of education.

Demographics

The final section of the instrument contained questions to gather demographic information about the participants. I designed the questions to ask respondents their total number of years experience teaching preschool and the number of hours of professional development related to early literacy completed in the last 2 years. This information provided a third variable by which I was able to make comparisons across groups.

Data Collection and Analysis

The purpose of this study was to develop an instrument to measure perceived knowledge and actual knowledge of preschool teachers regarding strategies for developing oral language in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. I collected data for the pilot of the instrument during the 2011–2012 school year. In order to collect the data from participants, I used an internet survey program, *SurveyMonkey*. I also used a data analysis program, Statistical Package for the Social Sciences (IBM SPSS 17), to ensure accurate data interpretation.

To examine internal consistency or the reliability of scores from the instrument, I used Cronbach's alpha. Since the instrument was used with each teacher at one point in time, it was important to determine the consistency among the items that were meant to assess the same construct. Additionally, I used corrected item/total correlations to identify items that did not measure the construct of teacher knowledge.

To futher analyze the data, I used factor analysis to determine validity of each set of questions used to measure each strategy and to reveal the most appropriate questions for measuring the construct of teachers' knowledge. According to Field (2009), factor analysis is appropriate when the researcher seeks to "construct a questionnaire to measure an underlying variable" (p. 628). For this study, I used factor analysis to examine the correlations among the knowledge questions and determine if the test was unidimensional or multidimensional (Johnson & Christensen, 2004).

To answer the first research question, I assessed teachers' knowledge using a series of multiple choice questions and calculated overall knowledge scores using zero points for incorrect answers and one point for correct answers. Additionally, I calculated measures of central tendencies (means and standard deviations). To describe the data collected on the knowledge portion of the instrument, I used descriptive statistics. Furthermore, I selected a multivariate analysis of variance (MANOVA) to determine if there were significant differences in preschool teachers' knowledge by total number of years experience teaching preschool and the number of hours of professional development related to early literacy completed in the last 2 years. Data are displayed in tables and figures. The following hypotheses related to the first research question guided the study:

1. H_0: There are no significant differences in preschool teachers' knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language based on total number of years experience teaching preschool.
2. H_1: There are significant differences in preschool teachers' knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language based on total number of years experience teaching preschool.

1. H_0: There are no significant differences in preschool teachers' knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing

oral language based on number of hours of professional development related to early literacy completed in the last 2 years.

2. H_1: There are significant differences in preschool teachers' knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language based on number of hours of professional development related to early literacy completed in the last 2 years.

To answer the second research question regarding preschool teachers' perceived competency, I collected data on a seven-point differential scale. To describe the data, I calculated descriptive statistics, including percents to describe the number of teachers rating themselves at each competency level. In Chapter 4, I provide means and standard deviations. Furthermore, I selected a multivariate analysis of variance (MANOVA) to determine if there were significant differences in preschool teachers' perceived knowledge by total number of years experience teaching preschool and the number of hours of professional development related to early literacy completed in the last 2 years. Data are displayed in tables and figures. The following hypotheses related to the second research question guided the study:

1. H_0: There are no significant differences in preschool teachers' perceived knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language based on total number of years experience teaching preschool.

2. H_1: There are significant differences in preschool teachers' perceived knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language based on total number of years experience teaching preschool.

1. H_0 : There are no significant differences in preschool teachers' perceived knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language based on number of hours of professional development related to early literacy completed in the last 2 years.

2. H_1: There are significant differences in preschool teachers' perceived knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language based on number of hours of professional development related to early literacy completed in the last 2 years.

Finally, to answer the third research question, I examined teachers' perceived knowledge and actual knowledge outcomes in order to determine the relationship between the two. I used an analysis of variance (ANOVA) to explore differences in means of groups of teachers at each knowledge and perceived knowledge level. To provide information about the strength of the relationship, I used a Chi-square (X^2) test for independence. Finally, I calculated effect size (Cohen's *d*) to provide information

about the degree of the magnitude between low performing and high performing teachers in the total score obtained.

Participant Protection

The Institutional Review Board (IRB) for Walden University granted permission to conduct the study. Upon receipt of permission to conduct the study, I posted a statement of informed consent on the internet survey site (See Appendix B). Before participating in the research, I asked respondents to read the consent document. I did not collect or ask respondents to report any identifying information.

Summary

In Chapter 3, I described the methodology for the study including study design, participant selection and sample, instrumention and materials, data collection and analysis, and participant protection. In Chapter 4, I describe the results of the study, and in Chapter 5, I offer a summary of the research, conclusions made, limitations, suggestions for future research, and social change implications.

Chapter 4: Results

Introduction

The purpose of this study was to develop an instrument that may be used to examine and describe the perceived level of knowledge and actual knowledge level of preschool teachers regarding strategies that support oral language foundations for literacy development in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. In this chapter, I describe the process used to collect and analyze the data in addition to the results of the data analyses. I present the chapter in three main sections: data collection process, preliminary analyses, and primary analyses.

Data Collection Process

In order to obtain participants for the study, I sent a series of emails (Appendix C) to Colorado Preschool Program (CPP) directors and asked directors to forward the emails to CPP teachers. In the first two emails, I invited teachers to complete an online instrument assessing teachers' perceptions of their knowledge and actual knowledge using *Survey Monkey*. I sent subsequent messages as follow-up emails to remind teachers to participate in the study and indicate participation deadlines. I kept the survey open for 13 weeks, including 3 weeks during which time teachers were on holiday vacations from work.

In total, 250 teachers started the survey, while 197 teachers (79%) completed all 35 questions. I included four main sections in the instrument: (a) Questions 1through 9 assessed teachers' knowledge of engaging in dialogic reading, and Questions 10 and 11

assessed teachers' perceptions of their knowledge of engaging in dialogic reading; (b) Questions 12 through 20 assessed teachers' knowledge of promoting extended discourse, and Questions 21 and 22 assessed teachers' perceptions of their knowledge of promoting extended discourse; (c) Questions 23 through 31 assessed teachers' knowledge of using specific vocabulary, and Questions 32 and 33 assessed teachers' perceptions of their knowledge of promoting extended discourse; and (d) Questions 34 and 35 collected demographic information including total number of years experience teaching preschool and number of hours of professional development in early literacy completed in the last 2 years. Two-hundred fifty teachers completed Questions 1 through 9. Two-hundred forty-nine teachers completed Questions 1 through 11. Two-hundred fourteen teachers completed Questions 1 through 22. One-hundred ninety-eight teachers completed Questions 1 through 33. One-hundred ninety-seven teachers completed every question, one through 35.

Preliminary Analyses

Participants' Demographics

In order to gather demographic information about participants, I included two questions in the final section of the instrument. Respondents were asked their total number of years experience teaching preschool and the number of hours of professional development related to early literacy completed in the last 2 years. This information provided me with a third variable by which comparisons were made across groups.

One-hundred ninety-seven teachers answered the last two questions which collected demographic information. The first question asked teachers to select from five

choices indicating their total number of years experience teaching preschool, including the current year. Fifty-four teachers (27%) indicated they had between 3 and 6 years experience teaching preschool. Almost as many teachers (*N* = 50) indicated they had between 11 and 20 years experience teaching preschool. Figure 1 illustrates teachers' years of experience teaching preschool.

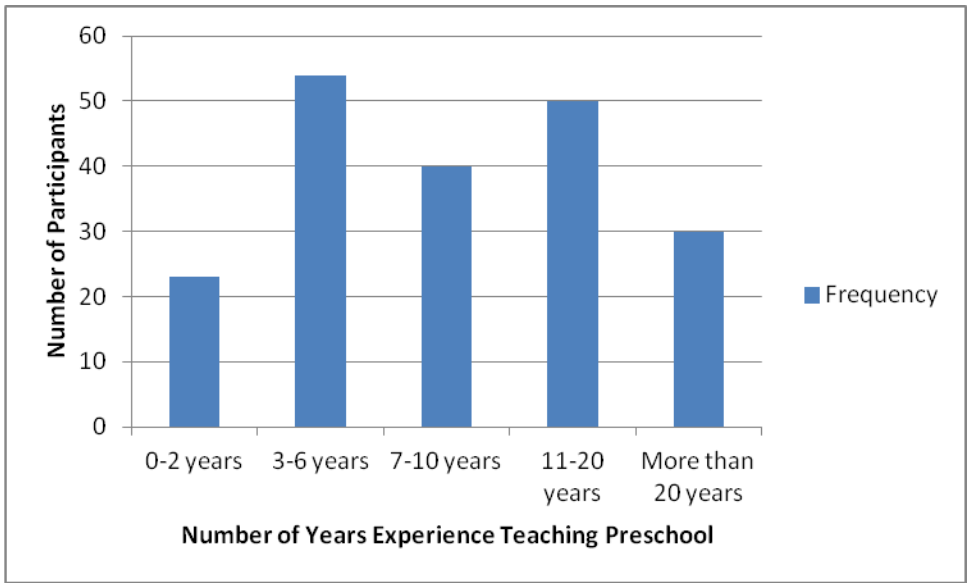

Figure 1. Frequency distribution of responses for number of years experience teaching preschool.

The second question in the demographic section asked teachers to indicate the number of hours of professional development in early literacy completed in the last 2 years. An overwhelming majority of teachers (*N* = 157) indicated they had completed between 0 and 90 clock hours of professional development in early literacy in the last 2 years. Twenty-seven teachers (14%) indicated they had completed between 91 and 180 clock hours of professional development in early literacy in the last 2 years. Only three teachers (2%) selected the highest number of clock hours, indicating they had completed

more than 270 hours of professional development in early literacy in the last 2 years. Figure 2 illustrates the range of responses regarding number of hours of professional development in early literacy teachers completed in the last 2 years.

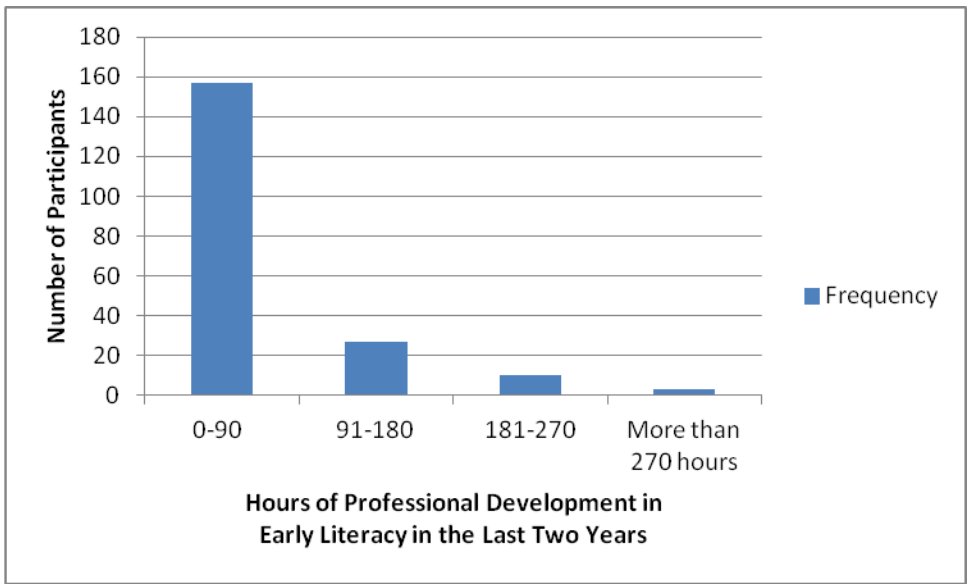

Figure 2. Frequency distribution of responses for number of hours of professional development completed in the last 2 years.

Reliability Statistics

Before answering the first research question regarding teachers' knowledge, I used Cronbach's alpha (α) to determine internal consistency among the items in each section of the instrument. Internal consistency is one measure of the reliability of scores on an instrument and demonstrates how reliably the items assess the same construct. Cronbach's alpha may range between zero and one, with values above .7 considered acceptable. I analyzed the data from three different sections of the instrument separately and combined including (a) knowledge of engaging in dialogic reading, (b) knowledge of promoting extended discourse, and (c) knowledge of using specific vocabulary and rare

words. To gain additional information regarding reliability, I used corrected item/total correlations to identify items that did not appear to measure the intended variable, and if removed, would increase internal consistency among the test questions.

Scores from the first section of the instrument, knowledge of engaging in dialogic reading, revealed a low and unacceptable level of reliability ($\alpha = .03$). The low level of reliability suggests that the questions within Section 1 did not all measure the same construct related to oral language development. Correlations among the items were very low. Omitted item statistics revealed no particular questions that would significantly increase the level of reliability if removed from the instrument.

The second section of the instrument was intended to measure teachers' knowledge of promoting extended discourse to support oral language development. Scores from this section revealed a higher and acceptable level of internal consistency ($\alpha = .86$). Based on this level of reliability, I can be fairly certain that all questions within this section of the instrument measure the same construct. There were no particular questions that should be deleted in order to significantly increase Cronbach's alpha.

The third section of the instrument, knowledge of using specific vocabulary and rare words, revealed a low and unacceptable level of reliability ($\alpha = .17$). The low level of reliability suggests that the questions within Section 3 did not all measure the same construct. Correlations among the items were very low. Similar to Section 1, omitted item statistics revealed no items that would result in a significantly increased level of reliability if deleted from the instrument.

A fourth test of reliability combined scores from Sections 1 and 2, knowledge of engaging in dialogic reading and knowledge of promoting extended discourse. Scores from these two sections combined revealed an acceptable level of reliability ($\alpha = .75$). The higher level of reliability for Sections 1 and 2 combined suggests that the questions within these two sections more closely assessed the same construct rather than two different constructs as the instrument was initially intended. It is possible that engaging in dialogic reading and promoting extended discourse are very similar activities, both involving high levels of talk by both the teacher and children, whether through conversation or reading aloud a book. Thus, these two domains of oral language development may be more similar than different, explaining the higher level of internal consistency among the test items when the two sections were combined.

A fifth test of reliability combined scores from Sections 2 and 3, knowledge of promoting extended discourse and knowledge of using specific vocabulary and rare words. Scores from these two sections combined revealed a low and unacceptable level of reliability ($\alpha = .03$), suggesting that these two sections did not contain questions which assessed the same construct. Correlations among items were low, and there were no particular items that would significantly increase the level of reliability if deleted from the instrument.

The low and unacceptable levels of reliability for scores from Sections 1 and 3 independent of each other were inconsistent with the comments received from national literacy experts who provided feedback on the content of the questions and answers prior to piloting the instrument, indicating that the questions would assess the particular

constructs they were designed to assess. Since the calculation of reliability statistics for Sections 1 and 2 combined revealed a higher and acceptable level of reliability, a logical conclusion is that these two sections more closely assessed teachers' knowledge of one domain related to oral language development rather than two different domains, as the instrument was originally designed. Furthermore, the low and unacceptable level of reliability for Section 3, knowledge of using specific vocabulary and rare words, may be explained by the reduced sample size for this section, (N = 198), compared to Sections 1 (N = 250) and 2 (N = 214). It is also possible that the increased number of questions with the choice *all of the above* in the third section may have impacted the reliability of scores. Section 1 included two *all of the above* answer selections, Section 2 included one *all of the above* answer selection, and Section 3 included four *all of the above* answer selections. Additionally, because the instrument measured at least two domains of knowledge related to oral language development, it is quite possible that teachers had more knowledge of one particular domain than another, thus impacting scores and the level of reliability for those questions, in this case, the questions in Section 3, knowledge of using specific vocabulary and rare words. If teachers lacked the knowledge to answer questions in the third section related to the use of specific vocabulary and rare words, they may have been more inclined to guess, impacting the internal consistency of the questions. Tables 1 through 5 show levels of reliability and the corrected item/total correlations for each section of the instrument independently and combined, as I described in this section.

Table 1

Item Analysis: Corrected Item Correlations Section 1

	Mean	Std. Deviation	Corrected Item/Total Correlation	Cronbach's Alpha if Item Deleted
Q1	2.34	0.882	.002	.036
Q2	1.54	0.974	.122	-.074
Q3	3.16	0.978	.041	.002
Q4	2.66	1.206	.019	.021
Q5	2.70	0.894	-.036	.066
Q6	3.88	0.393	-.067	.056
Q7	2.89	0.531	.068	.003
Q8	3.56	0.952	-.042	.073
Q9	2.30	0.685	-.040	.060

Table 2

Item Analysis: Corrected Item Correlations Section 2

	Mean	Std. Deviation	Corrected Item/Total Correlation	Cronbach's Alpha if Item Deleted
Q10	1.43	1.093	.529	.828
Q11	2.00	1.414	.542	.828
Q12	2.38	1.390	.641	.837
Q13	1.22	1.051	.407	.858
Q14	1.78	1.127	.604	.841
Q15	2.91	1.604	.673	.835
Q16	1.81	0.893	.744	.834
Q17	1.57	1.063	.521	.849
Q18	2.23	1.287	.671	.834

Table 3

Item Analysis: Corrected Item Correlations Section 3

	Mean	Std. Deviation	Corrected Item/Total Correlation	Cronbach's Alpha if Item Deleted
Q19	3.61	1.001	.061	.151
Q20	3.80	0.642	.136	.114
Q21	2.73	0.626	.036	.164
Q22	2.01	0.188	-.028	.176
Q23	3.48	0.732	.190	.074
Q24	2.10	0.918	-.001	.195
Q25	3.66	0.908	.016	.182
Q26	3.32	0.530	.203	.094
Q27	2.06	1.263	.000	.221

Table 4

Item Analysis: Corrected Item Correlations Sections 1 and 2

	Mean	Std. Deviation	Corrected Item/Total Correlation	Cronbach's Alpha if Item Deleted
Q1	2.34	0.882	.010	.756
Q2	1.54	0.974	.084	.753
Q3	3.16	0.978	.005	.759
Q4	2.66	1.206	.024	.763
Q5	2.70	0.894	-.014	.758
Q6	3.88	0.393	-.062	.752
Q7	2.89	0.531	.139	.746
Q8	3.56	0.952	.068	.754
Q9	2.30	0.685	.110	.748
Q10	1.43	1.093	.469	.722
Q11	2.00	1.414	.511	.715
Q12	2.38	1.390	.606	.703
Q13	1.22	1.051	.379	.730
Q14	1.78	1.127	.599	.709
Q15	2.91	1.604	.627	.698
Q16	1.81	0.893	.697	.708
Q17	1.57	1.063	.489	.720
Q18	2.23	1.287	.659	.699

Table 5

Item Analysis: Corrected Item Correlations Sections 2 and 3

	Mean	Std. Deviation	Corrected Item/Total Correlation	Cronbach's Alpha if Item Deleted
Q10	1.65	0.964	.069	-.010
Q11	2.37	1.251	-.100	.097
Q12	2.80	1.066	.004	.025
Q13	1.42	0.993	-.071	.066
Q14	2.07	0.904	-.025	.040
Q15	3.39	1.169	.071	-.018
Q16	2.11	0.537	.082	.050
Q17	1.82	0.911	-.039	.047
Q18	2.62	0.979	-.070	.065
Q19	3.61	1.001	.067	-.009
Q20	3.80	0.642	.101	-.009
Q21	2.73	0.626	.101	-.008
Q22	2.01	0.188	.104	.016
Q23	3.48	0.732	.084	-.007
Q24	2.10	0.918	.003	.026
Q25	3.66	0.908	-.016	.035
Q26	3.32	0.530	.073	.006
Q27	2.06	1.263	.016	.018

Factor Analysis

In order to further examine the correlations among the test items identified through reliability statistics described above, I used exploratory principle components factor analysis. Factor analysis may confirm and/or identify other relationships among variables and identify smaller groups of variables that are correlated and not identified through reliability tests for internal consistency. I used exploratory principle components factor analysis to reduce the nine variables within each section of the instrument to fewer factors.

Factor analysis for the first group of nine variables from Section 1 of the instrument, knowledge of engaging in dialogic reading, identified four factors accounting for 53% of the variance in the data. Questions 1, 2, and 6 were highly correlated and appeared to be influenced by the same factor. Examination of these three questions revealed an emphasis on teachers' behaviors while reading aloud books to children. Similarly, Questions 3 and 9 were identified as highly correlated with a second factor. Both questions addressed teachers' selection of books for reading aloud to students. Questions 4 and 7 crossloaded with more than one factor and correlations were too close to determine a stronger relationship with one factor than another. Therefore, Questions 4 and 7 seemed to be assessing more than one construct. Table 6 shows the relationships among variables and the resulting factors I described above.

Table 6

Factor Analysis: Knowledge of Engaging in Dialogic Reading

	Factor 1	Factor 2	Factor 3	Factor 4
Q2	.703	.318		
Q1	.620			
Q6	-.532	.365		
Q3		.725		-.310
Q9		-.459		
Q7		.445	.389	.392
Q8			-.761	
Q4			.595	-.508
Q5				.676

Factor analysis for the second set of items, Questions 10 through 18, confirmed the results of the test of internal consistency by identifying one factor for the set of nine questions. This section of the instrument, which assessed knowledge of promoting extended discourse, revealed items that were highly correlated and appeared to be assessing one construct related to oral language development in the preschool classroom. One factor accounted for 48% of the variance in the data. Table 7 shows the results of the factor analysis for Section 2 of the instrument.

Table 7

Factor Analysis: Knowledge of Promoting Extended Discourse

	Factor 1
Q16	.823
Q15	.768
Q18	.765
Q12	.739
Q14	.704
Q11	.648
Q10	.629
Q17	.624
Q13	.508

Factor analysis for Sections 1 and 2 combined also confirmed the data from tests of internal consistency I described previously in this chapter. Six factors accounted for 58% of the variance in the data with one factor accounting for 24% of the variance by itself. Questions from Section 2 of the instrument continued to demonstrate high levels of correlation among the variables and continued to stand alone even when combined with Section 1, demonstrating that Questions 10 through 18 appeared to be a good measure of teachers' knowledge of promoting extended discourse. Table 8 shows the relationships among variables for Sections 1 and 2 of the instrument combined.

Table 8

Factor Analysis: Knowledge of Engaging in Dialogic Reading and Knowledge of Promoting Extended Discourse

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Q16	.817					
Q18	.775					
Q15	.751					
Q12	.749					
Q14	.689					
Q10	.666					
Q11	.662					
Q17	.551	.392				
Q9		.704				
Q13	.391	.564				
Q3			.694	.354		
Q1			.692			
Q6		-.349	.391	-.349		
Q2				.822		
Q5					.731	
Q7					.608	
Q4						.840
Q8				.321	-.414	.-438

Factor analysis for Section 3, knowledge of using specific vocabulary and rare words, revealed four factors accounting for 55% of the variance in the data. Although factor analysis revealed a number of relationships among the variables, it was difficult to determine the reasons. For example, Questions 19, 20, and 23 were highly correlated in the factor analysis, yet these questions in general did not reveal an obvious relationship. Question 19 addressed teachers' actions during free play related to new vocabulary, Question 20 addressed large group time and teachers' use of rare words, and Question 23 related more to terminology and teachers' understanding of the relationship between phonological awareness and vocabulary development. Similarly, Questions 26 and 27 were highly correlated with a second factor, but further examination of the items revealed no obvious similarities. Question 26 related to teachers' methods for dealing with new and unfamiliar words while reading aloud books to children, and Question 27 asked teachers to demonstrate their understanding of direct and explicit vocabulary instruction. All in all, the results of the factor analysis for Section 3 of the instrument were similar to the results of the tests of internal consistency and the low level of reliability ($\alpha = .17$). Table 9 shows the results of the factor analysis for Section 3.

Table 9

Factor Analysis: Knowledge of Using Specific Vocabulary and Rare Words

	Factor 1	Factor 2	Factor 3	Factor 4
Q23	.715			
Q19	.623			
Q20	.535			.383
Q27		.780		
Q26		.765		
Q24			.718	
Q25			.672	
Q21				.689
Q22				-.621

In an effort to examine Section 3 further, I conducted factor analysis combining Sections 2 and 3. Tests revealed eight factors accounting for 59% of the variance, with only 10% of the variance explained by the first factor. Thus, factor analysis confirmed previous tests of internal consistency on Sections 2 and 3 combined ($\alpha = .03$). Section 3 consistently revealed a number of constructs assessed within the nine test items. A likely explanation is that vocabulary development, as it was assessed in Section 3, conceptually may include other concepts not related to oral language or what was measured in the other sections of the instrument.

Descriptive Statistics: Teachers' Knowledge

After completing tests of reliability and factor analysis, I used descriptive statistics to more closely examine the test items within each section of the instrument. Further examination of the items and teachers' answers may reveal patterns that confirm and/or explain the results of previous statistical tests. The description that follows includes each section of the instrument, including both the knowledge portion and the perceived knowledge portion, analyzed independently of the other sections, and a description of the items most often answered correctly and incorrectly.

Questions 1 through 9 assessed teachers' knowledge of engaging in dialogic reading. Two-hundred fifty teachers completed Questions 1 through 9. Of the first nine questions in the first section of the instrument, teachers most often answered Question 8 correctly (79%), followed by Question 7, answered correctly by 71% of participants and Question 1, answered correctly by 63% of participants. Question 8 assessed teachers' knowledge of scaffolding techniques while reading books aloud. Question 7 asked teachers to identify the skills that are affected by shared reading. Question 1 asked teachers to indicate which types of questions are most effective for building oral language skills during book reading.

Of the nine questions in Section 1, teachers most often answered incorrectly Question 6 (99%) followed by Question 2 (95%) and Question 4 (63%). Question 6 indicated that 90% of teachers thought all of the types of talk included in the answers are supportive of children's oral language development when reading books aloud, including nonimmediate talk, decontextualized language, immediate talk, and discussions about the

illustrations and words in the story. Teachers should have selected the answer which included nonimmediate talk and decontextualized language only; however, less than 1% of teachers selected this answer. Question 2 indicated that 70% of teachers thought providing opportunities for children to join in with the reading of the text is supportive of children's language growth during book reading activities. Instead, analytical conversations and talk about vocabulary are supportive of children's language growth during book reading activities. Only 5% of teachers selected this answer. Finally, Question 4 was answered incorrectly by 63% of teachers, indicating that teachers were not consistently able to correctly identify how to deal with new and unfamiliar vocabulary during book reading activities. Table 10 shows the test items I reviewed in this section and the frequency and percentage of participants who answered the questions correctly and incorrectly. Table 11 shows each of the questions answered correctly and incorrectly most often as I described above and each of the possible responses, including the frequency and percentage for each response.

Table 10

Frequency of Correct and Incorrect Responses: Knowledge of Engaging in Dialogic Reading

Question	**Correct Answers**	**Incorrect Answers**
	Frequency (Percent)	
1. During book reading activities, the most effective types of questions for building oral language skills include:	157 (62.8)	93 (37.2)
2. In order to support children's language growth, book reading activities should include:	12 (4.8)	238 (95.2)
4. During book reading activities, teachers should deal with new and unfamiliar vocabulary by:	93 (37.2)	157 (62.8)
6. In order to support children's oral language development when reading books aloud, the type of talk teachers and children should engage in includes:	2 (.8)	248 (99.2)
7. Shared reading has a significant effect on children's:	177 (70.8)	73 (29.2)
8. An example of a scaffolding technique during a read-aloud activity is:	197 (78.8)	53 (21.2)

Table 11

Frequency of Responses: Knowledge of Engaging in Dialogic Reading

Questions and Answers (correct answer is in bold print)	**Frequency (Percent)**
1. During book reading activities, the most effective types of questions for building oral language skills include:	
a. questions that can be answered directly from the story, including *who* and *what* questions	26 (10.4)
b. questions that challenge children to think, including *why, how,* and *when* questions	**157 (62.8)**
c. factual questions asked before, during, and after reading the story	24 (9.6)
d. questions that are closely tied to the illustrations and/or words in the text	43 (17.2)
2. In order to support children's language growth, book reading activities should include:	
a. discussions about the words, pictures, and events in the story	176 (70.4)
b. opportunities for children to join in with the reading of the text	37 (14.8)
c. analytical conversations and talk about vocabulary	**37 (14.8)**
d. discussions about topics that are familiar to the children	25 (10)
4. During book reading activities, teachers should deal with new and unfamiliar vocabulary by:	
a. stopping and asking children what they think the word means	78 (31.2)
b. continuing to read and telling students the definition of the word later	4 (1.6)
c. embedding definitions during the reading of the text	**93 (37.2)**
d. referring to pictures that give clues to the meaning of the words	75 (30)

(table continues)

Questions and Answers (correct answer is in bold print)	Frequency (Percent)
6. In order to support children's oral language development when reading books aloud, the type of talk teachers and children should engage in includes:	
a. nonimmediate talk and decontextualized language or talk that connects story events to personal experience	**2 (0.8)**
b. immediate talk or talk about the events and characters in the story	13 (5.2)
c. discussions about the illustrations and words in the story	11 (4.4)
d. all of the above	224 (89.6)
7. Shared reading has a significant effect on children's:	
a. alphabet knowledge	0 (0)
b. phonemic awareness and reading readiness	50 (20)
c. oral language and print knowledge	**177 (70.8)**
d. cognitive ability	23 (9.2)
8. An example of a scaffolding technique during a read-aloud activity is:	
a. pausing while reading to have children fill in words they know	25 (10)
b. asking direct questions while reading the book	7 (2.8)
c. creating stories about pictures or providing a storyline using only the pictures while reading	21 (8.4)
d. all of the above	**197 (78.8)**

The second section of the knowledge portion of the instrument, or Questions 10 through 18, assessed teachers' knowledge of promoting extended discourse. Two-hundred fourteen teachers completed this portion of the instrument. The three questions teachers most often answered correctly in this section were Questions 12, 13, and 16. Eighty-seven percent of participants answered Question 16 correctly, selecting the best way to respond in order to stimulate oral language development when a child points to a toy and says, "A car." Question 13 was also answered correctly by a high number of participants, with 84% of teachers responding appropriately. Teachers who answered this question correctly indicated that parallel talk, or the type of talk that narrates or describes what the child is doing at the moment, may be used to model how our language works. Finally, the question which received the third highest percentage of correct responses in this section was Question 12, although less than half (44%) of the teachers answered this question correctly. Question 12 required teachers to select the answer which demonstrated the best support of children's oral language development during free play. Forty-four percent of teachers selected the correct answer, *engage children in extended conversations that are intellectually challenging*. However, 57% of teachers answered incorrectly by choosing either (a) spend time engaged in very short conversations with many children or (b) ensure that there are ample amounts of time for free play throughout the day.

Three questions in the second section of the knowledge instrument were answered incorrectly by at least 80% of teachers. Question 15 directed teachers to select the type of talk that may accompany free play that is most supportive of the language and literacy

skills that are important for children a year later in kindergarten. Seventy-seven percent of teachers selected the answer *all of the above* which indicated teachers believed pretend talk, nontoy talk, and nonpretend talk are all supportive of the language and literacy skills that will be important for children in kindergarten. Additionally, just under 6% of teachers selected either nontoy talk or nonpretend talk. Teachers should have indicated that pretend talk is the type which is most supportive of language and literacy skills that are important for children a year later in kindergarten. Question 10 received the second highest percentage of incorrect responses in the second section of the knowledge instrument, answered incorrectly by 81% of teachers. Question 10 instructed participants to identify the way in which teachers can support students' oral language development during mealtimes. The majority of the teachers who answered incorrectly selected the answer, *engaging children in conversations about events happening in the present (present talk).* However, the best way to support students' oral language development during mealtimes is by remaining stationary and engaging children in extended discussions about decontextualized events or activities (nonpresent talk). The third question answered incorrectly by the majority of teachers was Question 14. Eighty percent of teachers were not able to identify the types of conversations that support children's oral language development. The majority of teachers selected either (a) conversations that include vocabulary that students are familiar with or (b) conversations that are primarily focused on events occurring in the here and now. Instead, teachers should have indicated that conversations including informative uses of rare words are most supportive of children's oral language development. However, less than 20% of

teachers answered Question 14 correctly. Table 12 shows the test items I reviewed in this section and the frequency and percentage of participants who answered the questions correctly and incorrectly. Table 13 shows each of the questions answered correctly and incorrectly most often as I described above and each of the possible responses, including the frequency and percentage for each response.

Table 12

Frequency of Correct and Incorrect Responses: Knowledge of Promoting Extended Discourse

Question	**Correct Answers**	**Incorrect Answers**
	Frequency (Percent)	
10. During mealtimes, teachers can support students' oral language development by:	40 (18.7)	174 (81.3)
12. In order to support oral language development during free play, teachers should:	93 (43.5)	121 (56.5)
13. Throughout the day, teachers can model how our language works by:	180 (84.1)	34 (15.9)
14. Children's oral language development is supported by conversations that:	42 (19.6)	172 (80.4)
15. Of the three types of talk (pretend, non-toy, and non-pretend), which type is most supportive of language and literacy skills that are important for children a year later in kindergarten?	37 (17.3)	177 (82.7)
16. During a conversation, a child points to a toy and says, "A car." The facilitative way to respond in order to stimulate oral language development is:	186 (86.9)	28 (13.1)

Table 13

Frequency of Responses: Knowledge of Promoting Extended Discourse

Questions and Answers (correct answer is in bold print)	**Frequency (Percent)**
10. During mealtimes, teachers can support students' oral language development by:	
a. engaging children in conversations about events happening in the present (present talk)	132 (61.7)
b. remaining stationary and engaging children in extended discussions about decontextualized events or activities (nonpresent talk)	**40 (18.7)**
c. moving around the classroom engaging many children in short conversations	22 (10.3)
d. having discussions that are supporting by things in the classroom environment	20 (9.3)
12. In order to support oral language development during free play, teachers should:	
a. spend time engaged in very short conversations with many children	44 (20.6)
b. move around the room frequently	18 (8.4)
c. engage children in extended conversations that are intellectually challenging	**93 (43.5)**
d. ensure that there are ample amounts of time for free play throughout the day	59 (27.6)
13. Throughout the day, teachers can model how our language works by:	
a. engaging in parallel talk or the type of talk that narrates or describes what the child is doing at that moment	**180 (84.1)**
b. doing the majority of the talking when engaging in conversations with students	0 (0)
c. using concrete and specific words	11 (5.1)
d. speaking in simple sentences that are easily understood	23 (10.7)

(table continues)

Questions and Answers (correct answer is in bold print)	Frequency (Percent)
14. Children's oral language development is supported by conversations that:	
a. include vocabulary that students are familiar with	79 (36.9)
b. include informative uses of rare words	**42 (19.6)**
c. are primarily focused on events occurring in the here and now	89 (41.6)
d. rely on the adult to guide the discussion	4 (1.9)
15. Of the three types of talk (pretend, non-toy, and non-pretend), which type is most supportive of language and literacy skills that are important for children a year later in kindergarten?	
a. pretend talk – talk with pretend elements and a nonliteral approach to feature in the immediate environment	**37 (17.3)**
b. non-toy talk – talk about events or concerns that are unrelated to the immediate play setting	6 (2.8)
c. non-pretend talk – talk that maintains a literal approach to actions and toys	6 (2.8)
d. all of the above	165 (77.1)
16. During a conversation, a child points to a toy and says, "A car." The facilitative way to respond in order to stimulate oral language development is:	
a. "Yes, a car."	8 (3.7)
b. "Yes, you are playing with a big, blue car."	**186 (86.9)**
c. "This is a car."	8 (3.7)
d. "You are playing with a car."	12 (5.6)

The third section of the knowledge portion of the instrument, or Questions 19 through 27, assessed teachers' knowledge of using specific vocabulary and rare words. One-hundred ninety-eight teachers completed this portion of the instrument. The three questions teachers most often answered correctly in this section were Questions 19, 21, and 22. Question 19 was answered correctly by 170 teachers (86%), indicating teachers were able to correctly identify methods to encourage the continued development of new vocabulary during free play. Question 21 was answered correctly by 160 teachers (81%). Teachers were asked to identify an effective strategy for teaching new words. By answering this question correctly, teachers indicated that using demonstrations and/or pictures, providing multiple definitions and examples, and connecting new words to concepts children already know are the best methods for teaching new words to children. However, nearly 20% of teachers selected two of the incorrect answers suggesting that providing single definitions and examples and asking children to explain what they think the word means are effective strategies for teaching new words. The third question teachers answered correctly the majority of the time was Question 22. Nearly every teacher (N = 194) correctly identified the predominant way that children acquire vocabulary, by hearing new words used in their environment, including in conversations, television, and storybooks read aloud to them.

Two questions in the last section, knowledge of using specific vocabulary and rare words, were answered incorrectly by more than 90% of teachers, Questions 20 and 25. Question 20 was answered incorrectly by 193 teachers (98%). The majority of teachers selected the answer *all of the above*, indicating that rare words, common words,

and extended talk should be used during large group time to extend children's language development. Instead, teachers should have only selected rare words as the best support of oral language development during large group time. Question 25 was also answered incorrectly by the majority of teachers (91%). Teachers were asked to identify the best method during mealtime to extend upon vocabulary that has been previously taught during the day. One-hundred seventy-two teachers selected *all of the above*. Instead, teachers should have selected the answer, *asking open ended questions to elicit thoughtful and elaborate uses of words*. Eighteen teachers selected the correct answer. Table 14 shows the test items I reviewed in this section and the frequency and percentage of participants who answered the questions correctly and incorrectly. Table 15 shows each of the questions answered correctly and incorrectly most often as I described above and each of the possible responses, including the frequency and percentage for each response.

Table 14

Frequency of Correct and Incorrect Responses: Using Specific Vocabulary and Rare Words

Question	**Correct Answers**	**Incorrect Answers**
	Frequency (Percent)	
19. Teachers can encourage the continued development of vocabulary during free play by:	170 (85.9)	28 (14.1)
20. Large group time provides an opportunity for teachers to extend upon children's language development through the use of:	5 (2.5)	193 (97.5)
21. An effective strategy for teaching new words is:	160 (80.8)	38 (19.2)
22. The predominant way that children acquire vocabulary is by:	194 (98)	4 (2)
25. During mealtime conversations, teachers can extend upon vocabulary that has been previously taught during the day by:	18 (9.1)	180 (90.9)

Table 15

Frequency of Responses: Using Specific Vocabulary and Rare Words

Questions and Answers (correct answer is in bold print)	**Frequency (Percent)**
19. Teachers can encourage the continued development of vocabulary during free play by:	
a. setting up play areas that extend upon a classroom theme and related vocabulary	25 (12.6)
b. setting up media centers (DVDs, electronic books, computers) that engage children in interactions with the new vocabulary	0 (0)
c. providing props related to the theme that may elicit theme-related vocabulary use	3 (1.5)
d. all of the above	**170 (85.9)**
20. Large group time provides an opportunity for teachers to extend upon children's language development through the use of:	
a. rare words	**5 (2.5)**
b. common words	10 (5.1)
c. non-pretend talk	4 (2.0)
d. all of the above	179 (90.4)
21. An effective strategy for teaching new words is to:	
a. provide a single definition and example in order to avoid complicating the explanation	18 (9.1)
b. ask the children to explain what they think the word means	19 (9.6)
c. use demonstrations and/or pictures, provide multiple definitions and examples, and connect new words to concepts children already know	**160 (80.8)**
d. ask children to use the word in a sentence	1 (0.5)

(table continues)

Questions and Answers (correct answer is in bold print)	Frequency (Percent)
22. The predominant way that children acquire vocabulary is by:	
a. having words explicitly taught to them	2 (1.0)
b. hearing new words used in their environment, including in conversations, television, and storybooks read aloud to them	**194 (98.0)**
c. asking adults to explain what words mean	1 (0.5)
d. reading books themselves, including a wide variety of themes	1 (0.5)
25. During mealtime conversations, teachers can extend upon vocabulary that has been previously taught during the day by:	
a. asking open ended questions to elicit thoughtful and elaborate uses of words	**18 (9.1)**
b. discussing events that have taken place in the classroom during the day	5 (2.5)
c. talking about the book that was read earlier in the day	3 (1.5)
d. all of the above	172 (86.9)

Descriptive Statistics: Teachers' Perceived Knowledge

The instrument for this study also included questions to measure teachers' perceived level of competency after answering each of the three sections of knowledge questions. The first question asked teachers to rate their own knowledge from zero to six (*poorly* to *very well*). The second question asked teachers to rate their own knowledge from zero to six (*well below average* to *well above average*) in comparison to other preschool teachers that answered the questions. To measure perceived knowledge, I used a semantic differential approach (Johnson & Christensen, 2004) with a seven-point bipolar rating scale with contrasting adjectives (*poorly* to *very well* or *well below average* to *well above average* in this study). Participants answered both questions indicating their

perceived level of knowledge after completing each section of the knowledge assessment. I designed the two questions at the end of each section of the instrument to measure whether or not teachers were aware of what they did and did not know regarding knowledge of engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. Because people in general are likely to seek knowledge in a particular domain when they are actually aware of their own knowledge deficits in that domain, it was important to determine whether or not the teachers in this study were aware of their own knowledge deficits.

After completing the first nine questions assessing knowledge of engaging in dialogic reading, teachers (N = 249) completed two questions indicating their perceived level of knowledge regarding the questions previously answered. In Section 1, 98 teachers (39%) rated their knowledge as a four, on a seven-point bipolar rating scale from *poorly* to *very well*. Seventy-nine teachers (32%) rated their knowledge as a three. For the second question related to perceived knowledge, teachers were asked to rate their own knowledge in comparison to other teachers who completed the knowledge portion regarding engaging in dialogic reading. The majority of teachers rated their knowledge in comparison to other teachers as a three (36%) or a four (36%) on a seven-point bipolar scale from *well below average* to *well above average*. Figures 3 and 4 illustrate the frequency distribution of teachers' responses to the two perceived knowledge questions for Section 1 of the knowledge assessment, engaging in dialogic reading.

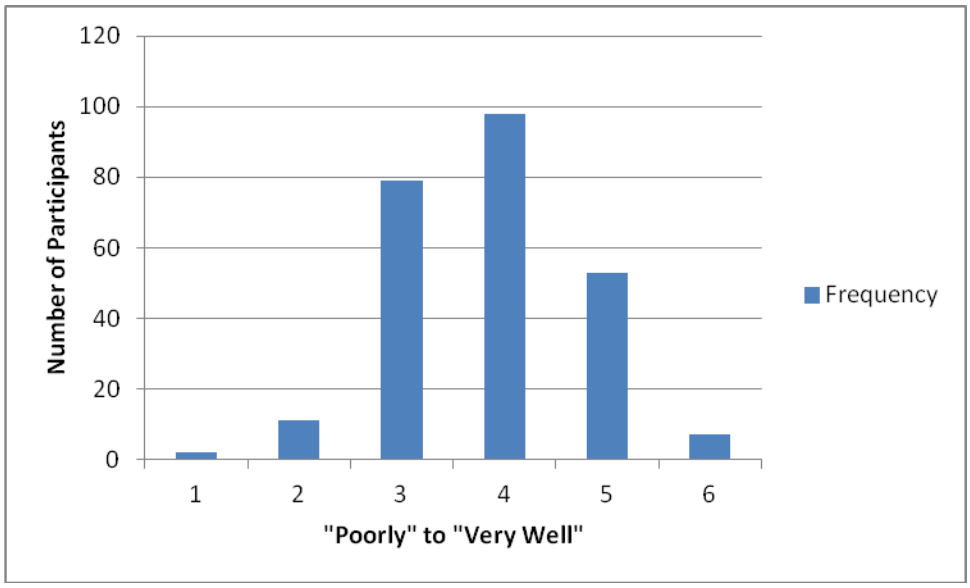

Figure 3. Frequency distribution of responses to perceived knowledge of engaging in dialogic reading.

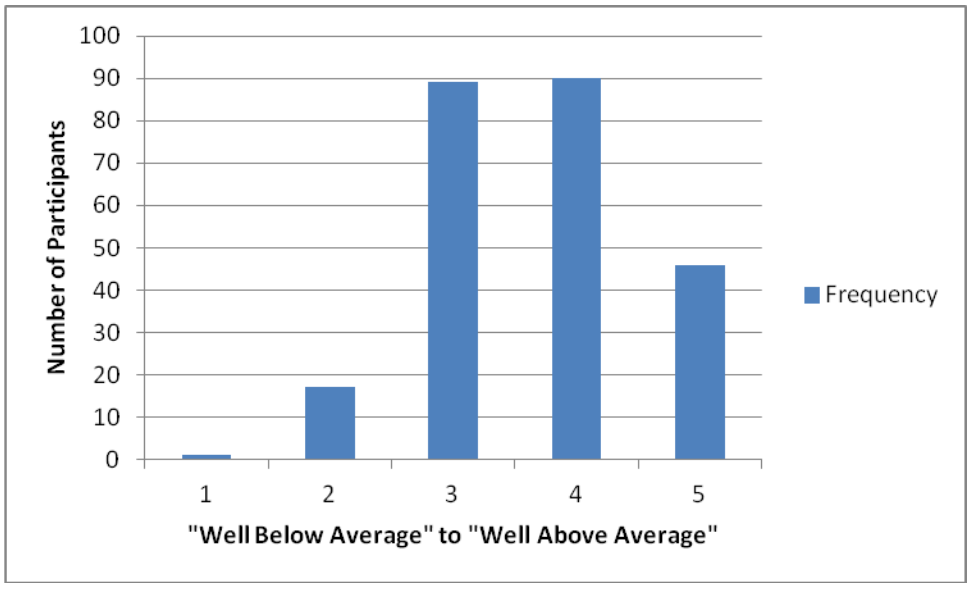

Figure 4. Frequency distribution of responses to perceived knowledge of engaging in dialogic reading in comparision to other teachers.

After completing the second set of questions (10-18) assessing knowledge of promoting extended discourse, teachers completed two questions indicating their perceived level of knowledge regarding the questions previously answered. Two-hundred fourteen teachers answered the perceived knowledge questions in the second section of the instrument. In Section 2, 91 teachers (43%) rated their knowledge as a four, on a seven-point bipolar rating scale from *poorly* to *very well*. Eighty teachers (37%) rated their knowledge as a three. For the second question related to perceived knowledge, teachers were asked to rate their own knowledge in comparison to other teachers who completed the knowledge portion regarding promoting extended discourse. The majority of teachers rated their knowledge in comparison to other teachers as a three (40%) or a four (37%) on a seven-point bipolar scale from *well below average* to *well above average*. Figures 5 and 6 illustrate the frequency distribution of teachers' responses to the two perceived knowledge questions for Section 2 of the knowledge assessment, promoting extended discourse.

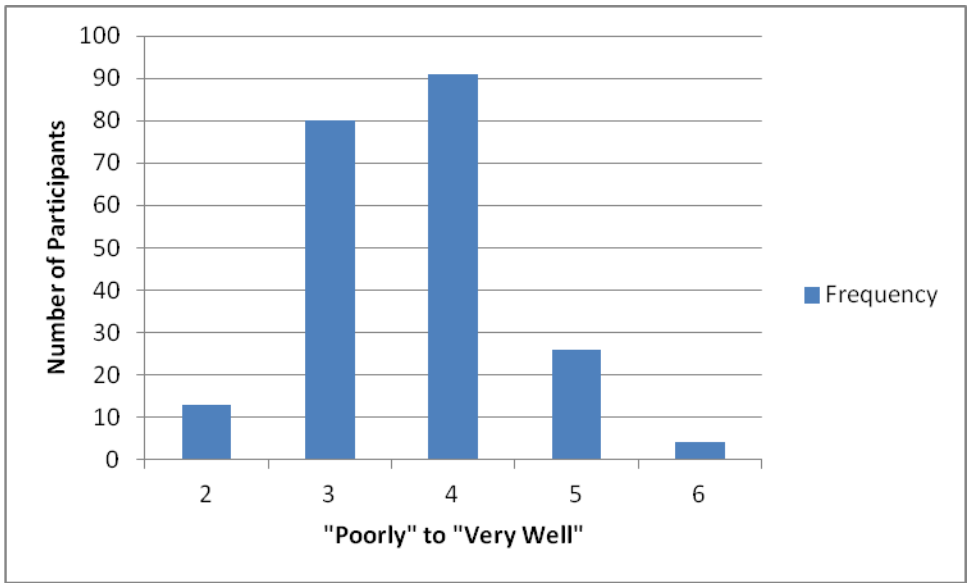

Figure 5. Frequency distribution of responses to perceived knowledge of promoting extended discourse.

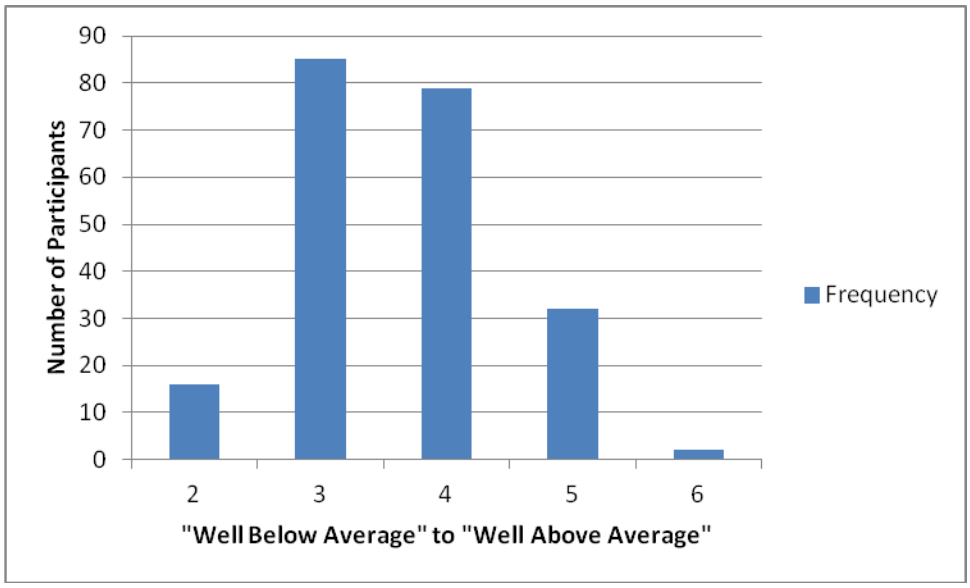

Figure 6. Frequency distribution of responses to perceived knowledge of promoting extended discourse in comparision to other teachers.

After completing the third set of questions (19-27) assessing knowledge of using specific vocabulary and rare words, teachers (N = 198) completed two questions indicating their perceived level of knowledge regarding the questions previously answered. In Section 3, 74 teachers (37%) rated their knowledge as a four and 73 teachers (37%) rated their knowledge as a three, on a seven-point bipolar rating scale from *poorly* to *very well*. For the second question related to perceived knowledge, teachers were asked to rate their own knowledge in comparison to other teachers who completed the knowledge portion regarding using specific vocabulary and rare words. The majority of teachers (N = 81) rated their knowledge in comparison to other teachers as a three (41%) on a seven-point bipolar scale from *well below average* to *well above average*. Figures 7 and 8 illustrate the frequency distribution of teachers' responses to the two perceived knowledge questions for Section 3 of the knowledge assessment, using specific vocabulary and rare words.

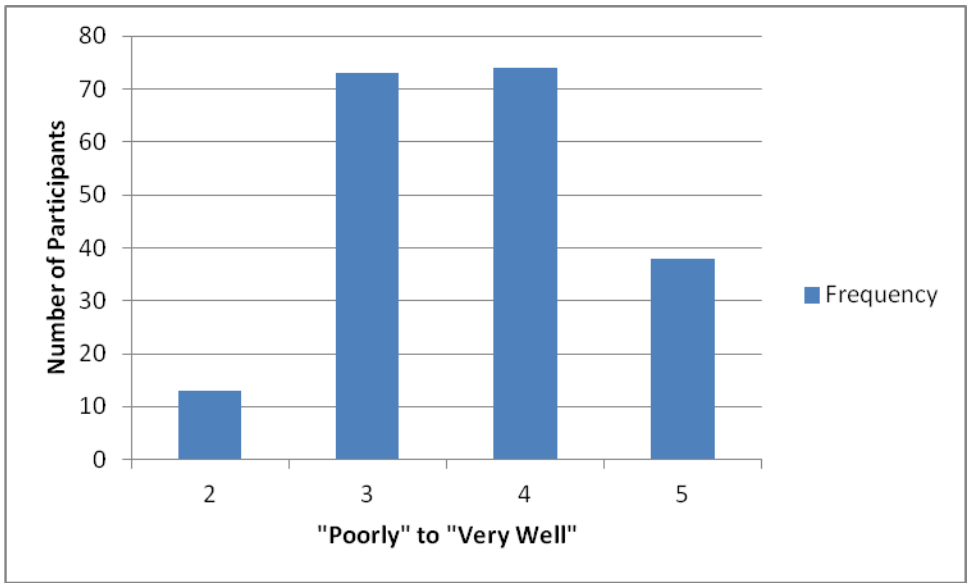

Figure 7. Frequency distribution of responses to perceived knowledge of using specific vocabulary and rare words.

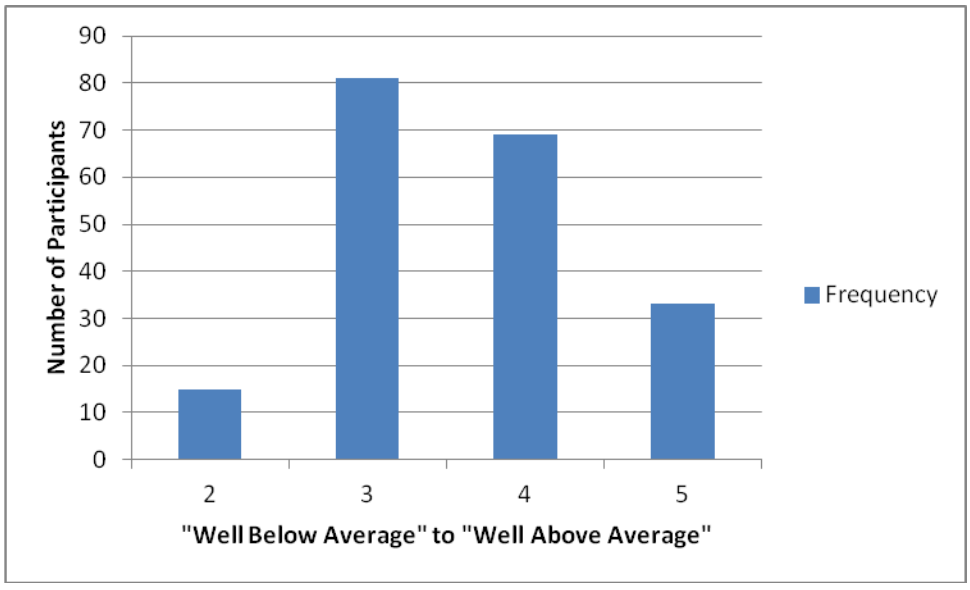

Figure 8. Frequency distribution of responses to perceived knowledge of using specific vocabulary and rare words in comparision to other teachers.

Primary Analyses

Upon completion of the preliminary analyses and identification of the most robust sections of the instrument according to reliability and validity statistics, I revised the research questions in order to reflect further analysis of only Section 2 of the instrument, knowledge of promoting extended discourse for developing oral language. The resulting revised research questions answered by this study include:

1. Is there a difference in preschool teachers' knowledge of strategies involving promoting extended discourse for developing oral language by total number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?
2. Is there a difference in preschool teachers' perceived knowledge of strategies involving promoting extended discourse for developing oral language by total number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?
3. What is the relationship between preschool teachers' perceived knowledge and actual knowledge of strategies involving promoting extended discourse for developing oral language?

Before answering each of the three research questions, I made adjustments to the categories included within each of the three independent variables: number of years experience teaching preschool, hours of professional development in early literacy completed in the last 2 years, and perceived level of compentency for knowledge of promoting extended discourse. First, I collapsed the categories to describe the number of

years experience teaching preschool from five to three to account for the low sample sizes represented in two of the five categories. Twenty-three teachers reported having 0 to 2 years experience, 54 teachers reported having 3 to 6 years experience, 40 teachers reported having 7 to 10 years experience, 50 teachers reported having 11 to 20 years experience, and 30 teachers reported having more than 20 years experience. I collapsed the categories into three new groups representing 0 to 6 years experience, 7 to 10 years experience, and 11 or more years experience. The new groups included samples of 77, 40, and 80 teachers respectively.

Similarly, I collapsed the categories to describe the number of hours of professional development in early literacy completed in the last 2 years from four to two to account for the low sample sizes in three of the four categories. One-hundred fifty-seven teachers reported having 0 to 90 hours of professional development, 27 teachers reported having 91 to 180 hours of professional development, 10 teachers reported having 181 to 270 hours of professional development, and three teachers reported having more than 270 hours of professional development. I collapsed the categories into two new categories representing up to 90 hours of professional development and more than 90 hours of professional development. The new categories included sample sizes of 157 and 40 teachers respectively. Figures 9 and 10 illustrate the new categories and distribution of responses for teachers' number of years experience teaching preschool and hours of professional development in early literacy completed in the last 2 years.

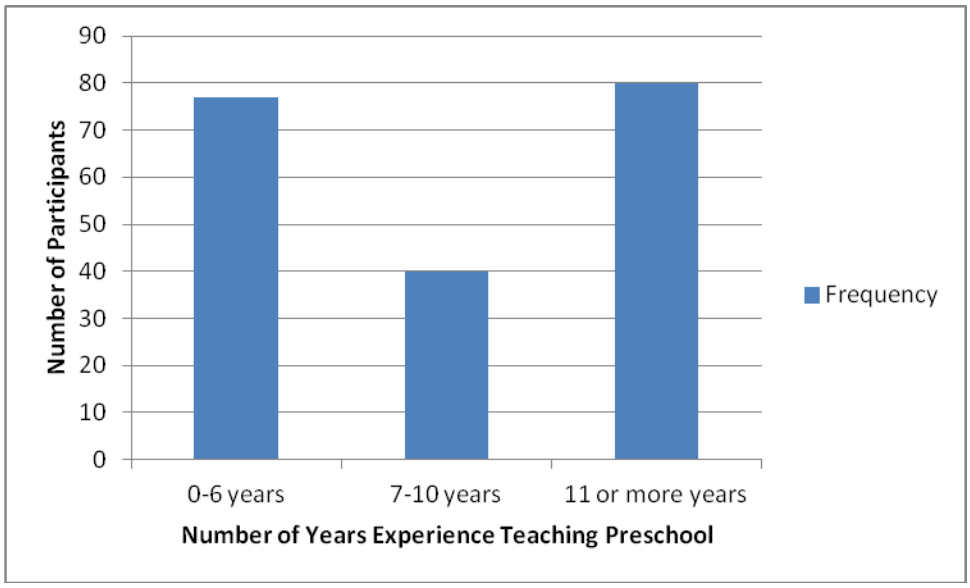

Figure 9. Frequency distribution of responses to number of years experience teaching preschool.

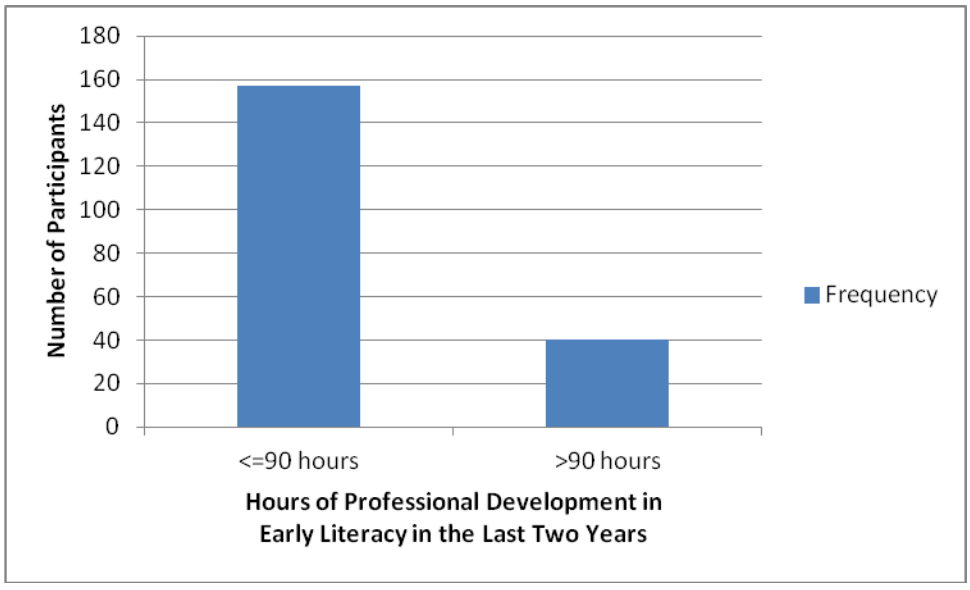

Figure 10. Frequency distribution of responses to number of hours of professional development in early literacy completed in the last 2 years.

Additionally, before examining the second research question involving teachers' perceived knowledge, I collapsed the seven-point bipolar rating scale from *poorly* to *very well* to describe teachers' self ratings of their knowledge into three new categories of ratings: low, average, and high. Teachers rating their knowledge as a zero to three (N = 93) were combined into the low category, teachers rating their knowledge as a four (N = 91) were included in the average category, and teachers rating their knowledge as a five or six (N = 30) were included in the high category. Collapsing the ratings from seven to three accounted for the low sample sizes in five of the seven categories.

Similary, for teachers' ratings of their perceived compentency compared to other teachers answering the knowledge questions for promoting extended discourse, I collapsed the categories from seven to three. Collapsing the categories accounted for the low sample sizes in four of the seven categories. Teachers rating their own competency compared to other teachers as a zero, one, or two (N = 16) were combined into the category, *lower than others*. Teachers rating their own competency compared to other teachers as a three (N = 85) were labeled as *about the same as others*, and teachers rating their own competency compared to other teachers as a four, five, or six (N = 113) were combined into the category, *higher than others*. Figures 11 and 12 illustrate the new categories and the distribution of responses for teachers' perceived competency for knowledge of promoting extended discourse and perceived competency compared to others for knowledge of promoting extended discourse.

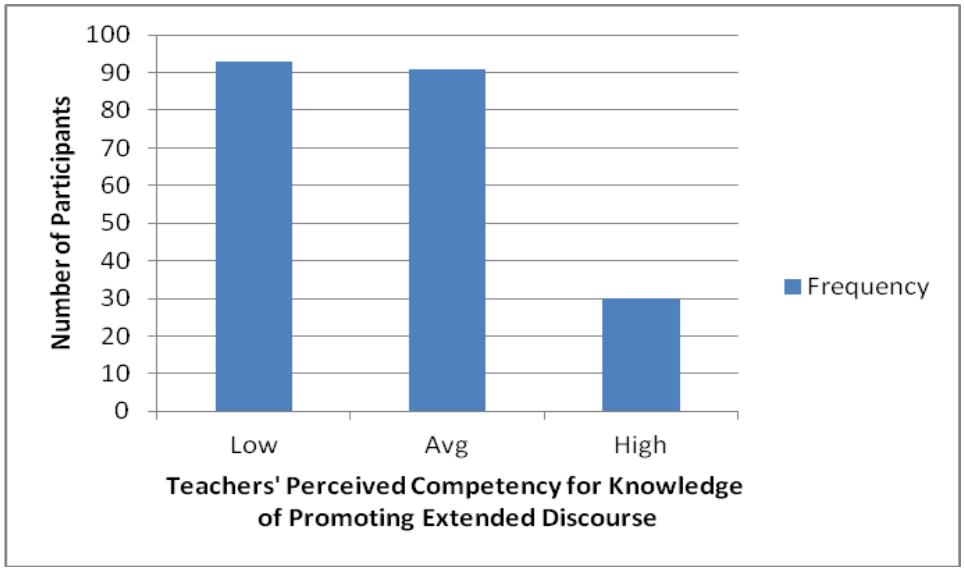

Figure 11. Frequency distribution of responses for teachers' perceived competency for knowledge of promoting extended discourse.

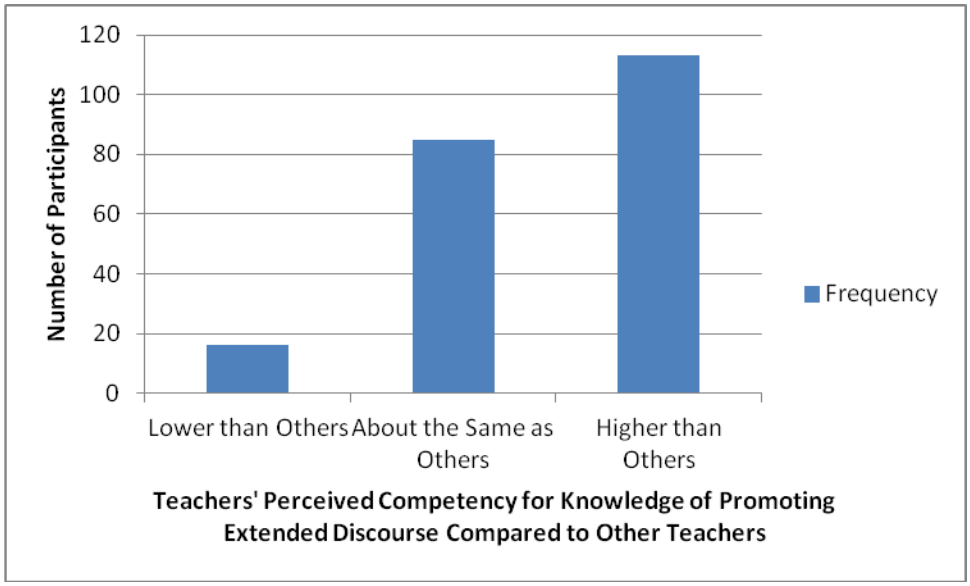

Figure 12. Frequency distribution of responses for teachers' perceived competency for knowledge of promoting extended discourse compared to other teachers.

Finally, after revising the categories included within each of the three independent variables, I determined the overall scale score for Section 2 of the instrument, knowledge of promoting extended discourse, for each participant (N = 214) by summing the number correct by each participant. Total scores ranged from one correct out of nine to nine correct out of nine. There were no participants that answered eight total questions correctly, and there were only two participants out of 214 that answered all nine questions correctly. Upon reviewing total scores for normality, I discovered the data to be positively skewed. Skewness is a measure of the symmetry or lack of symmetry in a distribution of scores. A distribution that is significantly skewed can lead to erroneous interpretations of statistical outcomes. When samples are normally distributed, skewness is equal to zero or close to zero. Normality analysis for this distribution indicated that the data were positively skewed (skewness statistic = .378, standard error of skewness = .166). To determine if skewness was significant, I doubled the standard error of skewness, resulting in a value of .332. Since the skewness statistic of .378 is higher than .332, it is considered to be significantly different from normal. Thus, it was necessary to reduce skewness of the data.

After completing tests of skewness, I explored two options for reducing skewness of the data. First, I removed the two total scores of nine from the analysis. Then, I reviewed the data for skewness again, and the data indicated that the distribution was no longer skewed (skewness statistic = .149, standard error of skewness = .167). I also conducted a second method for reducing skewness of the data by collapsing the distribution of scores from a nine point scale to an eight point scale, since there were no

participants that scored a total of eight. There were two participants who scored nine, and they were the highest scores in the distribution. Therefore, changing the score of nine to a score of eight still allowed the score to be the highest in the distribution while eliminating skewness (skewness statistic = .291, standard error of skewness = .167). Neither method changed the overall outcome of the analyses. Thus, in order to keep all scores within the sample of 214, I selected the second method of reducing skewness, and the scale was reduced from the highest score of nine to eight. Tables 16 and 17 show the differences in the number of questions answered correctly by number of years experience teaching preschool and hours of professional development in early literacy completed in the last 2 years, according to the new levels, zero to eight.

Table 16

Differences in Number of Questions Answered Correctly by Number of Years Experience Teaching Preschool

	Number of Questions Answered Correctly								
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
0 – 6 Years	1	4	14	17	17	14	7	2	1
7 – 10 Years	0	2	5	9	7	9	5	3	0
11 or More Years	0	8	12	15	25	11	5	3	1

Table 17

Differences in Number of Questions Answered Correctly by Hours of Professional Development in Early Literacy Complted in the Last 2 Years

	Number of Questions Answered Correctly								
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
<=90 Hours	1	11	24	32	42	27	11	8	1
>90 Hours	0	3	7	9	7	7	6	0	1

Research Question One

Is there a difference in preschool teachers' knowledge of strategies involving promoting extended discourse for developing oral language by total number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?

In order to answer the first research question, I conducted an ANOVA. I included one dependent variable (teachers' knowledge) and two independent variables (years of experience and hours of professional development) in the analysis. I used an ANOVA to detect significant differences in teachers' knowledge of strategies involving promoting extended discourse for developing oral language by total number of years experience teaching preschool and number of hours of professional development in early literacy completed in the last 2 years. The overall group mean score (N = 197, M = 3.76, SD = 1.63) indicated that on average, teachers answered three of nine questions correctly. Experience had no significant main effect on teachers' knowledge ($F(2, 197) = 1.19$; *NS*).

Professional development also had no significant main effect on teachers' knowledge ($F(1, 197) = .468$; *NS*). Consequently, the data failed to reject the first null hypothesis for research Question 1. There were no significant differences in preschool teachers' knowledge of strategies involving promoting extended discourse for developing oral language based on number of years experience teaching preschool. Similarly, the data failed to reject the second null hypothesis for research Question 1. There were no significant differences in preschool teachers' knowledge of promoting extended discourse for developing oral language based on hours of professional development in early literacy completed in the last 2 years. Table 18 shows means, standard deviations, and levels of significance for knowledge scores based on teachers' years of experience teaching preschool and number of hours of professional development in early literacy completed in the last 2 years.

Table 18

Mean Knowledge Scores, Standard Deviations, and Effect Sizes by Number of Years Experience Teaching Preschool and Hours of Professional Development

	N	Mean	SD	Sig.
Experience	197	3.761	1.63	.305
Professional Development	197	3.761	1.63	.495

Research Question Two

Is there a difference in preschool teachers' perceived knowledge of strategies involving promoting extended discourse for developing oral language by total number of

years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?

In order to answer the second research question, I conducted an ANOVA. I included one dependent variable (teachers' perceived competency) and two independent variables (years of experience and hours of professional development) in the analysis. I used an ANOVA to detect significant differences in teachers' perceived level of competency for knowledge of strategies involving promoting extended discourse for developing oral language by total number of years experience teaching preschool and number of hours of professional development in early literacy completed in the last 2 years. The overall group mean (N = 214, M = 3.71, SD = 1.61) indicated that on average, teachers rated their own knowledge as a three on a seven point bipolar scale. Experience had no significant main effect on teachers' perceived level of competency ($F(4, 197) = .096$, *NS*). Similary, professional development had no significant main effect on teachers' perceived level of competency ($F(2, 197) = 1.26$, *NS*). Consequently, the data failed to reject the first null hypothesis for research Question 2. There were no significant differences in preschool teachers' perceived knowledge of strategies involving promoting extended discourse for developing oral language based on total number of years experience teaching preschool. Similarly, the data failed to reject the second null hypothesis for research Question 2. There were no significant differences in preschool teachers' perceived knowledge of strategies involving promoting extended discourse for developing oral language based on number of hours of professional development related to early literacy completed in the last 2 years. Table 19 shows means, standard

deviations, and levels of significance for teachers' perceived knowledge based on teachers' years of experience teaching preschool and number of hours of professional development in early literacy completed in the last 2 years.

Table 19

Mean Perceived Knowledge, Standard Deviations, and Effect Sizes by Years Experience Teaching Preschool and Hours of Professional Development

	N	Mean	SD	Sig.
Experience	214	3.71	1.61	.984
Professional Development	214	3.71	1.61	.285

Research Question Three

What is the relationship between preschool teachers' perceived knowledge and actual knowledge of strategies involving promoting extended discourse for developing oral language?

In order to answer the third research question, I first conducted an ANOVA to explore differences in the means of groups of teachers rating their own knowledge as low, average, and high. The mean score (N = 93, M = 3.40, SD = 1.57) for teachers who rated their own knowledge as low indicated that their knowledge of strategies for promoting extended discourse was in fact low when compared to the group means of teachers who rated their knowledge as average or high. Similary, the mean score (N = 30, M = 4.23, SD = 1.57) for teachers who rated their own knowledge as high was in fact high when compared to the group means of teachers who rated their knowledge as low or average. Therefore, the data revealed that the 93 teachers who rated their own knowledge

as low did perform lower than the teachers who rated their knowledge as average or high. Conversely, the 30 teachers who rated their own knowledge as high were more knowledgeable than their counterparts who rated their knowledge as low or average. Teachers with less knowledge knew they had less knowledge while teachers with more knowledge knew they had more knowledge. Table 20 shows the mean scores for teachers rating their own knowledge as low, average, and high.

Table 20

Mean Knowledge Scores for Teachers Rating their Knowledge as Low, Average, and High

	N	Mean
Low	93	3.40
Average	91	3.85
High	30	4.23

To further understand the degree of the magnitude between low performing and high performing teachers in the total score obtained for the second section of the instrument, knowledge of promoting extended discourse, I calculated an effect size (Cohen's *d*). Results revealed an effect size of 0.53. According to Cohen, this effect is a significantly positive moderate effect, indicating that the variability in the test scores between low performing and high performing teachers was about one-half of a standard deviation. Based on the results of ANOVA and Cohen's *d*,I can be reasonably certain that the observed difference between low and high performing teachers is a true difference and was likely not due to chance.

In further analysis of the data to answer the third research question, I also included the second perceived knowledge question for which teachers were asked to rate their own knowledge compared to other participants. I used a three-by-three contingency table to compare observed or actual results from the two perceived knowledge questions. Contingency tables may be used to summarize results when the outcome is categorical. Calculations comparing the observed outcomes provide evidence of the degree of the relationship between them. Expected outcomes must first be calculated. In order to determine what the expected results would be, I multiplied the total count for each row for observed perceived competency (*low*, *average*, or *high*) by the corresponding column total count for observed perceived competency compared to others (*lower than others*, *same as others*, or *higher than others*). I then divided the product of the calculation for each row and column combination by the total sample for the group ($N = 214$).

Upon completion of the three-by-three contingency table and expected results, I conducted a Chi-square (X^2) test for independence in order to provide information about the strength of the relationship between the row variables and column variables. A low Chi-square value indicates that there is a small discrepancy between the rows and columns that is probably not statistically significant while a high Chi-square value indicates that there is a large discrepancy between the row and column values that may be significant.

The Chi-square for independence was $X^2 = 144.0$, $df = 4$, $p < .001$. Results deviated from what was expected in a normal distribution, indicating that the observed numbers differed significantly from what was expected . Thus, there was a contingency

between the observed variables, meaning that the two variables were not independent. Teachers' perceived knowledge and perceived knowledge compared to others were not independent of each other. Also, as demonstrated previously in Chapter 4, teachers' mean actual knowledge for *low*, *average*, and *high* aligned with their own ratings of their knowledge. Therefore, teachers' actual knowledge was not independent of perceived knowledge and perceived knowledge compared to others. Table 21 shows observed perceived knowledge compared to observed perceived knowledge when compared to others. Table 22 shows the results of the calculations which determined expected results for perceived knowledge and perceived knowledge compared to others.

Table 21

Observed Perceived Knowledge of Promoting Extended Discourse by Observed Perceived Knowledge Compared to Others

	Observed Perception of Knowledge Compared to Others			
Observed Perception of Knowledge (Actual Knowledge)	Lower than Others	About the Same as Others	Higher than Others	Total
	Count	Count	Count	Count
Observed Perceived Low Knowledge (Low Knowledge)	15	72	6	93
Observed Perceived Average Knowledge (Average Knowledge)	1	13	77	91
Observed Perceived High Knowledge (High Knowledge)	0	0	30	30
Total	16	85	113	214

Table 22

Expected Perceived Knowledge of Promoting Extended Discourse by Expected Perceived Knowledge Compared to Others

	Expected Perception of Knowledge Compared to Others			
Expected Perception of Knowledge (Actual Knowledge)	Lower than Others	About the Same as Others	Higher than Others	Total
	Count	Count	Count	Count
Expected Perceived Low Knowledge (Low Knowledge)	6.95	36.90	49.10	93
Expected Perceived Average Knowledge (Average Knowledge)	6.80	36.10	48.10	91
Expected Perceived High Knowledge (High Knowledge)	2.24	11.90	15.80	30
Total	16	85	113	214

Three distinct patterns were revealed in the analyses for research Question 3, as I illustrated in Table 17 above. First, of the 93 teachers who rated their own knowledge as low and actually scored lower than others, 72 rated their own knowledge compared to others as about the same as others, indicating that these teachers believed other teachers would have the same low knowledge as they had of strategies for promoting extended discourse. Secondly, of the 30 teachers who rated their own knowledge as high and also scored higher than others, all 30 rated their own knowledge compared to others as higher than others, demonstrating that these teachers believed they had higher knowledge than others, and in fact, they were correct. Third, of the 91 teachers who rated their own

knowledge as average and also scored in the average range, 77 rated their own knowledge as higher than others, demonstrating that they believed their own average knowledge of the topic would be sufficient for knowing more than the other participants. However, they were not correct. Essentially, teachers who had low knowledge knew they had low knowledge, but the majority of these teachers thought others would also have low knowledge. Teachers who had high knowledge knew they had high knowledge and believed their knowledge would be better than other teachers.

Summary

The purpose of this study was to create an instrument that may be used to examine and describe the perceived level of knowledge and actual knowledge level of preschool teachers regarding strategies that support oral language development in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. The pilot of the instrument revealed one section to be valid and reliable for measuring preschool teachers' knowledge of strategies for oral language development. Therefore, further analysis of the data from the study consisted of only Section 2 of the instrument, knowledge of promoting extended discourse.

Findings indicated that the majority of participants had low knowledge of strategies for promoting extended discourse. Neither years of experience nor hours of professional development had a significant relationship to teachers' knowledge or perceived knowledge. Teachers with low knowledge knew they had low knowledge but believed others would also have low knowledge. On the contrary, teachers with high

knowledge knew they had high knowledge and believed their knowledge was higher than others. Unfortunately, even those with high knowledge had a mean score which demonstrated that on average, they answered less than half the questions correctly.

Participants in the study included 250 teachers in Colorado Preschool Programs. The majority of teachers indicated they had completed less than 90 hours of professional development in the last 2 years in early literacy, indicating a need to increase the opportunities preschool teachers are provided for professional development. Participants in the study varied in their years of experience with 80 teachers having 11 or more years experience while almost as many teachers had 6 years or fewer. Given the low mean scores for all groups, professional development for all teachers is of upmost importance, regardless of how many years they have been teaching preschool.

Findings from the study were consistent with the idea that teachers may not know what they don't know. While teachers seemed to rate their own knowledge fairly well, too many teachers believed their own low knowledge would be the same as others. It is concerning that the teachers with low knowledge did not realize that they knew less than others. It was surprising that neither professional development nor years experience teaching preschool had a significant relationship with teachers' knowledge.

In Chapter 4, I provided information regarding the process used to collect and analyze the data in addition to the results of the data analyses. I presented results in three main sections: data collection process, preliminary analyses, and primary analyses. In Chapter 5, I include interpretations of the findings, recommendations for action, implications for social change, and recommendations for future research.

Chapter 5: Discussion, Interpretations, and Recommendations

Introduction

In this chapter, I present a summary and interpretations of the study findings in addition to implications and recommendations for policy makers, researchers, administrators and professors in higher education, state level coordinators, district level administrators, and school level personnel to improve upon the training and ongoing support that preschool teachers receive. I begin the chapter with a brief overview of why and how the study was conducted, reviewing the research questions and related findings. I follow the overview with interpretations of the findings and how the findings relate to a larger body of literature related to oral language development in the preschool classroom and teachers' knowledge of strategies for supporting oral language development and literacy foundations. Next, I address implications for social change in addition to recommendations for action and further research. Finally, I end the chapter with the my own reflections on the experience of conducting the study, identifying changes in my thinking that occurred as a result of conducting the study.

Overview

The purpose of this quantitative, nonexperimental study was to develop an instrument that may be used to measure preschool teachers' perceived level of knowledge and actual knowledge of strategies that support oral language development and literacy foundations in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words. Upon completion of primary analyses, I determined that the second section of the instrument,

knowledge of promoting extended discourse, was most valid and reliable for measuring preschool teachers' knowledge. Therefore, I revised the research questions to reflect further analysis of only the second section of the instrument, knowledge of promoting extended discourse. I addressed the following revised research questions in this study:

1. Is there a difference in preschool teachers' knowledge of strategies involving promoting extended discourse for developing oral language by total number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?
2. Is there a difference in preschool teachers' perceived knowledge of strategies involving promoting extended discourse for developing oral language by total number of years experience teaching preschool and number of hours of professional development related to early literacy completed in the last 2 years?
3. What is the relationship between preschool teachers' perceived knowledge and actual knowledge of strategies involving promoting extended discourse for developing oral language?

Analyses revealed no significant differences in preschool teachers' knowledge of promoting extended discourse by years experience teaching preschool or number of hours of professional development related to early literacy completed in the last 2 years. Similary, there were no significant differences in preschool teachers' perceived knowledge of promoting extended discourse by years experience teaching preschool or number of hours of professional development related to early literacy completed in the last 2 years. However, analysis of the relationship between preschool teachers'

knowledge and perceived knowledge revealed several significant patterns, as I discussed previously in Chapter 4. Teachers with low knowledge knew they had low knowledge but believed others would also have low knowledge. On the contrary, teachers with high knowledge knew they had high knowledge and believed their knowledge was higher than others. Although teachers who rated their knowledge as high did perform the highest when compared to the other teachers, on average, they answered less than half the questions correctly. Results were similar for teachers performing at low and average levels. Furthermore, Cohen's *d* demonstrated that the variability in the test scores between low and high performing teachers was significant.

Interpretation of Findings

The results of the study indicate that preschool teachers' knowledge of promoting extended discourse for developing oral language literacy foundations is low. Although teachers were accurate when rating their own knowledge, teachers with low knowledge incorrectly rated their knowledge as the same as others. According to Cunningham et al. (2009), teachers "tend to overestimate what they know, creating a potential obstacle for seeking knowledge" (p. 487). This study confirmed and extended upon Cunningham's findings, revealing that more than three-fourths of the teachers with low knowledge were unable to accurately rate their knowledge when compared to others. Although professional development was not significantly related to teachers' knowledge, the low knowledge scores of all participants coupled with the fact that 157 of 197 teachers indicated they had completed less than 90 hours of professional development in early

literacy in the last 2 years demonstrates a need for more professional development for preschool teachers.

Examination of the types of questions teachers answered incorrectly provided further information about the needed focus of professional development for preschool teachers. Answers to questions about the type of talk teachers should engage in with children revealed that teachers believe simple language is best, yet research is clear that children need to be exposed to language which includes rare words and more challenging vocabulary (Dickenson & Tabors, 2001; Hart & Risley, 1995). As discussed in detail in Chapter 2, during mealtimes, teachers should remain stationary and engage children in extended conversations about decontextualized events and activities, also known as nonpresent talk. These conversations should focus on nonpresent events, experiences, people, and objects that are familiar to children. This type of talk engages children in higher levels of thinking and challenges them to use more extensive vocabulary (Dickinson & Tabors, 2001). When engaging in conversations with children, teachers should also use targeted vocabulary that may not be familiar to students (Christ & Wang, 2010). Despite these facts, 153 of the 214 teachers who responded to Section 2 of the instrument believed familiar words and phrases, descriptions of events happening in the present, and simple sentences that are easily understood by all students are the best supports of oral language development in the preschool classroom. Similary, 165 of the 214 teachers who responded believed nonpretend talk and nontoy talk are most supportive of language and literacy skills that are important for children a year later in kindergarten. However, it is pretend talk that engages children in higher levels of

language interactions, requiring children to talk about pretend elements and use a nonliteral approach to features that are in the child's immediate environment (Dickenson & Tabors, 2001).

Consistent with the findings of previous research, this study indicates a need for continued training and professional development in early literacy for preschool teachers (Corrigan, 2011; Cunningham et al., 2009; Lane et al., 2009; Mather et al., 2001; Moats & Foorman, 2003). On average, teachers answered fewer than half of the questions related to promoting extended discourse correctly. Even teachers with the highest knowledge when compared to others answered fewer than half the questions correctly. Walpole et al. (2004) states that "teacher expertise, more than any other variable accounts for increases in student achievement in reading and other academic areas" (p. 277). Thus, it is essential for preschool teachers to have knowledge of the most appropriate uses of language to support children's oral language development associated with foundations of critical reading.

Implications for Social Change

This study contributes to positive social change by providing questions that may be used in future research studies about connections between oral language and literacy and teachers' perceived knowledge and actual knowledge. Data obtained from the instrument may be used to understand teachers' decisions, to inform preschool teachers' preparation, and to determine what type of professional development should be offered. Furthermore, the results of this study not only contribute to the limited body of research on preschool teachers' knowledge, but the study also extends upon the research by

including a measure of preschool teachers' perceived knowledge as it relates to oral language development. The development of effective professional development modules for preschool teachers is dependent on knowing teachers' perceptions of their knowledge and actual knowledge of strategies for oral language development in the preschool classroom. The results of the study may be used as a guide for policy makers, researchers, administrators and professors in higher education, state level coordinators, district level administrators, and school level personnel to improve the training and ongoing support that preschool teachers receive. President Obama's recent Race to the Top Early Learning Challenge (RTT-ELC) focused on supporting states in their efforts to improve early learning and development programs for children from infancy to preschool. The findings from this study support the goal of the federal RTT-ELC and other similar efforts by identifying specific areas for teacher training and ongoing professional development to improve early childhood programs. High-quality early learning programs which support oral language development for children are of upmost importance, especially for the most disadvantaged children. As demonstrated by the research of Hart and Risley (1995), children from disadvantaged homes tend to have smaller expressive vocabularies than their peers from more affluent homes. Thus, at the start of preschool, these children are already at a disadvantage and must learn and develop early language and literacy skills at a faster rate than their peers in order to close the achievement gap.

Recommendations for Action and Further Study

The results of this study may be valuable to policy makers, researchers, administrators and professors in higher education, state level coordinators, district level

administrators, and school level personnel. Information gained by the study may be used to improve preservice training and inservice professional development provided to preschool teachers. The results also contribute to the body of evidence on teachers' knowledge and existing instruments to measure teachers' knowledge. Results of the study may be circulated through my own place of employment, the Colorado Department of Education, in order to suggest state-wide professional development opportunities for preschool teachers in Colorado. Additionally, the results may be presented at local and national conferences on topics related to early childhood education, including annual conferences held by the Colorado Association for the Education of Young Children and the National Association for the Education of Young Children.

Although the results of this study indicate implications for training and ongoing professional development to improve early childhood programs, future administration of the instrument piloted through this study could be improved in a number of ways. First, calculations of internal consistency revealed that Sections 1 and 3 of the instrument may contain questions which assess more than the one construct they were intended to assess. As noted in Chapter 4, Section 1 was intended to assess teachers' knowledge of engaging in dialogic reading, yet the data revealed four factors. Section 3 of the instrument was intended to measure teachers' knowledge of using specific vocabulary and rare words, yet the data for section 3 also revealed four factors. A revised version of the instrument should take into account the results of the factor analyses and group questions more appropriately in each section so the questions truly assess the construct they were intended to assess.Additionally, revisions to the third section of the instrument,

knowledge of using specific vocabulary and rare words, should include changes to the four questions which included the answer selections, *all of the above*. Improving these four questions by providing more appropriate answers may increase the internal consistency among the items within Section 3. Furthermore, Appendices A through I include tables to show the frequency and percentage of responses for each question in each section of the instrument. Response patterns shown in the tables may reveal suggestions for item revision and/or elimination. For example, the data associated with Question 6 as shown in Appendices D and E demonstrates that the majority of participants selected *all of the above*, including the full range of teachers with few to many years experience teaching preschool and few to many hours of professional development in early literacy. Responses to this question, in addition to Questions 20 and 25 (Appendices H and I), indicate a need to revise these questions to include a different answer selection to increase internal consistency among the questions.

Another recommendation for future use of the instrument in studies is to include additional demographic variables by which to compare teachers' perceived competency and actual knowledge. For the purpose of this study, only teachers' years experience teaching preschool and number of hours of professional development in early literacy completed in the last 2 years were examined. Future studies might include variables such as teachers' highest degree earned with information regarding areas of study, teachers' primary language, and more specific information about professional development received.

Future experimental research might also include the use of the instrument to measure preschool teachers' perceived competency and knowledge as each relates to students' performance on assessments of oral language development. This study did not examine students' performance. Research that compares preschool teachers' perceived knowledge and actual knowledge of strategies for developing oral language to students' performance would provide additional support for and emphasize the importance of related preservice and inservice professional development for preschool teachers.

Finally, future studies might include preschool teachers from a variety of types of preschool programs. For this study, only teachers from the Colorado Preschool Program were included. Teachers who may be a part of the sample in future studies include teachers from child care settings and Head Start. Broadening the scope of the sample will increase the ability to generalize the results of the study to include all preschool teachers from a variety of types of programs.

Given the suggestions for future research, questions examined in additional studies using the instrument might include:

1. Is there a difference in preschool teachers' knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language by teachers' highest degree earned, area of study, and primary language spoken?
2. Is there a difference in preschool teachers' perceived knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and

(c) using specific vocabulary and rare words for developing oral language by teachers' highest degree earned, area of study, and primary language spoken?

3. Is there a difference in preschool teachers' perceived knowledge and actual knowledge of strategies involving (a) engaging in dialogic reading, (b) promoting extended discourse, and (c) using specific vocabulary and rare words for developing oral language by type of preschool program?
4. What is the relationship between preschool teachers' knowledge of strategies for developing oral language and students' performance on measures of oral language development?
5. What is the relationship between preschool teachers' perceived knowledge of strategies for developing oral language and students' performance on measures of oral language development?

Reflections

Many years of experience teaching in the elementary grades and consulting in both elementary and preschool classrooms has given me insight into the instructional strengths and needs of teachers. When I began this study, I had some preconceived notions about what my results may be, based on both the research and my own experiences. I expected that while preschool teachers may realize the importance of extended discourse in the classroom, they may not know the particular strategies that best support language development such as using targeted vocabulary and intellectually challenging language. I recognized that preschool teachers vary in their educational experiences and therefore, at no fault of their own, they may not have had the training

and ongoing professional development necessary to develop this knowledge. However, given the importance of the preschool years, I realized that my research was extremely important and could be beneficial, especially for preschool teachers in the state of Colorado, where I currently live. As the research unfolded, teachers began participating in the study, and participants started reaching out to me for answers to the questions and related research. I began to realize how concerned preschool teachers are about their daily practice and how important it is to them to have the knowledge of the most effective instructional practices in their classrooms. It is also possible that as teachers participated in the study, they became more aware of potential areas for growth in their own knowledge of strategies for supporting oral language development. I'm hopeful that as a result of this study, participants began to seek professional learning opportunities through provided references to research.

Conclusion

The results of this study, despite a need to revise the developed instrument, indicate a need for preservice and inservice training for preschool teachers related to strategies for developing oral language in the preschool classroom. As Section 2 of the instrument demonstrated, teachers lacked the necessary knowledge of strategies for promoting extended discourse for supporting children in oral language development. This study provided an instrument unlike any other, with a focus on preschool teachers and their perceived knowledge and actual knowledge of strategies that support oral language development in the preschool classroom. Tools such as this one will serve as an important support in future research for determining preschool teachers' perceived and

actual knowledge in order to provide the most appropriate professional development opportunities for preschool teachers. Investments in early childhood programs are one of the most important investments we can make. As Nobel Memorial Prize winner in economics James Heckman (2011) writes,

> The logic is quite clear from an economic standpoint. We can invest early to close disparities and prevent achievement gaps, or we can pay to remediate disparities when they are harder and more expensive to close. Either way, we are going to pay. And, we'll have to do both for a while. But, there is an important difference between the two approaches. Investing early allows us to shape the future; investing later chains us to fixing the missed opportunities of the past (p. 47).

Investing now in early childhood programs by improving upon the training and ongoing professional development opportunities preschool teachers receive will pay off in the future. Given sufficient and appropriate learning opportunities, teachers will have a better sense of what is important to teach and the best methods for teaching those skills related to oral language development in the preschool classroom.

References

Adams, M. J. (1998). The three-cueing system. In F. Lehr & J. Osborn (Eds.), *Literacy for all issues in teaching and learning* (pp. 73-99). New York, NY: The Guilford Press.

Aikens, N. L., & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology, 100*(2), 235-251.

Beron, K. J., & Farkas, G. (2004). Oral language and reading success: A structural equation modeling approach. *Structural Equation Modeling, 11*(1), 110-131.

Bursuck, W. D., Smith, T., Munk, D., Damer, M., Mehlig, L., & Perry, J. (2004). Evaluating the impact of a prevention-based model of reading on children who are at risk. *Remedial and Special Education, 25*(5), 303-313.

Cain, K., Oakhill, J., & Bryant, P. (2004). Children's reading comprehension ability: Concurrent prediction by working memory, verbal ability, and component skills. *Journal of Educational Psychology, 96*(1), 31-42.

Caspe, M. (2009). Low-income Latino mothers' booksharing styles and children's emergent literacy development. *Early Childhood Research Quarterly, 24*(3), 306-324.

Catts, H. W., Adlof, S. M., & Weismer, S. E. (2006). Language deficits in poor comprehenders: A case for the simple view of reading. *Journal of Speech, Language, and Hearing Research, 49*, 278-293.

Catts, H. W., Fey, M. E., Zhang, X., & Tomblin, B. (1999). Language basis of reading

and reading disabilities: Evidence from a longitudinal investigation. *Scientific Studies of Reading, 3*(4), 331-361.

Center for the Improvement of Early Reading Achievement (2003). *Put reading first: The research building blocks for teaching children to read kindergarten through grade 3* (2nd ed.). Jessup, MD: National Institute for Literacy at ED Pubs.

Chall, J. S. (1996). *Learning to read: The great debate: An inquiry into the science, art, and ideology of old and new methods of teaching children to read* (3rd ed.). New York: McGraw-Hill.

Chall, J. S. (1996). *Stages of reading development* (2nd ed.). Orlando, FL: Harcourt Brace.

Cheesman, E. A., McGuire, J. M., Shankweiler, D., & Coyne, M. (2009). First-year teacher knowledge of phonemic awareness and its instruction. *Teacher Education and Special Education, 32*(3), 270-289.

Chun, K. T. (1975). *Measures for psychological assessment: A guide to 3,000 original sources and their applications.* Ann Arbor, MI: Institute for Social Research.

Colorado Department of Education (2011). *Working together: Colorado preschool program legislative report*. Retrieved from http://www.cde.state.co.us/cpp/

Corrigan, R. (2011). Effects of pre-service teachers' receptive vocabulary knowledge on their interactive read-alouds with elementary school students. *Reading and Writing, 24*(7), 749-771.

Courtland, M. C., & Leslie, L. (2010). Beliefs and practices of three literacy instructors in elementary teacher education. *Alberta Journal of Educational Research, 56*(1),

19-30.

Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches.* London, England: Sage Publications.

Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology, 33*(6), 934-945.

Cunningham, A. E., Zibulsky, J., & Callahan, M. D. (2009). Starting small: Building preschool teacher knowledge that supports early literacy development, *Reading & Writing, 22*, 487-510.

Cutting, L. E., Materek, A., Cole, C. A., Levine, T. M., & Mahone, E. M. (2009). Effects of fluency, oral language, and executive function on reading comprehension performance. *Annals of Dyslexia, 59*(34/54), 34-54.

Cutting, L. E., & Scarborough, H. S. (2006). Prediction of reading comprehension: Relative contributions of word recognition, language proficiency, and other cognitive skills can depend on how comprehension is measured. *Scientific Studies of Reading, 10*(3), 277-299.

Dail, A. R., & McGee, L. M. (2011). Expanding preschoolers' vocabulary. *The Free Library.* Retrieved from http://www.thefreelibrary.com/Expanding preschoolers' vocabulary: the role of professional...-a0250133770

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives, 8*(1), 1-46.

DeFord, D. E. (1985). Validating the construct of theoretical orientation in reading

instruction. *Reading Research Quarterly, 20*(3), 351-367.

Dickinson, D. K., & McCabe, A. (2001). Bringing it all together: The multiple origins, skills, and environmental supports of early literacy. *Learning Disabilities Research & Practice, 16*(4), 186-202.

Dickinson, D. K., McCabe, A., & Essex, M. J. (2006). A window of opportunity we must open to all: The case for preschool with high-quality support for language and literacy. In Dickinson, D. K. & Neuman (2nd ed.). *Handbook of early literacy research* (pp. 11-28). New York, NY: The Guilford Press.

Dickinson, D. K., & Smith, M. W. (1994). Long term effects of preschool teachers' book readings on low-income children's vocabulary and story comprehension. *Reading Research Quarterly, 29*(2), 105-122.

Dickinson, D. K., & Tabors, P. O. (2001). *Young children learning at home and school: Beginning literacy with language.* Baltimore, MD: Paul H. Brookes Publishing Co.

Ehri, L. (1999). Phases of development in learning to read words. In J. Oakhill & R. Beard. *Reading development and the teaching of reading: A psychological perpective* (pp. 79-108). Malden, MA: Blackwell Publishers.

Ehri. L. C. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of Reading, 9*(2), 167-188.

Ehri, L. C., & Williams, J. P. (1996). Learning to read and learning to teach reading. In F. B. Murray. *The teacher educator's handbook: Building a knowledge base for the preparation of teachers* (pp. 231-234). San Francisco, CA: Jossey-Bass.

Emmerson, G. J., & Neely, M. A. (1998). Two adaptable, valid, and reliable data collection measures: Goal attainment scaling and the semantic differential. *The Counseling Psychologist, 16*, 261-271.

Evans, G. (2004). The environment of childhood poverty. *American Psychologist, 59*(2), 77-92.

Ezell, H. K., Justice, L. M., & Parsons, D. (2000). Enhancing the emergent literacy skills of pre-schoolers with communication disorders: A pilot investigation. *Child Language Teaching & Therapy, 16*(2), 121-140.

Field, A. (2009). *Discovering statistics using spss* (3rd edition). London: Sage Publications Ltd.

Fink, A. (2006). *How to conduct surveys: A step-by-step guide.* London: Sage Publications Ltd.

Foorman, B. R., Fletcher, J. M., Francis, D. J., Schatschneider, C., & Mehta, P. (1998). The role of instruction in learning to read: Preventing failure in at-risk children. *Journal of Educational Psychology, 90*(1), 37-55.

Foorman, B. R., Francis, D. J., Shaywitz, S. E., Shaywitz, B. A., & Fletcher, J. M. (1997). The case for early reading intervention. In B. Blachman (Ed.)., *Foundations of reading acquisition and dyslexia: Implications for early intervention* (pp. 243-264). Baltimore, MD: Paul H. Brookes.

Foster, M. A., Lambert, R., Abbott-Shim, M., McCarty, F., & Franze, S. (2005). A model of home learning environment and social risk factors in relation to children's emergent literacy and social outcomes. *Early Childhood Research Quarterly, 20,*

13-36.

Gough, P., & Tunmer, W. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*, 6-10.

Guo, G., & Harris, K. M. (2000). The mechanisms mediating the effects of poverty on children's intellectual development. *Demography, 37*(4), 431-447.

Hart, B., & Risley, T. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Paul H. Brookes Publishing.

Hawken, L. S., Johnston, S. S., & McDonnell, A. P. (2005). Emerging literacy views and practices: Results from a national survey of Head Start preschool teachers. *Topics in Early Childhood Special Education, 25*(4), 232-243.

Heckman, J. (2011). The economics of inequality: The value of early childhood education. *American Educator,* 31-35.

Hemphill, L., & Tivnan, T. (2008). The importance of early vocabulary for literacy achievement in high-poverty schools. *Journal of Education for Students Placed at Risk, 13*, 426-451.

Hoff, E. (2003). The specificity of environmental influence: Socioeconomic status affects early vocabulary development via maternal speech. *Child Development, 74*(5), 1368-1378.

Johnson, B., & Christensen, L. (2004). *Educational research: Quantitative, qualitative, and mixed approaches* (2nd ed.). New York, NY: Pearson Education, Inc.

Johnson, D., & Tschannen-Moran, M. (2003). *Teachers' sense of efficacy for literacy instruction scale: The development of a new instrument*. Paper presented at the

National Reading Conference, Scottsdale, AZ.

Johnson, O. (1971). *Tests and measurements in child development: A handbook.* San Francisco, CA: Jossey-Bass Publishers, Inc.

Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology, 80,* 437-447.

Kainz, K., & Vernon-Feagans, L. (2007). The ecology of early reading development for children in poverty. *The Elementary School Journal, 107*(5), 407-427.

Kendeou, P., Van Den Broek, P., White, M. J., & Lynch, J. S. (2009). Predicting reading comprehension in early elementary school: The independent contributions of oral language and decoding skills. *Journal of Educational Psychology, 101*(4), 765-778.

Kirkland, L. D., & Patterson, J. (2005). Developing oral language in primary classrooms. *Early Childhood Education Journal, 32*(6), 391-395.

Lane, H. B. et al. (2009). Teacher knowledge about reading fluency and indicators of students' fluency growth in reading first schools. *Reading and Writing Quarterly, 25,* 57-86.

Lonigan, C. J., Burgess, S. R., & Anthony, J. L. (2000). Development of emergent literacy and early reading skills in preschool children: Evidence from a latent-variable longitudinal study. *Developmental Psychology, 36*(5), 596-613.

Lynch, J. (2010). Kindergarten teachers' beliefs about students' knowledge of print literacy and parental involvement in children's print literacy development. *Alberta Journal of Educational Research, 56*(2), 157-171.

Lynch, J. (2009). Preschool teachers' beliefs about children's print literacy development. *Early Years: An International Journal of Research and Development, 29*(2), 191-203.

McCutchen, D., et al. (2002). Beginning literacy: Links among teacher knowledge, teacher practice, and student learning. *Journal of Learning Disabilities, 35*(1), 69-86.

McCutchen, D., Green, L., Abbott, R. D., & Sanders, E. A. (2009). Further evidence for teacher knowledge: Supporting struggling readers in grades three through five. *Reading and Writing, 22,* 401-423.

McGill-Franzen, A. (2010). The national early literacy panel report: Summary, commentary, and reflections on policies and practices to improve children's early literacy. *Educational Researcher, 39*(4), 275-278.

McGill-Franzen, A., Lanford, C., & Adams, E. (2002). Learning to be literate: A comparison of five urban early childhood programs. *Journal of Educational Psychology, 94*(3), 443-464.

Mather, N., Bos, C., & Babur, N. (2001). Perceptions and knowledge of preservice and inservice teachers about early literacy instruction. *Journal of Learning Disabilities, 34*(5), 472-482.

Mahar, N. E., & Richdale, A. L. (2008). Primary teachers' linguistic knowledge and perceptions of early literacy instruction. *Australian Journal of Learning Disabilities, 13*(1), 17-37.

Mathes, P. G., Torgesen, J. K., Clancy-Menchetti, J., Santi, K., Nicholas, K., Robinson,

C., & Grek, M. (2003). A comparison of teacher-directed versus peer-assisted instruction to struggling first-grade readers. *The Elementary School Journal, 103*(5), 460-479.

Mehta, P. D., Foorman, B. R., Branum-Martin, L., & Taylor, W. P. (2005). Literacy as a unidimensional multilevel construct: Validation, sources of influence, and implications in a longitudinal study in grades 1 to 4. *Scientific Studies of Reading, 9*(2), 85-116.

Merlo, L. J., Bowman, M., & Barnett, D. (2007). Parental nurturance promotes reading acquisition in low socioeconomic status children. *Early Education and Development, 18*(1), 51-69.

Metsala, J. L. (1999). Young children's phonological awareness and nonword repetition as a function of vocabulary development. *Journal of Educational Psychology, 91*, 3-19.

Moats, L. (2009). Knowledge foundations for teaching reading and spelling. *Reading and Writing, 22*, 379-399.

Moats, L. C. (2009). *Language essentials for teachers of reading and spelling, modules 1-12.* Boston, MA: Sopris West Educational Services.

Moats, L. C., & Foorman, B. R. (2003). Measuring teachers' content knowledge of language and reading. *Annals of Dyslexia, 53*, 23-45.

Moats, L., Carreker, S., Davis, R., Meisel, P., Spear-Swerling, L. & Wilson, B. (2010). *Knowledge and practice standards for teachers of reading*. Retrieved from International Dyslexia Association website:

http://www.interdys.org/standards.htm

Moats, L. C., & Hennessy, N. (2010). *Language essentials for teachers of reading and spelling, modules 1-12.* Boston, MA: Sopris West Educational Services.

Nathanson, S., Pruslow, J., & Levitt, R. (2008). The reading habits and literacy attitudes of inservice and prospective teachers: Results of a questionnaire survey. *Journal of Teacher Education, 59*(4), 313-321.

National Center for Educational Statistics (2010). *The condition of education 2010.* Washington, DC: Institute of Education Sciences. Retrieved from website: http://nces.ed.gov/

National Center for Family Literacy (2008). *Developing early literacy: Report of the National Early Literacy Panel.* Washington, DC: National Institute for Literacy. Retrieved from website: http://www.nifl.gov/earlychildhood/NELP/NELPreport.html

National Institute for Literacy (2010). *Learning to talk and listen: An oral language resource for early childhood caregivers.* Washington, DC: RMC Research Corporation. Retrieved from website: http://lincs.ed.gov/publications/publications.html

National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.

Neuman, S. (2006). The knowledge gap: Implications for early education. In Dickinson, D. K. & Neuman, S. B. (2nd ed.). *Handbook of early literacy research* (pp. 29-40). New York, NY: The Guilford Press.

Neuman, S.B. (2010). Lessons from my mother: Reflections on the National Early Literacy Panel report. *Educational Researcher, 39*(4), 301-304.

NICHD Early Child Care Research Network. (2005). Pathways to reading: The role of oral language in the transition to reading. *Developmental Psychology, 41*(2), 428-442.

O'Conner, R. E., Fulmer, D., Harty, K. R., & Bell, K. M. (2005). Layers of reading intervention in kindergarten through third grade. *Journal of Learning Disabilities, 38*(5), 440-455.

Oles, H. J., & Bolvin, J. O. (1972). The reliability and usability of a semantic differential attitude scale with third through fifth grade students. Paper presented at the convention of National Council of Measurement in Education, Chicago, IL.

Paulson, L. H., & Moats, L. C. (2010). *LETRS for early childhood educators.* Boston, MA: Cambium Learning.

Piasta, S. B., Connor, C. M., Fishman, B. J., & Morrison, F. J. (2009). Teachers' knowledge of literacy concepts, classroom practices, and student reading growth. *Scientific Studies of Reading, 13*(3), 224-248.

Podhajski, B., Mather, N., Nathan, J., & Sammons, J. (2009). Professional development in scientifically based reading instruction: Teacher knowledge and reading outcomes. *Journal of Learning Disabilities, 42*(5), 403-417.

Pressley, M., Warton-McDonald, R., Allington, R., Block, C., Morrow, L., Tracey, D., . . . Woo, D. (2001). A study of effective first-grade literacy instruction. *Scientific Studies of Reading, 5*(1), 35-58.

Pullen, P. C., & Justice, L. M. (2003). Enhancing phonological awareness, print awareness, and oral language skills in preschool children. *Intervention in School and Clinic, 39*(2), 87-98.

Robbins, C., & Ehri, L. C. (1994). Reading storybooks to kindergartners helps them learn new vocabulary words. *Journal of Educational Psychology, 86,* (1), 54-64.

Roth, F. P., Speece, D. L., & Cooper, D. H. (2002). A longitudinal analysis of the connection between oral language and early reading. *The Journal of Educational Research, 95*(5), 259-272.

Routman, R. (1996). *Literacy at the crossroads: Critical talk about reading, writing, and other teaching dilemmas.* Portsmouth, NH: Heinemann.

Scarborough, H. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman & D. Dickenson, *Handbook of early literacy* (pp. 97-110). New York: Guilford Press.

Scarborough, H. (2005). Developmental relationships between language and reading: Reconciling a beautiful hypothesis with some ugly facts. In H.W. Catts & A.G. Kamhi, *The connections between language and reading disabilities* (pp. 3-24). Mahwah, NJ: L.Erlbaum Associates.

Serry, T., Rose, M., & Liamputtong, P. (2008). Oral language predictors for the at-risk reader: A review. *International Journal of Speech-Language Pathology, 10*(6),

392-403.

Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade: A practice guide* (NCEE 2010-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from whatworks.ed.gov/publications/practiceguides

Shanahan, T., & Lonigan, C. J. (2010). The National Early Literacy Panel: A summary of the process and the report. *Educational Researcher, 39*(4), 279-285.

Shaw, D. M., Dvorak, M. J., & Bates, K. (2007). Promise and possibility - hope for teacher education: Pre-service literacy instruction can have an impact. *Reading Research & Instruction, 46*(3), 223-254.

Smith, F. (1979). *Reading without nonsense*. New York, NY: Teachers College Press.

Sousa, D. A. (2005). *How the brain learns to read.* Thousand Oaks: Corwin Press.

Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology, 38*(6), 934-947.

Straub, S. (1999). Books for babies: An overlooked resource for working with new families. *Infants and Young Children, 11*(3), 79-88.

Tannenbaum, K. R., Torgesen, J. K., & Wagner, R. K. (2006). Relationship between word knowledge and reading comprehension in third-grade children. *Scientific Studies of Reading, 10*(4), 381-398.

Touliatos, J., Perlmutter, B., & Straus, M. (2001). *Handbook of family measurement techniques.* Thousand Oaks, CA: Sage Publications.

Vellutino, F. R., Tunmer, W. E., Jaccard, J. J., & Chen, R. (2007). Components of reading ability: Multivariate evidence for a convergent skills model of reading development. *Scientific Studies of Reading, 11*(1), 3-32.

Walpole, S., Justice, L. M., & Invernizzi, M. A. (2004). Closing the gap between research and practice: Case study of school-wide literacy reform. *Reading and Writing Quarterly, 20*, 261-283.

Weaver, C. (1994). *Understanding whole language: From principles to practice* (2nd ed.). Portsmouth, NH: Heinemann.

Weigel, D. J., Martin, S. S., Bennett, K. K. (2005). Ecological influences of the home and the child-care center on preschool-age children's literacy development. *Reading Research Quarterly, 40*(2), 204-233.

Wilkins, J. L. (2008). The relationship among elementary teachers' content knowledge, attitudes, beliefs, and practices. *Journal of Mathematics Teacher Education,* 11, 139-164.

Appendix A: Teachers' Knowledge of Oral Language Development (TKOLD)

Instructions: This instrument is designed to assess your current knowledge of strategies for supporting oral language development in the preschool classroom. Please carefully read the directions for each section and mark the answers you feel are most appropriate.

Section I: Knowledge of Engaging in Dialogic Reading

1. During book reading activities, the most effective types of questions for building oral language skills include (Caspe, 2009; Dickinson & Tabors, 2001, pp. 36, 194-199; Ezell, Justice, & Parsons, 2000; Kirkland & Patterson, 2005; Pullen & Justice, 2003):

    a. questions that can be answered directly from the story, including *who* and *what* questions
    b. questions that challenge children to think, including *why, how,* and *when* questions
    c. factual questions asked before, during, and after reading the story
    d. questions that are closely tied to the illustrations and/or words in the text

2. In order to support children's language growth, book reading activities should include (Caspe, 2009; Dickinson & Tabors, 2001, p. 199):

    a. discussions about the words, pictures, and events in the story
    b. opportunities for children to join in with the reading of the text
    c. analytical conversations and talk about vocabulary
    d. discussions about topics that are familiar to the children

3. When selecting books for read aloud activities that will support oral language development, choose books that (Dickinson & Tabors, 2001, p. 185; Kirkland & Patterson, 2005):

    a. have words that will be easily understood by all students
    b. have high quality illustrations that relate directly to the text
    c. are predictable in nature and can be read along with the teacher
    d. include real-life experiences, communicate information, and/or contain varied vocabulary

4. During book reading activities, teachers should deal with new and unfamiliar vocabulary by (Christ & Wang, 2010; National Institute for Literacy, 2010):

a. stopping and asking children what they think the word means
b. continuing to read and telling students the definition of the word later
c. embedding definitions during the reading of the text
d. referring to pictures that give clues to the meaning of the words

5. An effective strategy for reading books aloud is often referred to as dialogic reading. This strategy includes (Dickinson & Tabors, 2001; National Center for Family Literacy, 2008; McGill-Franzen et al., 2002; Paulson & Moats, 2010; Pullen & Justice, 2003):

    a. the adult reading the text aloud and doing the majority of the talking about the text as it is read
    b. a shared reading approach in which the adult engages the child in storytelling by discussing the text and asking questions about the text, and the child takes on a more active role, becoming the teller of the story
    c. the adult reading the story aloud, asking questions throughout, and summarizing the book after it is read
    d. the adult and child previewing the text, discussing key vocabulary, reading the text aloud, and engaging in conversations about the text as directed by the child

6. In order to support children's oral language development when reading books aloud, the type of talk teachers and children should engage in includes (Dail & McGee, 2011; Dickinson & Tabors, 2001):

    a. nonimmediate talk and decontextualized language or talk that connects story events to personal experience
    b. immediate talk or talk about the events and characters in the story
    c. discussions about the illustrations and words in the story
    d. all of the above

7. Shared reading has a significant effect on children's (National Center for Family Literacy, 2008, p. 155 & 162; Pullen & Justice, 2003):

    a. alphabet knowledge
    b. phonemic awareness and reading readiness
    c. oral language and print knowledge
    d. cognitive ability

8. An example of a scaffolding technique during a read-aloud activity is (Paulson & Moats, 2010, p. 44):

    a. pausing while reading to have children fill in words they know

b. asking direct questions while reading the book
c. creating stories about pictures or providing a storyline using only the pictures while reading
d. all of the above

9. A teacher is selecting a book for the read-aloud portion of the day in order to support children's receptive vocabulary development. He/she should (National Institute for Literacy, 2010; Pullen & Justice, 2003):

a. select a book that the children have never heard before
b. re-read the book introduced on the previous day
c. choose a book with familiar words and concepts
d. pick a book with more text and few illustrations

Directions: Regarding the questions asked in section I (questions 1-9) above, please answer the following: (Cunningham, Zibulsky, & Callahan, 2009; Emmerson & Neeley, 1998; Oles & Bolvin, 1972).

10. How well do you think you did on questions 1-9?

Poorly **0-------1-------2-------3-------4-------5-------6** *Very well*

11. Of all the preschool teachers completing questions 1-9, how well do you think you did compared to the other teachers?

Well below average **0------1------2------3------4------5------6** *Well above average*

Section II: Knowledge of Promoting Extended Discourse

12. During mealtimes, teachers can support students' oral language development by (Dickinson & Tabors, 2001, p. 215-221):

a. engaging children in conversations about events happening in the present (present talk)
b. remaining stationary and engaging children in extended discussions about decontextualized events or activities (nonpresent talk)
c. moving around the classroom engaging many children in short conversations
d. having discussions that are supported by things in the classroom environment

13. When engaging in conversations with children, teachers should use language that includes (Christ & Wang, 2010):

    a. familiar words and phrases that students can understand
    b. decriptions of events happening in the present
    c. simple sentences that are easily understood by all students
    d. targeted vocabulary that may not be familiar to students

14. In order to support children's oral language development during free play, teachers should (Dickinson & Tabors, 2001, p. 234-254):

    a. spend time engaged in very short conversations with many children
    b. move around the room frequently
    c. engage children in extended conversations that are intellectually challenging
    d. ensure that there are ample amounts of time for free play throughout the day

15. Throughout the day, teachers can model how our language works by (Dickinson & Tabors, 2001; National Institute for Literacy, 2010; Paulson & Moats, 2010; Pullen & Justice, 2003):

    a. engaging in parallel talk or the type of talk that narrates or describes what the child is doing at that moment
    b. doing the majority of the talking when engaging in conversations with students
    c. using concrete and specific words
    d. speaking in simple sentences that are easily understood

16. Children's oral language development is supported by conversations that (Dickinson & Tabors, 2001, p. 103):

    a. include vocabulary that students are familiar with
    b. include informative uses of rare words
    c. are primarily focused on events occurring in the here and now
    d. rely on the adult to guide the discussion

17. Of three types of talk (pretend, non-toy, and non-pretend) that may accompany free play in preschools, which type is most supportive of language and literacy skills that are important for children a year later in kindergarten? (Dickinson & Tabors, 2001, p. 60-71)

    a. pretend talk – talk with pretend elements and a nonliteral approach to features in the immediate environment

b. non-toy talk – talk about events or concerns that are unrelated to the immediate play setting
c. non-pretend talk – talk that maintains a literal approach to actions and toys
d. all of the above

18. During a conversation, a child points to a toy and says, "A car." The facilitative way to respond in order to stimulate oral language development is (National Institute for Literacy, 2010; Paulson & Moats, 2010):

    a. "Yes, a car."
    b. "Yes, you are playing with a big, blue car."
    c. "This is a car."
    d. "You are playing with a car."

19. In order for children to develop language, adults must intentionally engage children in conversations using language stimulation techniques. Examples of language stimulation techniques often used in preschool classrooms include (Paulson & Moats, 2010, p. 41):

    a. parallel talk, self-talk, and expansion
    b. interaction and language modeling
    c. waiting and extending
    d. pausing, confirming, and imitating

20. An example of an interaction response in which the teacher is using the "labeling" technique to support language development is (Paulson & Moats, 2010):

    a. A child says, "I drew a circle," and the teacher responds, "Yes, you drew a circle."
    b. A child says, "I drew a circle," and the teacher responds, "You drew a small, yellow circle."
    c. A child chooses a crayon and the teacher says, "You are drawing a circle. What are you drawing?"
    d. A child draws a circle with a crayon and the teacher says, "You are drawing a circle."

Directions: Regarding the questions asked in section II (questions 10-18) above, please answer the following: (Cunningham, Zibulsky, & Callahan, 2009; Emmerson & Neeley, 1998; Oles & Bolvin, 1972).

21. How well do you think you did on questions 10-18?

Poorly **0-------1-------2-------3-------4-------5-------6** *Very well*

22. Of all the preschool teachers completing questions 10-18, how well do you think you did compared to the other teachers?

    Well below average **0------1------2------3------4------5------6** *Well above average*

Section III: Knowledge of Using Specific Vocabulary

23. Teachers can encourage the continued development of new vocabulary during free play by (Christ & Wang, 2010):

    a. setting up play areas that extend upon a classroom theme and related vocabulary
    b. setting up media centers (DVDs, electronic books, computers) that engage children in interactions with the new vocabulary
    c. providing props related to the theme that may elicit theme-related vocabulary use
    d. all of the above

24. Large group time provides an opportunity for teachers to extend upon children's language development through the use of (Dickinson & Tabors, 2001, p. 248):

    a. rare words
    b. common words
    c. non-pretend talk
    d. all of the above

25. An effective strategy for teaching new words is to (Christ & Wang, 2010; Dickinson & Tabors, 2001, p. 105-110; National Institute for Literacy, 2010):

    a. provide a single definition and example in order to avoid complicating the explanation
    b. ask the children to explain what they think the word means
    c. use demonstrations and/or pictures, provide multiple definitions and examples, and connect new words to concepts children already know
    d. ask children to use the word in a sentence

26. The predominant way that children acquire vocabulary is by (Christ & Wang, 2010; Hart & Risley, 1995):

    a. having words explicitly taught to them
    b. hearing new words used in their environment, including in conversations, television, and storybooks read aloud to them
    c. asking adults to explain what words mean
    d. reading books themselves, including a wide variety of themes

27. It is important to build children's _____while working to increase children's vocabulary because the two skills are related (Paulson & Moats, 2010, p. 28).

    a. alphabet knowledge
    b. concepts of print
    c. phonological awareness
    d. all of the above

28. One very important aspect of vocabulary development is _____ because the ability to say a word is dependent on the ability to hear the word in your mind (Paulson & Moats, 2010, p. 28).

    a. phonological representation
    b. expressive language
    c. receptive language
    d. decontextualized language

29. During mealtime conversations, teachers can extend upon vocabulary that has been previously taught during the day by (Dickinson & Tabors, 2001, p. 220):

    a. asking open ended questions to elicit thoughtful and elaborate uses of words
    b. discussing events that have taken place in the classroom during the day
    c. talking about the book that was read earlier in the day
    d. all of the above

30. A teacher is reading aloud a story and comes across a word for which she knows the children have not been exposed. What is the best way to approach the word in order to begin the process of intentionally adding it to the children's vocabulary? (Christ & Wang, 2010; National Institute for Literacy, 2010).

    a. replace the word with another word while reading
    b. continue reading and explain the meaning of the word if children ask
    c. embed the definition of the word into the reading of the text
    d. ask children what they think the word means

31. Direct and explicit vocabulary instruction includes (National Institute for Literacy, 2010):

    a. providing students with a student friendly definition, examples, and non-examples
    b. directing students to a visual in order to determine the word's meaning
    c. using the word in a sentence before asking children to think about the word's definition
    d. asking children to determine the word's meaning through context in the story

Directions: Regarding the questions asked in section III (questions 19-27) above, please answer the following: (Cunningham, Zibulsky, & Callahan, 2009; Emmerson & Neeley, 1998; Oles & Bolvin, 1972).

32. How well do you think you did on questions 19-27?

    Poorly **0-------1-------2-------3-------4-------5-------6** *Very well*

33. Of all the preschool teachers completing questions 19-27, how well do you think you did compared to the other teachers?

    Well below average **0------1------2------3------4------5------6** *Well above average*

Section IV: Demographics

34. What is your total number of years experience teaching preschool, including the current year?
    ____0-2 years
    ____3-6 years
    ____7-10 years
    ____11-20 years
    ____More than 20 years

35. In the last two years, how many hours of professional development in early literacy have you received? (1 semester hour equals 15 clock hours)
    ____0-90 clock hours
    ____91-180 clock hours
    ____181-270 clock hours
    ____more than 270 clock hours

Appendix B: Consent Form

You are invited to take part in a research study to develop an instrument to measure preschool teachers' knowledge of strategies for oral language development. You were chosen for the study because you are a preschool teacher during the 2011–2012 school year in a Colorado Preschool Program. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Dian Prestwich, who is a doctoral student at Walden University. The researcher has over 15 years of experience in K-12 education at both the school and state level, although her most passionate years of experience were in early childhood classrooms.

Background Information:
The purpose of this study is to develop an instrument that may be used to measure preschool teachers' perceived level of knowledge and actual knowledge of strategies that support oral language development in the preschool classroom, including engaging in dialogic reading, promoting extended discourse, and using specific vocabulary and rare words.

Procedures:
If you agree to be in this study, you will be asked to use an internet program (Survey Monkey) to:

- Answer 27 questions to measure knowledge of strategies for oral language development.
- Answer 6 questions to measure your perceptions of your knowledge related to each set of questions.
- Answer 2 questions related to demographic information about you.

Completing the questions will take about 20-30 minutes of your time.

Voluntary Nature of the Study:
Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. No one at Colorado Preschool Program centers will treat you differently if you decide not to be in the study. If you agree to participate and at any time change your mind, you may discontinue participation without penalty. By completing the online instrument, it is implied that you have given your consent and agreed to participate in the study.

Risks and Benefits of Being in the Study:

The study is not experimental in nature, and there are no known risks to participants. Potential benefits include the opportunity for you to examine your own knowledge and perceptions about your knowledge of strategies for developing oral language in the preschool classroom. Additionally, the results of the study may provide information for future professional development for preschool teachers and suggestions for changes to preservice and inservice teacher preparation programs.

Compensation:
There is no compensation for participating in the study.

Confidentiality:
Any information you provide will be kept anonymous. No identifying information is required of you during completion of the online instrument. The researcher will not use your information for any purposes outside of this research project.

Walden University's approval number for this study is 10-13-11-0014488 and it expires on October 12, 2012.

You may keep this copy of the consent form for your records.

Appendix C: Emails to Participants

Dear Colorado Preschool Program (CPP) Teacher,

Coming soon to your email inbox is an invitation to participate in an online survey regarding preschool teachers' perceived level of knowledge and actual knowledge of strategies for developing oral language in the preschool classroom. Once you receive the email invitation, I hope that you will take 20-30 minutes to complete the survey. This survey is part of my doctoral research at Walden University. Your participation will provide valuable information to support preservice and inservice training for preschool teachers.

Thank you in advance.

Please let me know if you have any questions.

Sincerely,

Dian Prestwich
Doctoral Candidate
Walden University

Dear Colorado Preschool Program (CPP) Teacher,

I am writing to invite you to participate in an important study regarding the development of an instrument to measure preschool teachers' perceived knowledge and actual knowledge of strategies for developing oral language in the preschool classroom. You have been invited to participate because you are a CPP teacher in the 2011-2012 school year in the state of Colorado. This study is a part of my doctoral research at Walden University. Your participation will provide valuable information to support preservice and inservice training for preschool teachers.

Participation involves completion of an online survey. The survey can be accessed by clicking the following link or by copying and pasting the URL into your browser.

https://www.surveymonkey.com/s/CG7NBV3

Your participation is voluntary. If at any time, you choose not to participate, there will be no penalty; simply exit the online survey and your survey will be deleted. There are no foreseeable risks or discomforts associated with participating.

Submission of the survey accessed through the above link will be considered your consent to participate. Your responses will be anonymous.

Thank you in advance for your attention to this request. I appreciate your time and your willingness to help me explore preschool teachers' perceived knowledge and actual knowledge of strategies for developing oral language in the preschool classroom.

Sincerely,

Dian Prestwich
Doctoral Candidate
Walden University

Dear Colorado Preschool Program (CPP) Teacher,

On Thursday, October 20th, you received an email inviting you to participate in an online survey regarding preschool teachers' perceived knowledge and actual knowledge of strategies for developing oral language in the preschool classroom. Your participation will provide valuable information to support preservice and inservice training for preschool teachers.

I hope you'll take approximately 20-30 minutes to complete the survey.
The survey can be accessed through the following link or by copying the URL into your browser.

https://www.surveymonkey.com/s/CG7NBV3

Your participation is voluntary. If at any time, you choose not to participate, there will be no penalty; simply exit the online survey and your survey will be deleted. There are no foreseeable risks or discomforts associated with participating.

Submission of the survey accessed through the above link will be considered your consent to participate. Your responses will be anonymous.

I appreciate and value your time. Thank you for completing the survey.

Sincerely,

Dian Prestwich
Doctoral Candidate
Walden University

Colorado Preschool Program (CPP) Teachers,

You're invited!

Please remember to participate in the online survey for CPP teachers in Colorado. Your participation will provide valuable information to support preservice and inservice training for preschool teachers. The survey can be accessed through the following link, or you can copy and paste the URL into your browser.

https://www.surveymonkey.com/s/CG7NBV3

Your participation is voluntary. If at any time, you choose not to participate, there will be no penalty; simply exit the online survey and your survey will be deleted. There are no foreseeable risks or discomforts associated with participating.

Submission of the survey accessed through the above link will be considered your consent to participate. Your responses will be anonymous.

Thank you for your time.

Sincerely,

Dian Prestwich
Doctoral Candidate
Walden University

Dear Colorado Preschool Program (CPP) Teachers,

Thank you to all of you who have completed the online survey titled *Teachers' Knowledge of Oral Language Development.* **Your input is vital to the success of this study and will provide valuable information to support preservice and inservice training for preschool teachers.** If you have not already completed the survey, I would like to encourage you to do so. This is the last opportunity to complete the survey, as **data collection will be ending on Sunday, December 18, 2011**.

The survey is available online at:
https://www.surveymonkey.com/s/CG7NBV3

Your participation is voluntary. If at any time, you choose not to participate, there will be no penalty; simply exit the online survey and your survey will be deleted. There are no foreseeable risks or discomforts associated with participating.

Submission of the survey accessed through the above link will be considered your consent to participate. Your responses will be anonymous.

Thank you for responding to this request. I really appreciate and value your time.

Sincerely,

Dian Prestwich
Doctoral Candidate
Walden University

Appendix D: Responses for Engaging in Dialogic Reading by Number of Years Experience Teaching Preschool

	Frequency (Percent)		
Questions and Answers (correct answer is in bold print)	**0-6 Years**	**7-10 Years**	**11 or More Years**
1. During book reading activities, the most effective types of questions for building oral language skills include:			
a. questions that can be answered directly from the story, including *who* and *what* questions	12 (70.6)	2 (11.8)	3 (17.6)
b. questions that challenge children to think, including *why, how,* and *when* questions	**40 (39.6)**	**29 (28.7)**	**32 (31.7)**
c. factual questions asked before, during, and after reading the story	9 (52.9)	1 (5.9)	7 (41.2)
d. questions that are closely tied to the illustrations and/or words in the text	16 (50)	8 (25)	8 (25)
2. In order to support children's language growth, book reading activities should include:			
a. discussions about the words, pictures, and events in the story	52 (44.1)	31 (26.3)	35 (29.7)
b. opportunities for children to join in with the reading of the text	11 (47.8)	4 (17.4)	8 (34.8)
c. analytical conversations and talk about vocabulary	**5 (71.4)**	**1 (14.3)**	**1 (14.3)**
d. discussions about topics that are familiar to the children	9 (47.4)	4 (21.1)	6 (31.6)

(table continues)

	Frequency (Percent)		
Questions and Answers (correct answer is in bold print)	**0-6 Years**	**7-10 Years**	**11 or More Years**
4. During book reading activities, teachers should deal with new and unfamiliar vocabulary by:			
a. stopping and asking children what they think the word means	25 (44.6)	14 (25)	17 (30.4)
b. continuing to read and telling students the definition of the word later	0 (0)	0 (0)	0 (0)
c. embedding definitions during the reading of the text	**22 (40.7)**	**16 (29.6)**	**16 (29.6)**
d. referring to pictures that give clues to the meaning of the words	30 (52.6)	10 (17.5)	17 (29.8)
6. In order to support children's oral language development when reading books aloud, the type of talk teachers and children should engage in includes:			
a. nonimmediate talk and decontextualized language or talk that connects story events to personal experience	**0 (0)**	**0 (0)**	**1 (100)**
b. immediate talk or talk about the events and characters in the story	0 (0)	0 (0)	0 (0)
c. discussions about the illustrations and words in the story	11 (64.7)	0 (0)	6 (35.3)
d. all of the above	66 (44.3)	40 (26.8)	43 (28.9)

(table continues)

Questions and Answers (correct answer is in bold print)	Frequency (Percent) 0-6 Years	7-10 Years	11 or More Years
7. Shared reading has a significant effect on children's:			
a. alphabet knowledge	0 (0)	0 (0)	0 (0)
b. phonemic awareness and reading readiness	11 (34.4)	10 (31.3)	11 (34.4)
c. oral language and print knowledge	**59 (49.6)**	**25 (21)**	**35 (29.4)**
d. cognitive ability	7 (43.8)	5 (31.3)	4 (25)
8. An example of a scaffolding technique during a read-aloud activity is:			
a. pausing while reading to have children fill in words they know	7 (50)	3 (21.4)	4 (28.6)
b. asking direct questions while reading the book	2 (66.7)	0 (0)	1 (33.3)
c. creating stories about pictures or providing a storyline using only the pictures while reading	8 (50)	5 (31.3)	3 (18.8)
d. all of the above	**60 (44.8)**	**32 (23.9)**	**42 (31.3)**

Appendix E: Responses for Engaging in Dialogic Reading by Hours of Professional Development

	Frequency (Percent)	
Questions and Answers (correct answer is in bold print)	**<=90 Hours**	**>90 Hours**
1. During book reading activities, the most effective types of questions for building oral language skills include:		
a. questions that can be answered directly from the story, including *who* and *what* questions	16 (80.8)	4 (20)
b. questions that challenge children to think, including *why, how,* and *when* questions	**95 (77.9)**	**27 (22.1)**
c. factual questions asked before, during, and after reading the story	14 (82.4)	3 (17.6)
d. questions that are closely tied to the illustrations and/or words in the text	31 (83.8)	6 (16.2)
2. In order to support children's language growth, book reading activities should include:		
a. discussions about the words, pictures, and events in the story	112 (80.6)	27 (19.4)
b. opportunities for children to join in with the reading of the text	23 (82.1)	5 (17.9)
c. analytical conversations and talk about vocabulary	**3 (37.5)**	**5 (62.5)**
d. discussions about topics that are familiar to the children	18 (85.7)	3 (14.3)

(table continues)

	Frequency (Percent)	
Questions and Answers (correct answer is in bold print)	**<=90 Hours**	**>90 Hours**
4. During book reading activities, teachers should deal with new and unfamiliar vocabulary by:		
a. stopping and asking children what they think the word means	54 (84.4)	10 (15.6)
b. continuing to read and telling students the definition of the word later	1 (50)	1 (50)
c. embedding definitions during the reading of the text	**51 (73.9)**	**18 (26.1)**
d. referring to pictures that give clues to the meaning of the words	50 (82)	11 (18)
6. In order to support children's oral language development when reading books aloud, the type of talk teachers and children should engage in includes:		
a. nonimmediate talk and decontextualized language or talk that connects story events to personal experience	**1 (100)**	**0 (0)**
b. immediate talk or talk about the events and characters in the story	0 (0)	0 (0)
c. discussions about the illustrations and words in the story	16 (84.2)	3 (15.8)
d. all of the above	139 (79)	37 (21)

(table continues)

Questions and Answers (correct answer is in bold print)	Frequency (Percent) <=90 Hours	>90 Hours
7. Shared reading has a significant effect on children's:		
a. alphabet knowledge	0 (0)	0 (0)
b. phonemic awareness and reading readiness	29 (76.3)	9 (23.7)
c. oral language and print knowledge	**112 (80)**	**28 (20)**
d. cognitive ability	15 (83.3)	3 (16.7)
8. An example of a scaffolding technique during a read-aloud activity is:		
a. pausing while reading to have children fill in words they know	13 (81.3)	3 (18.8)
b. asking direct questions while reading the book	4 (100)	0 (0)
c. creating stories about pictures or providing a storyline using only the pictures while reading	14 (73.7)	5 (26.3)
d. all of the above	**125 (79.6)**	**32 (20.4)**

Appendix F: Responses for Promoting Extended Discourse by Number of Years Experience Teaching Preschool

	Frequency (Percent)		
Questions and Answers (correct answer is in bold print)	**0-6 Years**	**7-10 Years**	**11 or More Years**
10. During mealtimes, teachers can support students' oral language development by:			
a. engaging children in conversations about events happening in the present (present talk)	49 (40.2)	23 (18.9)	50 (41)
b. remaining stationary and engaging children in extended discussions about decontextualized events or activities (nonpresent talk)	**9 (23.7)**	**13 (34.2)**	**16 (42.1)**
c. moving around the classroom engaging many children in short conversations	12 (57.1)	2 (9.5)	7 (33.3)
d. having discussions that are supporting by things in the classroom environment	7 (43.8)	2 (12.5)	7 (43.8)
12. In order to support oral language development during free play, teachers should:			
a. spend time engaged in very short conversations with many children	18 (45)	6 (15)	16 (40)
b. move around the room frequently	8 (50)	3 (18.8)	5 (31.3)
c. engage children in extended conversations that are intellectually challenging	**32 (37.6)**	**18 (21.2)**	**35 (41.2)**
d. ensure that there are ample amounts of time for free play throughout the day	19 (33.9)	13 (23.2)	24 (42.9)

(table continues)

Questions and Answers (correct answer is in bold print)	Frequency (Percent) 0-6 Years	7-10 Years	11 or More Years
13. Throughout the day, teachers can model how our language works by:			
a. engaging in parallel talk or the type of talk that narrates or describes what the child is doing at that moment	**66 (39.5)**	**35 (21)**	**66 (39.5)**
b. doing the majority of the talking when engaging in conversations with students	0 (0)	0 (0)	0 (0)
c. using concrete and specific words	4 (44.4)	1 (11.1)	4 (44.4)
d. speaking in simple sentences that are easily understood	7 (33.3)	4 (19)	10 (47.6)
14. Children's oral language development is supported by conversations that:			
a. include vocabulary that students are familiar with	32 (44.4)	11 (15.3)	29 (40.3)
b. include informative uses of rare words	**13 (31)**	**12 (28.6)**	**17 (40.5)**
c. are primarily focused on events occurring in the here and now	32 (39.5)	17 (21.0)	32 (39.5)
d. rely on the adult to guide the discussion	0 (0)	0 (0)	2 (100)

(table continues)

	Frequency (Percent)		
Questions and Answers (correct answer is in bold print)	**0-6 Years**	**7-10 Years**	**11 or More Years**
15. Of the three types of talk (pretend, non-toy, and non-pretend), which type is most supportive of language and literacy skills that are important for children a year later in kindergarten?			
a. pretend talk – talk with pretend elements and a nonliteral approach to feature in the immediate environment	**19 (54.3)**	**5 (14.3)**	**11 (31.4)**
b. non-toy talk – talk about events or concerns that are unrelated to the immediate play setting	2 (33.3)	1 (16.7)	3 (50)
c. non-pretend talk – talk that maintains a literal approach to actions and toys	0 (0)	1 (25)	3 (75)
d. all of the above	56 (36.8)	33 (21.7)	63 (41.4)
16. During a conversation, a child points to a toy and says, "A car." The facilitative way to respond in order to stimulate oral language development is:			
a. "Yes, a car."	4 (50)	0 (0)	4 (50)
b. "Yes, you are playing with a big, blue car."	**65 (38)**	**36 (21.1)**	**70 (40.9)**
c. "This is a car."	3 (42.9)	2 (28.6)	2 (28.6)
d. "You are playing with a car."	5 (45.5)	2 (18.2)	4 (36.4)

Appendix G: Responses for Promoting Extended Discourse by Hours of Professional Development

	Frequency (Percent)	
Questions and Answers (correct answer is in bold print)	**<=90 Hours**	**>90 Hours**
10. During mealtimes, teachers can support students' oral language development by:		
a. engaging children in conversations about events happening in the present (present talk)	96 (78.7)	26 (21.3)
b. remaining stationary and engaging children in extended discussions about decontextualized events or activities (nonpresent talk)	**31 (81.6)**	**7 (18.4)**
c. moving around the classroom engaging many children in short conversations	17 (81)	4 (19)
d. having discussions that are supporting by things in the classroom environment	13 (81.3)	3 (18.8)
12. In order to support oral language development during free play, teachers should:		
a. spend time engaged in very short conversations with many children	31 (77.5)	9 (22.5)
b. move around the room frequently	12 (75)	4 (25)
c. engage children in extended conversations that are intellectually challenging	**62 (72.9)**	**23 (27.1)**
d. ensure that there are ample amounts of time for free play throughout the day	52 (92.9)	4 (7.1)

(table continues)

	Frequency (Percent)	
Questions and Answers (correct answer is in bold print)	**<=90 Hours**	**>90 Hours**
13. Throughout the day, teachers can model how our language works by:		
a. engaging in parallel talk or the type of talk that narrates or describes what the child is doing at that moment	**133 (79.6)**	**34 (20.4)**
b. doing the majority of the talking when engaging in conversations with students	0 (0)	0 (0)
c. using concrete and specific words	7 (77.8)	2 (22.2)
d. speaking in simple sentences that are easily understood	17 (81)	4 (19)
14. Children's oral language development is supported by conversations that:		
a. include vocabulary that students are familiar with	55 (76.4)	17 (23.6)
b. include informative uses of rare words	**35 (83.3)**	**7 (16.7)**
c. are primarily focused on events occurring in the here and now	66 (81.5)	15 (18.5)
d. rely on the adult to guide the discussion	1 (50)	1 (50)

(table continues)

	Frequency (Percent)	
Questions and Answers (correct answer is in bold print)	**<=90 Hours**	**>90 Hours**
15. Of the three types of talk (pretend, non-toy, and non-pretend), which type is most supportive of language and literacy skills that are important for children a year later in kindergarten?		
a. pretend talk – talk with pretend elements and a nonliteral approach to feature in the immediate environment	**31 (88.6)**	**4(11.4)**
b. non-toy talk – talk about events or concerns that are unrelated to the immediate play setting	5 (83.3)	1 (16.7)
c. non-pretend talk – talk that maintains a literal approach to actions and toys	3 (75)	1 (25)
d. all of the above	118 (77.6)	34 (22.4)
16. During a conversation, a child points to a toy and says, "A car." The facilitative way to respond in order to stimulate oral language development is:		
a. "Yes, a car."	7 (87.5)	1 (12.5)
b. "Yes, you are playing with a big, blue car."	**135 (78.9)**	**36 (21.1)**
c. "This is a car."	5 (71.4)	2 (28.6)
d. "You are playing with a car."	10 (90.9)	1 (9.1)

Appendix H: Responses for Using Specific Vocabulary and Rare Words by Number of Years Experience Teaching Preschool

	Frequency (Percent)		
Questions and Answers (correct answer is in bold print)	**0-6 Years**	**7-10 Years**	**11 or More Years**
19. Teachers can encourage the continued development of vocabulary during free play by:			
a. setting up play areas that extend upon a classroom theme and related vocabulary	11 (52.4)	4 (19)	6 (28.6)
b. setting up media centers (DVDs, electronic books, computers) that engage children in interactions with the new vocabulary	0 (0)	0 (0)	0 (0)
c. providing props related to the theme that may elicit theme-related vocabulary use	1 (50)	1 (50)	0 (0)
d. all of the above	**65 (45.1)**	**35 (24.3)**	**44 (30.6)**
20. Large group time provides an opportunity for teachers to extend upon children's language development through the use of:			
a. rare words	**2 (66.7)**	**0 (0)**	**1 (33.3)**
b. common words	8 (80)	0 (0)	2 (20)
c. non-pretend talk	1 (33.3)	1 (33.3)	1 (33.3)
d. all of the above	66 (43.7)	39 (25.8)	46 (30.5)

(table continues)

	Frequency (Percent)		
Questions and Answers (correct answer is in bold print)	**0-6 Years**	**7-10 Years**	**11 or More Years**
21. An effective strategy for teaching new words is to:			
a. provide a single definition and example in order to avoid complicating the explanation	8 (50)	3 (18.8)	5 (31.3)
b. ask the children to explain what they think the word means	9 (50)	3 (16.7)	6 (33.3)
c. use demonstrations and/or pictures, provide multiple definitions and examples, and connect new words to concepts children already know	**60 (45.5)**	**33 (25)**	**39 (29.5)**
d. ask children to use the word in a sentence	0 (0)	1 (100)	0 (0)
22. The predominant way that children acquire vocabulary is by:			
a. having words explicitly taught to them	2 (100)	0 (0)	0 (0)
b. hearing new words used in their environment, including in conversations, television, and storybooks read aloud to them	**73 (44.8)**	**40 (24.5)**	**50 (30.7)**
c. asking adults to explain what words mean	1 (100)	0 (0)	0 (0)
d. reading books themselves, including a wide variety of themes	1 (100)	0 (0)	0 (0)

(table continues)

	Frequency (Percent)		
Questions and Answers (correct answer is in bold print)	**0-6 Years**	**7-10 Years**	**11 or More Years**
25. During mealtime conversations, teachers can extend upon vocabulary that has been previously taught during the day by:			
a. asking open ended questions to elicit thoughtful and elaborate uses of words	**6 (42.9)**	**4 (28.6)**	**4 (28.6)**
b. discussing events that have taken place in the classroom during the day	3 (60)	2 (40)	0 (0)
c. talking about the book that was read earlier in the day	2 (66.7)	0 (0)	1 (33.3)
d. all of the above	66 (45.5)	34 (23.4)	45 (31)

Appendix I: Responses for Using Specific Vocabulary and Rare Words by Hours of Professional Development

	Frequency (Percent)	
Questions and Answers (correct answer is in bold print)	**<=90 Hours**	**>90 Hours**
19. Teachers can encourage the continued development of vocabulary during free play by:		
a. setting up play areas that extend upon a classroom theme and related vocabulary	20 (80)	5 (20)
b. setting up media centers (DVDs, electronic books, computers) that engage children in interactions with the new vocabulary	0 (0)	0 (0)
c. providing props related to the theme that may elicit theme-related vocabulary use	2 (100)	0 (0)
d. all of the above	**134 (79.3)**	**35 (20.7)**
20. Large group time provides an opportunity for teachers to extend upon children's language development through the use of:		
a. rare words	**5 (100)**	**0 (0)**
b. common words	8 (80)	2 (20)
c. non-pretend talk	4 (100)	0 (0)
d. all of the above	139 (78.5)	38 (21.5)

(table continues)

	Frequency (Percent)	
Questions and Answers (correct answer is in bold print)	**<=90 Hours**	**>90 Hours**
21. An effective strategy for teaching new words is to:		
a. provide a single definition and example in order to avoid complicating the explanation	14 (77.8)	4 (22.2)
b. ask the children to explain what they think the word means	16 (84.2)	3 (15.8)
c. use demonstrations and/or pictures, provide multiple definitions and examples, and connect new words to concepts children already know	**125 (79.1)**	**33 (20.9)**
d. ask children to use the word in a sentence	1 (100)	0 (0)
22. The predominant way that children acquire vocabulary is by:		
a. having words explicitly taught to them	2 (100)	0 (0)
b. hearing new words used in their environment, including in conversations, television, and storybooks read aloud to them	**152 (79.2)**	**40 (20.8)**
c. asking adults to explain what words mean	1 (100)	0 (0)
d. reading books themselves, including a wide variety of themes	1 (100)	0 (0)

(table continues)

	Frequency (Percent)	
Questions and Answers (correct answer is in bold print)	**<=90 Hours**	**>90 Hours**
25. During mealtime conversations, teachers can extend upon vocabulary that has been previously taught during the day by:		
a. asking open ended questions to elicit thoughtful and elaborate uses of words	**13 (76.5)**	**4 (23.5)**
b. discussing events that have taken place in the classroom during the day	5 (100)	0 (0)
c. talking about the book that was read earlier in the day	3 (100)	0 (0)
d. all of the above	135 (78.9)	36 (21.1)

Curriculum Vitae

Dian T. Prestwich, M.Ed.

Education:

Doctor of Philosophy August 2012
Walden University, Minneapolis, Minnesota
Measuring Preschool Teachers' Perceived Competency and Knowledge of Oral Language Development
4.0 GPA

Master of Education – Curriculum and Instruction Oct. 2003
Literacy: Language, Reading, and Writing
Lesley University, Cambridge, Massachusetts
4.0 GPA

Bachelor of Arts – Elementary Education May 1995
Computer Literacy Certification
Northwestern State University, Natchitoches, Louisiana
3.2 GPA

Relevant Professional Experience:

Senior Consultant; Read to Achieve Grant Program 2009-Present
Colorado Department of Education, Denver, Colorado

Manage all aspects of the Colorado Read to Achieve grant program for 47 participating schools, including reviewing and approving budgets, scheduling and coordinating professional development, coordinating consultants' work in buildings, conducting on-going site visits, coordinating development of content for the Read To Achieve website, webinars, and other forms of communication, writing the annual Read To Achieve report to the Governor, and planning and facilitating Read To Achieve Board meetings. Coordinate implementation of the Colorado Basic Literacy Act (CBLA) including providing technical assistance to all elementary schools in the state of Colorado, acting as the primary CBLA contact for the state's elementary schools, providing resources to schools to assess, monitor, and analyze data of K-3 students, facilitating the state level literacy expert team through the revision of CBLA to align with Common Core State Standards, and serving on the state's early childhood assessment team for implementation of Colorado's Achievement Plan for Kids (CAP4K). Conduct program reviews for higher education teacher preparation programs and lead the state department's cross-unit leadership team in the development of the Colorado Comprehensive Literacy Plan birth through grade 12.

Literacy Coach 2004- 2009
Dupont Elementary School, Commerce City, Colorado

Collaborated with building principal to coordinate and design focused and purposeful professional development for 25 classroom teachers, grades PreK-5, which improved teacher effectiveness and collaboration. Assisted district's seven elementary schools in the implementation of research-based screening and progress monitoring assessments. Provided classroom demonstration lessons and coached teachers in the use of scientifically-based core reading programs and research-based instructional strategies. Facilitated weekly grade-level and vertical team planning discussions to analyze student work, review classroom assessment information, and plan for instruction. Facilitated the school's Leadership Team to plan and coordinate implementation of a Response to Intervention model, including the selection and execution of a variety of scientifically-based intervention programs.

Other Experience:

Classroom Teacher, Grades 2, 3, and 4 1997-2004
Dupont Elementary School, Commerce City, Colorado

Performed duties of regular education classroom teacher, including teaching all basic subject areas, using formative and summative assessments to guide instruction, and planning and teaching lessons to align with state standards.

Title One Reading Rescue Teacher, Grade 1 1996-1997
R. V. Kerr Elementary, Bossier City, Louisiana

Classroom Teacher, Grade 2 1995-1996
Franklin Elementary, Sterling, Colorado

Professional Presentations:

Prestwich, D., Bamberry, L., Meyers, C., & Boyer, M. (2012). *Leveraging and sustaining the education reform agenda to improve literacy outcomes.* Panel Discussion at the Striving Readers Comprehensive Literacy Formula Grantee Conference.

Prestwich, D. (2011). *Celebrating language.* Keynote presented at the Montana Instructional Institute.

Prestwich, D. (2011). *Phonological and phonemic awareness.* Keynote presented at the

Montana Early Reading First Winter Institute.

Prestwich, D., & Scheffel, D. (2010). *The colorado basic literacy act.* Presentation to the House of Representatives and Senate Joint Education Committee.

Prestwich, D., Almeida, P., & Heronema, K. (2008). *Accelerating english language acquisition:How it's possible.* Presented at the Colorado Reading Summit.

Prestwich, D. (2008). *Basic early assessment of reading.* A webinar presented for the Colorado Department of Education Literacy Grants & Initiatives Unit.

Prestwich, D. & Passmore, C. (2004). *Models of co-teaching.* Presented at the University of Denver Conference.

Professional Affiliations:

Member, American Educational Research Association (AERA)
Member, National Association for the Education of Young Children (NAEYC)
Member, Colorado Association for the Education of Young Children (CAEYC)