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Literacy Instruction in Three Preschool Programs: A Multiple Case Study

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2014

Abstract

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MA, Marshall University, 2004

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Many preschool students enter kindergarten without the oral language and phonetic awareness skills necessary for academic success. Qualitative research is also limited about the instructional practices preschool teachers use to improve the literacy skills of their students. The purpose of this study was to explore how teachers used developmentally appropriate instructional practices to improve the literacy skills of preschool students. The conceptual framework was based on the theories of Piaget and Vygotsky in relation to language development. A multiple case study research design was used. Participants included 6 teachers from 3 different preschool programs in an urban school district in the eastern United States. Data were collected from individual interviews with preschool teachers, observations of literacy instruction in classrooms, and related program documents. For the single case analysis, coding and category construction were used to analyze the interview data, and descriptive statistics were used to analyze the observation data. A content analysis was used to analyze the documents. For the cross case analysis, data were examined across all cases for emerging themes and discrepant data. A key finding was that preschool teachers used developmentally appropriate instruction to improve oral language, phonological awareness, and written expression and supported play through learning centers; however, limited teacher–child interaction was found in relation to quality of feedback and language modeling. This study contributes to positive social change by providing educators with a deeper understanding of the need to improve the literacy skills of young children.

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Dedication

I would like to thank my amazing children, family, and friends who have been so patient and supportive of me. Each child, family member, and friend has had to make a sacrifice of time in order to help me complete this degree. I appreciate all of their love, support, and patience.

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Chapter 1: Introduction to the Study

Preschool programs have continued to grow since the creation of the Head Start program in the 1960s. The growth of these programs has attracted the attention of educators, parents, communities, and decision-makers, including lawmakers, because of concerns about the impact of these programs on student readiness for academic success in the primary grades, particularly for those children living in poverty (Vinovskis, 2005). However, educators and researchers have expressed concern about the quality of these preschool programs in relation to instructional practices, particularly concerning teacher–student interaction and the role of play in learning (Vinovskis, 2005).

The purpose of this study was to examine literacy instruction in three different types of public-funded preschool programs, including the federally funded Title I and Head Start preschool programs and a state-funded preschool program. Preschool teachers provide literacy instruction for students who are 3- or 4-years-old and whose cognitive development occurs at different rates; therefore, preschool teachers need to consider the developmental level of individual students to provide appropriate instruction. The National Association for the Education of Young Children (NAEYC; 2011)recommended a set of criteria in relation to literacy instruction, which includes the following: (a) students are engaged in oral and written communication, (b) students are given opportunities to develop oral vocabulary through conversation, and (c) students are provided with opportunities to communicate with peers.

A lack of qualitative research was found about how teachers in different preschool programs, including federally funded and state- funded programs, use

developmentally appropriate practices to improve the literacy skills of preschool students. In particular, a lack of qualitative research exists about how preschool teachers use the specific concepts of teacher-child interaction and play to improve literacy instruction for preschool students. Therefore, researchers need to explore how to improve teaching and learning for preschool students, particularly in relation to literacy skills. This study has implications for positive social change in preschool education because it will contribute to the discussion about best practices in literacy instruction for preschool programs that are supported by research.

This chapter includes background information about how the No Child Left Behind Act (NCLB; 2001) requires preschool teachers to improve reading achievement for all students. This background section also includes a brief discussion of the significance of using developmentally appropriate practices to improve literacy instruction for preschool students. The three different types of public preschool programs included in this study are also described, including the federally funded Head Start preschool program and the Title I preschool program, as well as a state-funded preschool initiative. In addition, this chapter includes the problem statement, the purpose of the study, the research questions, and the conceptual framework of the study. This chapter also includes an overview of the methodology, definitions of key concepts related to this study, assumptions, scope and delimitations, and limitations of the study. In addition, the significance of this study is explained.

Background

One of the requirements of Public Law 107-110, also known as the NCLB Act (2001), is that all public school students must be proficient in reading by the end of Grade 3. Since the NCLB Act was implemented, educators in public school districts have been held accountable for the performance of all students, including those students in specific categories such as special education, English language learners, and racial groups such as African Americans, Latino Americans, Asian Americans, and Native Americans. This accountability has trickled down to kindergarten and to preschool classrooms because the NCLB Act requires that students be ready to learn in order to be successful in kindergarten and Grade 1.

This readiness to learn involves specific literacy skills at the preschool level, which are defined somewhat differently. Invernizzi, Justice, Landrum, and Booker (2005) defined these literacy skills as (a) developing listening and speaking skills, (b) understanding words and their meaning, (c) manipulating sounds, (d) recognizing letters of the alphabet, (e) understanding print as a function of reading, and (f) experimenting with writing using various tools. Invernizzi et al. argued that these skills are necessary for preschool students to master in order to create a solid academic foundation for students when they enter kindergarten. Other researchers have also defined literacy skills for preschool students. In a survey of early literacy measures for improving student reading achievement, Marston et al. (2007) defined literacy skills as "phonemic awareness, the alphabetic principle, decoding, and fluency" (p. 98). In a discussion of enhancing early literacy skills for preschool students, Laundry, Swank, Smith, Assel, and Gunnewig

(2006) defined early literacy skills as phonological awareness and print knowledge. Landry et al. (2006) defined phonological awareness as "children's developing sensitivity to sounds and an understanding that sounds can be combined to make words" (p. 306) and print knowledge as "acquiring the ability to name letters and the knowledge that letters are associated with sounds" (p. 306). However, all of these definitions include skills related to phonological awareness.

In addition to these multiple definitions for preschool literacy skills, researchers have struggled to define developmentally appropriate practices for preschool students. Copple and Bredekamp (2009) defined developmentally appropriate practices as purposefully planned instruction delivered through meaningful interaction with students. Copple and Bredekamp argued that teachers need to actively engage with students through questioning and engaging in conversation with them. The NAEYC website (2011) defined developmentally appropriate practice as follows:

> [It is] an approach to teaching grounded both in the research on how young children develop and learn and what is known about effective early education. Its framework is designed to promote young children's optimal learning and development. Developmentally appropriate practice involves teachers meeting young children where they are (by stage of development); both as individuals and as part of a group; and helping each child meet challenging and achievable learning goals.

In addition, the NAEYC website defined three core considerations of developmentally appropriate practice, which include (a) knowing about child development and learning,

(b) knowing what is individually appropriate, and (c) knowing what is culturally important.

Researchers have also attempted to define developmentally appropriate practices in relation to literacy instruction for young children. In a study about skill development in nonreading preschool students, Molfese et al. (2006) noted that developmentally appropriate literacy instruction includes fluency, vocabulary, and comprehension skills. In a study about conversational language as a predictor of early reading development, DeThorne, Petrill, Schatneider, and Cutting (2010) argued that developmentally appropriate practice includes teacher use of instructional strategies related to oral language in order to increase reading comprehension through the development of oral vocabulary. Christie (1991) believed that developmentally appropriate practice for young children includes the construct of play as an instructional strategy, which promotes social, language, and cognitive skills. Pink (2009) argued that play presents children with intrinsic motivation through choice, personal empowerment, and responsibility. In a study about predicting learning outcomes at the end of kindergarten from the quality of prekindergarten instruction, Burchinal et al. (2008) maintained that developmentally appropriate practice includes teacher-child interaction through play as an instructional practice that is correlated with the learning philosophy of constructivism. Based on these studies, developmentally appropriate literacy instruction includes a constructivist approach that uses play to cultivate motivation, social, cognitive, and language development.

The NAEYC (2011) website also recommended that early childhood educators who provide instruction to students in preschool programs use developmentally appropriate practices in curriculum, instruction, and assessment to meet their individual learning needs. However, universal preschool programs are not currently available to all families in the United States. The most common types of preschool programs available in the United States include the federally funded Head Start preschool program and the Title I preschool program and a variety of state funded preschool programs and private child care centers.

The Head Start program is the oldest of all of the federally funded preschool programs, and therefore, many studies have been conducted about it. DeThorne, Petrill, Schatschneider, and Cutting (2010) examined oral language and phonological awareness activities through teacher-student interactions in Head Start preschool program classrooms. DeThorne et al. found that oral vocabulary development enhances reading comprehension. Powell and Diamond (2013) examined the impact of professional development with Head Start teachers on their vocabulary and phonemic awareness instruction. Powell and Diamond found that professional development improved their instructional practice. Hindman and Wasik (2012) also found that professional development in literacy instruction improved teachers' classroom instruction.

The NCLB (2001) Act, Ewen and Mathews (2007) contended, also changed the way that Title I federal funds could be used in public school education. For the first time in the history of federal funding for education, schools were allowed to use Title I funds to establish or enhance preschool programs for students younger than 6 years of age.

Because Title I preschool programs were not established in public school districts until the passage of the NCLB Act, Ewen and Mathews (2007) found that limited research specifically related to Title I preschool programs. Ewen and Mathews also found that improvements in federal funding for public preschool programs increased the opportunity for children living in poverty to attend these programs.

A variety of preschool programs are also supported by state funds. In the eastern state where this study was conducted, Rotz and Sarte (2007) noted that, in 1995, the state-funded preschool program served 4-year-olds only, based on six criteria: limited English proficiency, family unemployment, homelessness, poverty, parent incarceration, and parents with limited education. The state in which the study was conducted is one of 38 states that support a state-funded preschool program to promote school readiness for children in relation to these criteria. Rotz, Bearse, Rest, and Sarte (2007) noted that many of these state funded preschool programs are partially funded and regulated by the state, but governed by the localities.

In summary, prior qualitative studies related to literacy instruction in preschool programs are limited. More specifically, a lack of qualitative research was found about the impact of developmentally appropriate instructional practices on the literacy skills of preschool students, particularly in relation to teacher-student interaction and play. Therefore, this study will contribute to the body of knowledge on literacy instruction in preschool programs by describing how preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of students in three different preschool programs.

Problem Statement

Since the passage of the NCLB (2001) Act, educational stakeholders have demanded that public school educators improve the literacy skills of students who enter kindergarten. However, in a discussion of early reading assessment in kindergarten, Santi, York, Foreman, and Francis (2009) maintained that many children entering kindergarten do not have the literacy readiness skills to master state standards in reading and English language arts. In a case study about school-wide literacy reform, Walpole, Justice, and Invernizzi (2004) also noted that a large number of children enter school with substantial reading deficiencies. In another study about monitoring children's growth in early literacy skills, Ball and Gettinger (2009) identified alphabet knowledge, beginning sound recognition, and syllabication as critical literacy skills that young children need to master, while Santi et al. (2009) identified phonemic awareness, oral reading, and comprehension as critical literacy skills that children need to master by the end of Grade 1.

Researchers have made many recommendations about how to address this problem. Cooke, Kretlow, and Helf (2010) suggested that kindergarten teachers should implement intense interventions for students who struggle to master specific reading skills. In a discussion about the timing of early reading assessments in kindergarten, Santi et al. (2009) and Kagan and Kauerz (2007) indicated that some states have attempted to rectify the difficulties that teachers encounter when children enter kindergarten without literacy skills by assessing the quality of preschool programs. Katan and Kaurez found that educators in some states developed rating scales and systems to assess this quality.

For example, LaParo, Pianta, and Stuhlman (2005) created the Classroom Assessment Scoring System (CLASS) as an observational instrument to be used by teachers to assess preschool program quality. Invernizzi, Justice, Landrum, and Booker (2005) developed a reading readiness screening tool, the Phonological Awareness Literacy Screener (PALS), to be used by teachers to target potential reading difficulties.

In spite of these efforts, problems related to the development and implementation of high quality preschool programs remain. In a discussion about developmentally appropriate practice in early childhood programs, Copple and Bredekamp (2009) believed that these problems are due to the absence of developmentally appropriate instructional practices that involve the construct of play. In a study about student achievement in kindergarten and Grade 1, Curby, Rimm-Kaufman, and Ponitz (2009) maintained that more appropriate teacher-child interaction is needed to improve the literacy skills of preschool students entering kindergarten.

Several possible factors contribute to a lack of high-quality preschool programs in the United States. In a discussion of preschool education policies in the Kennedy and Johnson administrations, Vinovskis (2005) found that a lack of alignment exists among curriculum, instruction, and assessment components within preschool programs. In a discussion of Title I and early childhood programs, Ewen and Mathews (2007) maintained that preschool experiences are not clearly defined and are too closely linked to funding sources. In a study about students' reading growth during the first 2 years of school, McCoach, O'Connell, Reis, and Levitt (2006) found that offering a wide variety of preschool programs has resulted in inconsistency in literacy instruction that has in turn

created a wide range of student literacy readiness skills. In a discussion about the effects of preschool education, Pianta, Barnett, Burchinal, and Thornburg (2009) noted that a lack of instructional standardization in preschool programs in the United States negatively impacts the learning of preschool students.

This study contributes to the body of knowledge about literacy instruction in publically-funded preschool programs by exploring how preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of students in three different preschool programs offered in a public school district in an eastern state in the United States. These three preschool programs include the federally funded Head Start preschool program that has been active since the 1960s, the federally funded Title I preschool program created by the NCLB Act of 2001, and a state-funded preschool program.

Purpose of the Study

The purpose of this multiple case study was to explore how preschool teachers used developmentally appropriate instructional practices to improve the literacy skills of students in three different preschool programs. In order to accomplish this purpose, I described how preschool teachers provide literacy instruction for preschool students and the perceptions that these teachers have about the effectiveness of their instructional practices in improving literacy skills for these students. I also described how preschool teachers use play and teacher-child interaction to improve the literacy skills for these students. I included documents about the three preschool programs that provide supporting information about program standards, instructional processes and practices,

and assessments that preschool teachers use in their classrooms to improve literacy skills for preschool students.

Research Questions

The research questions were based on the conceptual framework for this study. Preschool is a time of significant cognitive and social growth for children and, therefore, it is critical that preschool teachers use developmentally appropriate practices to support this cognitive growth. Developmentally appropriate practice in preschool education is based on the philosophy of constructivism, which is supported by the theories of Piaget (1926) and Vygotsky (1986) in relation to cognitive development and language. In developmentally appropriate practices, teachers emphasize learning through teacher-child interaction and through play and exploration. Piaget maintained that play is structured according to the cognitive developmental level of the child. Vygotsky's research on the zone of proximal development supports the scaffolding of concepts and skills in order to support higher levels of cognitive development in students. Both Piaget and Vygotsky advocated for the importance of imaginary play and the teacher's role as a facilitator of learning in the cognitive and social learning of children. Therefore, the research questions for this study include:

Central Research Question

How do preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of preschool students?

Related Research Questions

1. How do preschool teachers provide literacy instruction for preschool students?

2. What perceptions do preschool teachers have about the effectiveness of the instructional practices they use to improve literacy skills for preschool students?

3. How do preschool teachers use developmentally appropriate instruction through play to improve literacy skills for preschool students?

4. How does teacher–child interaction develop oral language skills to enhance literacy for preschool students?

5. What do documents about the three different preschool programs reveal about literacy instruction for preschool students?

Conceptual Framework

The conceptual framework for this study was based on the theories of Piaget (1926) and Vygotksy (1986) in relation to cognitive development and language. In addition to other constructivists such as Dewey and Montessori, Vygotsky and Piaget also contributed to the development and growth of constructivism, which is a belief system about how individuals construct their understanding or knowledge of the environment. The theoretical constructs of constructivism are formed through a cultural filter within the processes of accommodation, assimilation, and evaluation of stimuli. The philosophy of constructivism reflects the beliefs that Piaget and Vygotsky held about

cognitive development, and these beliefs anchor developmentally appropriate practice in preschool education today.

Piaget's Theory of Cognitive Development

In this theory of cognitive development, Piaget (1926) focused on discovering the origins of natural logic and the transformation of thought from one form of reasoning to another. The major concepts of Piaget's theory of cognitive development begin with the principles of assimilation and accommodation. Piaget and Inhelder (1969) noted that "the filtering or modification of the input is called assimilation; the modification of internal schemes to fit reality is called accommodation" (p. 6). Once assimilation has been achieved by a child, the child's experiences are constructed through a process of accommodation. In this process, the child adjusts internalized concepts to reorganize thinking to match the changed information. Once assimilation and accommodation have been balanced, the child achieves equilibrium, or a steady state, of understanding. In addition, Piaget maintained that the natural growth and development of cognition and language occurs in four major stages, including sensorimotor, preoperational, concrete operational, and formal operational.

The sensorimotor stage, according to Piaget (1926), occurs when infants and toddlers take in stimuli through the senses of touch, taste, smell, hearing, and sight. At this stage, children need to be stimulated by their environment in a sensory way. Infants go through a progressive stage of reflexive movements and later develop physical habits such as crawling and walking through repeated conditioning of the body. During the sensorimotor stage, Piaget argued that children cannot comprehend representations of

objects and do not understand symbolic function. Instead, assimilation and accommodation occur as a result of children's responses to environmental sensory stimuli. Intelligence develops before language, and language development is social and forms from imitation and play.

The preoperational stage occurs between ages 2 and 8. During this stage, Piaget (1926) believed that children begin logical thought; however, they often have difficulty with problem-solving. This stage includes the time that children spend in the development of organizational thought and the preparation of cognitive skills. Children begin to combine and arrange numbers and classify groupings into related categories. Information is learned through generalization when children connect new information with prior knowledge. Piaget also noted that, in this stage, children continue to struggle with the concept of conservation. For example, a child is shown two glasses of water. One glass is wide and short while the other is tall and thin. When water is poured from one glass to the other and back again, a child in the preoperational stage believes an increase or decrease in the volume of the liquid has occurred, which indicates that the child understands the concept of conservation. Piaget also found that children compare all new knowledge to known knowledge.

The concrete operational stage, according to Piaget (1926), occurs between ages 8 and 12. During the concrete operational stage, Piaget argued that logical thinking begins, and children transform knowledge by using reverse, inverse, or reciprocal patterns. By the time children have reached the concrete operational stage, they have developed a deeper understanding of conservation. For example, if water were poured from the same

two cups as in the previous example, the child would believe that the poured water had the same volume. Piaget argued that the child would also use his or her cognitive skills to understand the reverse. Reciprocal understanding would be evident if the child explained that the volume of water is lower. Thus, in this stage, the child begins to understand how to classify, order, and group information together.

Piaget (1926) argued that the formal operational stage of cognitive development occurs between the age of 12 and 15. During this stage, Piaget postulated that children begin to develop abstract thinking and deductive reasoning in relation to hypothetical concepts. Children are able to disconnect from object-related thoughts and explore the concepts of hypothesis, reasoning, proportion, and other concepts that are not absolutes. Children develop the ability to categorize in a more general sense, such as classifying unrelated objects into larger categories. Children begin to understand concepts that are historical, and they begin to anticipate the future. Piaget maintained that, in this stage, children also begin to develop personal theories, ideas, and opinions, and they are able to understand spatial proportion, similar figures, metric speed, and probability.

In language development, Piaget (1926) also believed that language is developed socially. When children are engaged in play, they begin as solitary talkers and then advance to imaginary listeners. Piaget argued that peer interaction promotes self-directed learning through exploration and play. Piaget also argued that teachers need to create purposeful situations in order to promote the experimentation and manipulation of the environment and that make-believe play and peer interaction enhances learning. In

addition, Piaget believed that learning new knowledge is an adaptive and social process and that children are actively engaged in the learning process.

Vygotsky's Theory of Psychological Development

The conceptual framework for this study was also based on Vygotsky's (1986) cultural-historical theory of psychological development. In relation to this theory, Vygotsky focused on the role of culture in learning, particularly in relation to language development. Vygotsky described three main characteristics of intelligence in relation to learning. First, people learn from inherited experiences by building new discoveries and knowledge that they add to prior knowledge and experiences. Once people have learned from prior events, then new discoveries contribute to the body of knowledge for new generations. Secondly, people learn about past places and events through the experiences of others. Finally, people adapt the environment to their personal wants and needs by creating mental models in the mind.

Vygotsky (1986) also believed that two main cultural factors influence learning. First, signs and symbols within a specific culture influence the way the members of that culture think and learn. Signs and symbols represent a vital part of cultural learning. In addition, social interactions with other members of a culture provide an opportunity for individuals to exchange ideas in order to gain knowledge. In relation to learning in school, Vygotsky emphasized the idea that individuals are influenced by others in their cultural setting. This cultural influence creates an individual's concepts of self-regulated learning, attention, self-awareness, and thinking. Vygotsky also believed that a synthesis of current events and opposing forces create change.

One of the concepts that Vygotsky (1969) developed in relation to the theory of psychological development was the zone proximal development. Vygotsky defined the zone of proximal development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Closing this distance is the challenge that teachers face in improving the cognitive abilities of their students. As people mature, Vygotsky believed that they change from demonstrating immature, simple thinking to demonstrating mature, complex thinking. Lower-level thinking includes concrete memory, concrete perceptions, low attention span, and preconceptual thinking. Higher-level thinking includes logical memory, the ability to categorize, focused attention, problem-solving, and the ability to think conceptually. First, children learn to imitate the behavior of others and begin to understand that problems have solutions. Then children work with their peers to solve problems together. Finally, children are able to explain their problem-solving process to others, to analyze problems, and to ask important questions in order to clarify the problem and solve it. Thus, Vygotksy argued that the zone of proximal development can be instrumental in developing problem-solving skills through adult guidance and interaction with peers.

Vygotsky (1986) also believed that it is within this zone of proximal development that teachers can use diagnostic assessments to determine a student's appropriate level of learning. Based on these assessments, teachers can control those tasks that are beyond the student's capability. This scaffolding of instruction allows the student to concentrate on

only those tasks that he or she can complete. Vygotsky's research concerning the zone of proximal development has received considerable attention in recent years because programs such as Reading Recovery and reciprocal teaching are based on his ideas about scaffolding instruction, teacher-student collaboration, and teacher modeling and imitation (Gredler, 2009).

Both Piaget (1926) and Vygotsky (1986) demonstrated how the cognitive development of individuals depends on their interactions with the environment in terms of how they construct meaning and understanding in relation to those interactions. Both theorists believed that children are active and constructive learners. Both theorists regarded social interaction as a key component in learning. Their theories are responsible for the child-centered and discovery pedagogies that are found in developmentally appropriate practices today. The philosophy of constructivism is based in part on the cognitive development theory of Piaget and in part on the cultural-historical theory of Vygotsky because their research supports play and developmentally appropriate practices in the preschool classroom. Both Piaget and Vygotsky believed in the importance of (a) imaginary play in the development of language, (b) teacher-child interactions and play, (c) the development of advanced cognitive skills in children, and (4) understanding how children approach learning. Piaget and Vygotsky are both considered constructivists in their approach to cognitive development and language. For these reasons, their research formed the conceptual framework of this study on developmentally appropriate practices in preschool literacy instruction.

Nature of the Study

For this qualitative study, I used a multiple case study research design to describe how preschool teachers used developmentally appropriate instructional practices to improve the literacy skills of preschool students. The case or unit of analysis for this study was literacy instruction in an individual preschool program in a large urban school district in an eastern state, and the three cases included in this study were the federally funded Head Start preschool program, the federally funded Title I preschool program, and a state-funded preschool program. In the selected school district, the Head Start preschool program was independently governed by a local community action council, and the Title I preschool program and the state-funded preschool program were governed by the public school district.

In relation to the methodology of this study, I collected data from multiple sources of evidence, including individual interviews with preschool teachers from each preschool program, observations of instructional lessons in literacy development in preschool classrooms in each program, and documents related to literacy instruction for each program. I designed the two data collection instruments that I used. The first instrument was the oral questionnaire that I used to conduct the interviews with the preschool teachers. This oral questionnaire was constructed according to guidelines that Merriam (2009) recommended for conducting effective interviews for qualitative research. The second instrument was the CLASS instrument that LaParo et al. (2004) developed. I used this data collection instrument to observe classroom instruction in preschool programs, based on quality indicators. I also collected several different types of documents to

support the interview and observation data. I examined the results of the report card for

the school district's preschool programs, which was posted on the State Department of

Education (2013) website for this state. In addition, I collected documents about the state

standards used in these preschool programs, the curricular materials that teachers used in

each program, and the assessments that teachers used in each program. I collected these

documents from the senior coordinator of research and evaluation for the selected school

district and from the Head Start program director.

I conducted data analysis at two levels. At the first level, which was the single

case analysis, I used the specific analytic techniques of coding and category construction

to analyze the interview data for each single case, based on the constant comparative

method recommended by Merriam (2009). I also used line-by-line coding as

recommended by Charmaz (2006) in order to stay as close to the data as possible. I

analyzed the observation data for each single case using descriptive statistics to present

tables that describe the results of the ratings for each CLASS indicator for each

observation. In addition, I used a content analysis to analyze the documents for each

single case, which included a description of the purpose, the organizational structure, the

content, and the use of each type of document. At the second level of analysis, which was

the cross case analysis, I used the general analytic technique of theory development to

analyze the interview and observation data across all data sources and cases for patterns,

themes, and relationships and discrepant data and to determine the findings for this study.

I also presented specific strategies that were used to improve the trustworthiness of this

study.

Definition of Terms

Developmentally appropriate practices (DAP): According to the NAEYC (2011) website, developmentally appropriate practices is "an approach to teaching grounded both in the research on how young children develop and learn and what is known about effective early education". The following three core considerations are recommended for developmentally appropriate practice: (a) knowing about child development and learning, (b) knowing what is individually appropriate, and (c) knowing what is culturally important.

Foundation blocks: The State Department of Education for the selected state in this study established the Foundation Blocks as a set of learning standards to align with the K-12 Standards of Learning (SOL) objectives for all public schools. In this state, educators in all public preschool programs used these standards. The Foundation Blocks are divided into developmental and academic goals in relation to literacy, mathematics, science, social studies, physical, and personal/social development (Heckman, 2013).

Preschool literacy skills: For this study, all Title I and state-funded preschool programs defined preschool literacy skills in relation to the Foundation Blocks (Heckman, 2013). The preschool teachers in the Head Start program used performance standards that reflect the same skills as the Foundation Blocks. Both sets of standards identify the following preschool literacy skills: (a) developing oral language through listening and speaking to communicate, (b) developing vocabulary through word meaning, (c) recognizing letters, (d) recognizing letter sounds, and (e) understanding concepts of print (Heckman, 2013).

Preschool literacy instruction: For this study, literacy instruction includes an emphasis on teacher-child interactions during play in order to improve literacy skills through oral language, quality of feedback, and language modeling (LaParo, Pianta, & Hamre, 2008).

Public preschool programs: For this study, public preschool programs refer to center-based programs serving 3-year-old and 4-year-old students that are funded by state or federal agencies operated in or near public schools, including the Head Start preschool program, the Title I preschool program, and state-funded preschool programs (Clifford et al., 2005).

State-funded preschool programs: For this study, the state-funded preschool program was established by the general assembly to provide a quality preschool program to prepare at-risk 4-year-old students for academic success (Rotz et al., 2007).

Title I preschool program: For this study, the Title I preschool program is a program for 3-year-old students located in the Tidewater Region of this eastern state. The NCLB (2001) Act established Title I under the Early Reading First grant that was offered to qualifying public school districts in 2002. Title I preschool programs are governed by the public school system and can only be used in schools that are classified by Title I free-and-reduced-lunch guidelines (Justice, Mashburn, Hamre, & Pianta, 2008).

Assumptions

This study was based on several assumptions. The first assumption was that the public preschool programs included in this study are typical of preschool programs found in large urban school districts across the United States that may or may not be accredited

by the NAEYC. This assumption contributes to the transferability of the findings of this study to other similar preschool programs. The second assumption was that the teachers would respond openly and honestly to the interview questions in order to provide an accurate picture of teacher perceptions about the effectiveness of instructional practices in relation to improving literacy skills for preschool students. The third assumption was that the documents provided by the school district and the Head Start program would be accurate in order to ensure the credibility of this study.

Scope and Delimitations

The scope of this study includes the boundaries of the study and the rationale for those boundaries. The boundaries of this study included three preschool programs in a large urban school district in an eastern state of the United States. The rationale for the scope of this study was that, although many different public and private preschool programs are offered in this state where this study was conducted, public preschool programs are more tightly controlled by their governing bodies, such as a community action council or a school district system and, therefore, are more consistent in comparison with other program designs and structures than private preschool programs. Public preschool programs were more conducive to this study because the instructional practices used in these preschool programs can be more clearly identified in the research literature, based on their funding source and governing bodies, than private preschool programs.

This study was further narrowed or delimited by the participants, the time, the resources, and the geographical location of the study. The participants of this study

included preschool teachers involved in the Head Start preschool program, the Title I preschool program, and the state-funded preschool program in this particular school district. Data collection for this study was also narrowed to the 2012-2013 school year. In addition, I was a single researcher with limited financial resources to conduct the study. Therefore, in terms of geographical location, the scope of this study was narrowed to the school district where I resided, due to limitations of time and expense.

Limitations

This study was also limited by the methodological weaknesses of the qualitative approach and case study design. In a qualitative study, the researcher is often the sole person responsible for all data collection and analysis; therefore, the potential for researcher bias exists. This limitation is addressed in the section on issues of trustworthiness in Chapter 3 where strategies that I used to enhance the credibility, transferability, dependability, and confirmability of this study are described. In relation to case study design, the potential for transferability also needs to be considered because, in order to generalize the findings of this study, the investigator must adhere to strict data collection and analysis procedures and provide an adequate amount of descriptive data regarding the context and the findings of the study (Merriam 2009). Those data collection and analysis protocols are described in Chapter 3.

Significance

The significance of this study relates to the practical contributions of the study to research on the topic, to practice in the field, to defining district policies, and to social change. In relation to research on the topic, researchers could replicate this study in other

preschool programs in other states in order to examine the instructional practices of preschool teachers and the effect that these practices may have on the literacy skills of preschool and kindergarten students. In relation to practice in the field, the findings of this study may lead to changes in how preschool administrators and teachers choose instructional materials, how they implement state standards in literacy and instructional lessons in literacy, and how they conduct assessments to prepare students for the academic challenges of kindergarten. The finding of this study may facilitate evidence-based decision-making processes by members of the local school board that could result in the improvement of preschool and kindergarten curriculum, instruction, and assessment practices related to literacy skills.

This study also contributes to positive social change in education in three ways. First, this study provides educators at the state and national level with a deeper understanding about the need to support high-quality preschool programs across this country for all students. Second, this study contributes to the improvement of preschool education by describing high-quality practices in literacy instruction. Third, educators may use this study as an impetus to providing professional development to preschool education teachers about high quality preschool literacy instruction.

Summary

In this introductory chapter, for the background to this study, I included a description of the requirements of the NCLB (2001) Act for public schools in the United States, especially in relation to the literacy skills that preschool students are expected to master in order to be successful in kindergarten and Grade 1. The problem that I

addressed in this study is the lack of qualitative research about how preschool teachers

prepare students for the academic expectations of kindergarten, particularly in relation to

literacy skills. In addition, I included the central and related research questions and the

purpose of the study, as well as the conceptual framework and a brief summary of the

methodology that I used to conduct this multiple case study. I designed the central

research question to explore how preschool teachers use developmentally appropriate

instructional practices to improve the literacy skills of preschool students. I also

described the assumptions and scope, delimitations, and limitations of the study. In

relation to significance, I included a discussion of how this study contributes to research

on the topic, to practice in the field, to the development of educational policies, and to

positive social change in preschool education.

In Chapter 2, I included a review of research studies related to the following

topics: (a) developmental appropriate practice in preschool programs, (b) preschool

program curriculum, (c) preschool program instruction, (d) preschool program

assessment, (e) teacher-child interaction, (f) the role of play, (g) high-quality preschool

programs in relation to the Star Quality Initiative, (h) literacy instruction in public

preschool programs, (i) perceptions of preschool teachers about literacy instruction, (j)

the challenges preschool teachers face in providing preschool literacy instruction, and (k)

a review of case study methodologies. In addition, I included a description of the major

themes and gaps found in the literature and how this study contributed to the present

body of literature on literacy instruction in preschool programs.

Chapter 2: Literature Review

For this study, the problem was defined as a lack of consistency in literacy instruction for students in preschool classrooms in the United States. These students often enter kindergarten without sufficient literacy skills to achieve academic success. In addition, the mandates set by the NCLB (2001) Act require public school educators to demonstrate that all students are proficient in reading by Grade 3, which places additional expectations on preschool teachers to provide high quality literacy instruction. However, qualitative research about how preschool teachers in different types of preschool programs provide literacy instruction to students is limited. Therefore, the purpose of this multiple case study was to explore how preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of students in three different public preschool programs.

Students need high quality preschool instruction in order to enter kindergarten ready to learn. Magnuson, Ruhm, and Waldforgel (2007) examined instructional practices in literacy to determine if preschool students enter kindergarten ready to learn. Magnuson et al. found that when students are given high quality reading instruction that included letter recognition, phonemic awareness, an understanding of rhyme, and print awareness, they enter kindergarten ready to learn what is expected of students at the kindergarten level. Landry et al. (2006) conducted a study to examine the literacy instructional practices of teachers after they received professional development concerning specific strategies related to phonological awareness and print knowledge. Landry et al. found that students made gains in phonological awareness and print

knowledge from teachers after they received training in literacy instruction. Howes et al. (2008) examined predictions of student outcomes at the end of kindergarten based on the quality of prekindergarten teaching, instruction, activities, and caregiver sensitivity. Howes et al. compared data from a study conducted by the National Center for Early Development and Learning (2001) to data from different types of preschool programs across 11 states. Howes et al. found that effective instruction requires sensitive interaction between teachers and students and that instruction should be play-based to encourage a positive social environment. In a study about the timing of early reading assessment in kindergarten, Santi et al. (2009) maintained that many preschool students enter kindergarten without the necessary literacy skills. These skills are often phonological awareness skills (Ball & Gettinger, 2009; Walpole et al., 2004).

For this chapter, I organized the review of the literature into three major sections related to instructional practices in literacy that researchers consider developmentally appropriate. These topics include (a) developmentally appropriate practices in public preschool programs, (b) preschool program curriculum, (c) preschool program instruction, (d) preschool program assessment, (e) teacher-child interaction, (f) the role of play, (g) high-quality preschool programs in relation to the Star Quality Initiative, (h) literacy instruction in public preschool programs, (i) the perceptions of preschool teachers about literacy instruction, (j) the challenges preschool teachers face in providing preschool literacy instruction, and (k) a review of case study methodologies. In addition, I included a description of the major themes and gaps found in the literature and how this study contributes to the present body of literature on this topic.

Literature Search Strategies

For this study, I used several search strategies to conduct the literature review, including a search of published books on topics such as early childhood education, the history of the Head Start preschool program, reading readiness, and literacy skills at the preschool level. In addition, I conducted a search of peer reviewed journals on early childhood education, reading, and literacy skills in general. I also conducted a keyword search in a variety of databases, including EBSCO, Academic Search Premiere, and ERIC. The following keywords were used: *achievement gap and early childhood education, alphabet knowledge, assessment and early childhood education, at-risk students and early childhood education, decoding and early childhood education, developmental screening, developmentally appropriate practice and early childhood education, early childhood, early childhood assessment, early childhood education, early childhood screening tools, early childhood special education, early reading intervention, emergent literacy, Head Start, kindergarten reading, kindergarten readiness, language development and early childhood education, letter knowledge and early childhood education, literacy instruction and early childhood education, oral language and early childhood education, parent-child interaction and early childhood education, phonemic awareness and early childhood education, phonological awareness and early childhood education, play and early childhood education, preschool education, preschool children, preschool quality, print awareness and early childhood education, school readiness, teacher-child interaction*, and *universal preschool*. The search included articles from 2006 to 2011.

Conceptual Framework

Multiple examples of the phenomenon of developmentally appropriate practice can be found in the research literature. Three core considerations of developmentally appropriate practice, according to the NAEYC website (2011), include (a) knowing about child development and learning, (b) knowing what is individually appropriate, and (c) knowing what is culturally important. The NAEYC defined developmentally appropriate practices as an approach to teaching based on research about how young children develop and learn and about effective early childhood education. Developmentally appropriate practice encourages teachers to provide instruction to young children at their appropriate stage of development and to help them meet achievable learning goals.

Other definitions of developmentally appropriate practice were also found in the literature review. In a discussion of early childhood programs, Copple and Bredekamp (2009) added to the understanding of developmentally appropriate practice by arguing that teachers must "create a caring community of learners, teach to enhance development and learning, plan curriculum to achieve important goals, assess children's development and learning, and establish reciprocal relationships with families" (p. 34). In a caring community, Copple and Bredekamp noted, the teacher knows the child and family well and is familiar with the child's personality, abilities, and interests. Developmentally appropriate strategies to enhance learning include the following: (a) acknowledging what the child does or says, (b) encouraging effort, (c) giving specific feedback, (d) modeling appropriate behavior, (e) demonstrating how to do a task, (f) setting achievable challenges, (g) asking questions to promote thinking, (h) giving help when needed, (i)

providing factual information, and (j) giving directions for desired actions. Copple and Bredekamp recommended that teachers should plan activities using a high-quality curriculum as a guide. Teachers should monitor and evaluate learning and plan instructional lessons according to the individual learning needs of students. Assessments should be individually appropriate for the child's age, development, and culture. In addition, Copple and Bredekamp believed that developmentally appropriate practice means that teachers should make families feel welcome, establish positive relationships and communication, and actively involve parents with setting goals for their child. In their discussion of early childhood programs, Copple and Bredekamp also believed that developmentally appropriate classrooms include teacher consideration of children's cognitive developmental levels. Teachers need to be aware that young children experience the preoperational stage of cognitive development, as defined by Piaget (1929); therefore, young children are often illogical, egocentric, and one-dimensional in their thinking. In addition, young children also develop their understanding of the world through social interaction with others, as Vygotsky (1986) pointed out.

In the theory of cognitive development, Piaget (1926) focused on the transformation of thought from one form of reasoning to another through the principles of assimilation, accommodation, and equilibrium. Once assimilation has been achieved, the child's experiences are constructed by accommodation. In accommodation, the child adjusts internalized concepts to reorganize thinking to match changed information. Once assimilation and accommodation have been balanced, the child achieves equilibrium, a steady state of understanding.

Piaget (1926) emphasized the natural growth and development of cognition and language in a constructive manner through four major stages: (a) sensorimotor, (b) preoperational, (c) concrete operational, and (d) formal operational. The sensorimotor stage occurs when infants and toddlers take in stimuli from the environment through their senses. Piaget also argued that, during this sensorimotor stage, language development is social and formed through imitation and play. The preoperational stage occurs between age 2 and 8. During this stage, Piaget maintained that children learn how to generalize when they connect new information with prior knowledge. The next stage of cognitive development, which is concrete operational, occurs between ages 8 and 12. During this stage, children develop a deeper understanding of conservation by transforming knowledge through reverse, inverse, or reciprocal patterns in order to understand how to group information cognitively and linguistically. The final stage, formal operational, occurs between ages 12 and 15. During this stage, children begin to develop abstract thinking and deductive reasoning skills, including the ability to categorize unrelated objects into a larger group.

The conceptual framework for this study is also based on Vygotsky's (1986) cultural-historical theory of psychological development, particularly in relation to language. Vygotsky described three main characteristics of psychological development in relation to learning. First, children learn from inherited experiences by building new discoveries that add to prior knowledge. Secondly, children learn about past places and events through the experiences of others. Finally, children adapt the environment to their personal wants and needs by creating mental models.

As part of his theory about language development, Vygotsky (1986) developed a concept of learning known as the zone of proximal development, which promotes the idea that children learn to master skills without assistance through a process of steps or levels. Vygotsky defined the zone of proximal development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Vygotsky argued that the actual cognitive development level of the child needs to be determined first. This level is the lower level of the zone of proximal development. However, from that level, the child accomplishes some tasks with a little help from a peer or an adult, whereby that child reaches a higher level of development, which stems from that child's existing understanding. The distance between the independent performance and the assisted performance is the zone where proximal development occurs. Educators have used this concept of proximal development as the basis for the instructional strategy of scaffolding, which teachers often use in order to provide more specific assistance to students during instruction.

Vygotsky (1986) also believed in learning through social interaction. Vygotsky argued that the classroom should include a sense of community in which all students participate and contribute to the learning environment. Vygotsky maintained that teachers should set challenging and achievable goals based on what students already know, and they should build upon that knowledge to help students reach a new level of understanding. Vygotsky believed that teachers should use the zone of proximal

development to move a child to the next level of understanding by promoting problem solving through questioning and interaction with students and by encouraging peer modeling and engagement in learning.

In summary, Piaget (1926) and Vygotsky (1986) explored how the development of cognition depends on the individual's interactions with the environment. They believed in the progression of knowledge through developmental stages and change over time. Therefore, the philosophy of constructivism is based in part on the cognitive development theory of Piaget and the social learning theory of Vygotsky, which includes the important concept of the zone of proximal development. Both theorists believed in the importance of (a) imaginary play in the development of language, (b) interaction with peers and the teacher's role as a guide and facilitator, (c) children's cognitive development in relation to their approach to learning, and (d) social interaction as a key component in linguistic learning. Constructivism reflects the developmental needs of the individual student that supports the use of developmentally appropriate practices in the preschool classroom; therefore, the ideas of Piaget and Vygotsky form the conceptual framework of this study because their work links theories of learning to developmentally appropriate practices that teachers use in the preschool classroom today.

Developmentally Appropriate Practice

The NAEYC (2009) first defined developmentally appropriate practice for early childhood education in 1987. That definition has been revised many times over the past 25 years. The NAEYC now defines developmentally appropriate practice as a research-based approach to teaching young children, which involves providing instruction to

young children according to their individual stages of development in order to help them achieve their learning goals. The three core considerations of developmentally appropriate practice include (a) knowing about child development and learning, (b) knowing what is individually appropriate, and (c) knowing what is culturally important.

This NAEYC (2009) definition also includes a position statement about developmentally appropriate practice in early childhood programs serving children from birth through age eight. The position statement begins with a discussion of the three critical issues that early childhood educators face in the current context of instructional practices. These issues include (a) reducing learning gaps and increasing the achievement of all children, (b) creating improved education for preschool and elementary children, and (c) recognizing teacher knowledge and decision making as vital to educational effectiveness (p. 2-5). In addition to these issues, this position statement also presents the following major considerations in relation to developmentally appropriate practice: (a) what is known about child development and learning; (b) what is known about each child as an individual; and (c) what is known about the social and cultural contexts in which children live (p. 9-10).

In their position statement, the NAEYC (2009) also defined the following 12 principles of child development and learning that inform practice for preschool education. These principles are as follows: (a) many aspects of children's learning and development follow well documented sequences, with later abilities, skills, and knowledge building on those already acquired; (b) development and learning proceed at varying rates from child to child, as well as, at uneven rates across different areas a child's individual functioning;

(c) development and learning result from a dynamic and continuous interaction of biological maturation and experience; (d) early experiences have profound effects, both cumulative and delayed, on a child's development and learning; and optimal periods exist for certain types of development and learning to occur; (e) development proceeds toward greater complexity, self-regulation, and symbolic or representational capacities; (f) children develop best when they have secure, consistent relationships with responsive adults and opportunities for positive relationships with peers; (g) development and learning occur in and are influenced by multiple social and cultural context; (h) always mentally active in seeking to understand the world around them, children learn in a variety of ways; a wide range of teaching strategies and interactions are effective in supporting all these kinds of learning; (i) play is an important vehicle for developing self-regulation as well as, for promoting language, cognition, and social competence; (j) development and learning advance when children are challenged to achieve at a level just beyond their current mastery, and also when they have many opportunities to practice newly acquired skills; and (k) children's experiences shape their motivation and approaches to learning, such as persistence, initiative, and flexibility; in turn, these dispositions and behaviors affect their learning and development (p. 11-15).

In addition to these 12 principles, the NAEYC (2009) position statement also includes five general guidelines for developmentally appropriate practice in the education of young children. First, classroom community involvement is encouraged and respected so that children recognize their place in the classroom and their ability to contribute. Second, relationship building is essential to development and learning. Children learn

through interactions with others including peers and adults through play, collaboration, investigation, conversation, and interaction. Third, through interaction and planning, teachers facilitate the development of a sense of responsibility and self-regulation to help children understand limits and accountability. Teachers understand and acknowledge feelings and frustration and guide children to learn appropriate problem solving skills. Fourth, teachers ensure that the classroom environment is healthy and safe and to make sure children have activity, sensory stimulation, rest, and proper nutrition within a balanced daily schedule. Finally, teachers set a positive social and emotional environment where children feel comfortable with taking appropriate risk in a classroom without fear, worry, or stress.

In their discussion of early childhood programs, Copple and Bredekamp (2009) expanded on the NAEYC's principals and guidelines by recommending the following developmentally appropriate instructional strategies for teachers to use in the classroom: (a) acknowledge children's ideas, (b) provide praise and encouragement, (c) provide specific feedback, (d) model appropriate behavior, (e) demonstrate procedures, (f) challenge children's abilities, (g) ask critical thinking questions, (h) provide cues to help children work through problems, (i) provide content information, and (j) provide directions for appropriate behavior (p. 20-22).

In addition to their position statement about developmentally appropriate practices, the NAEYC (2009) also established criteria for program standards that are used in states across the United States to accredit public preschool programs. The accreditation process is voluntary, and follows a four step process: (a) enroll and conduct a self-study,

(b) provide an application and self-assessment, (c) apply for candidacy, and (d)

participate in an observation by a NAEYC assessor. In the state where this study was

conducted, none of the preschool programs had pursued NAEYC accreditation.

The NAEYC (2011) website also posted standards documents for all early

childhood education programs, including preschool education programs. The NAEYC

standards for preschool programs address such topics as health, safety, developmental

needs, program requirements, staffing needs, professional development, family

involvement, how to handle child behavior, teacher-child interaction, the play

environment, material and equipment, curriculum, instruction, and assessment. These

documents also include a detailed description of each standard so that preschool teachers

and administrators will understand the expectations for each standard. Standards related

to the preschool program curriculum are described in the next section.

Preschool Program Curriculum

The NAEYC (2006) established national standards that preschool administrators

and teachers should use to develop and implement preschool program curricula. The

NAEYC recommendations are that preschool curricula, as reflected in these standards,

should be (a) developmentally appropriate, (b) align with the program's philosophy, (c)

direct program planning, instruction, and assessment, (d) flexible to schedule changes and

children's needs, (e) appropriate for a variety of cultures and socio-economic differences,

and (f) properly implemented through play. The NAEYC curriculum standards are

guidelines for preschool educators to follow, but they are not mandatory. Neuman and

Roskos (2005) stated that the NAEYC position on language and literacy includes the

following expectations: (a) children should engage in literacy through meaningful experiences, (b) literacy skills are a continuum and not sequential, (c) teachers are familiar with typical variations among literacy skills, (d) teachers should respect children's home language and culture, and (e) teachers need to use multiple modes of assessment.

Fuentes (2010). described the Head Start Child Outcome Framework, which allows administrators and teachers of individual Head Start programs to make individual curriculum adoptions; however, the designated curriculum must also be developmentally appropriate, research-based, and aligned with the national standards for Head Start programs. The framework focuses on language development in relation to receptive and expressive language. Receptive language includes conversation, songs, varied vocabulary, forms of language, and grammatical structure. Expressive language includes communication with others, expression of ideas, different forms of language, grammatical structure, storytelling, and conversation. The framework also emphasizes the literacy skills of book knowledge and phonological awareness. Book knowledge includes looking at books, recognizing the basic characteristics of a book, asking and answering questions, demonstrating interest, and retelling stories. Phonological awareness includes the ability to identify and discriminate between words in language, syllables, sounds, beginning and ending sounds, and same sounds.

For this study, a review of the research literature indicated a number of research studies related to preschool program curricula. In a discussion of enhancing early literacy skills for preschool students through professional development, Landry, Swank, Smith,

Assel, and Gunnewig (2006) noted that Head Start program personnel have struggled to find a developmentally appropriate curriculum design that balances literacy skills, cognitive focus, and social-emotional development. When low-income children experience a high quality preschool program, the chance that they will experience serious reading problems is reduced. Landry et al. found that students learn language, cognitive, and social-emotional skills best when the content accompanies their interests and invites cooperative learning and trust.

In an evaluation of curriculum, setting, and mentoring on the performance of students enrolled in pre-kindergarten, Assel, Landry, Swank, and Gunnewig (2007) used a pre-test/post-test design method to compare two popular preschool curricula because they believed that the type of curriculum available to public preschool programs influences children's literacy skills. In their study, Assel et al. compared two popular curricula, Let's Begin with the Little People and Doors to Discovery. Assel et al. found that preschool students in the experimental group who used both curricula improved their literacy skills as compared to students in the control group.

In a study that investigated a preschool emergent literacy curriculum, DeBaryshe and Gorecki (2007) used an experimental design to examine the effectiveness of curriculum for literacy instruction. The hypothesis of their study was that preschool students need to be competent in oral language, phonemic awareness, alphabet knowledge, and print awareness. The pretest and posttest contained three language and reading assessments, including the Expressive One-Word Picture Vocabulary Test, the Test of Early Reading Abilities 3, and the Preschool Comprehensive Test of Phonological

Processing. DeBaryshe and Gorecki found that the tested curriculum in the experimental group was more effective in improving literacy skills for preschool students than the standard curriculum used in the control group.

In another related study, Justice, Mashburn, Pence, and Wiggins (2008) examined the quality of language and literacy instruction in prekindergarten programs for at-risk students. They used an experimental design to conduct this study. Justice et al. examined the Language-Focused Curriculum published by the University of Kansas. They examined predictors of expressive language, including "syntactic construction encompassing verb phrases structures, adjective/object descriptions, pronouns, and prepositions" (p.985). The goal of this study was to conduct an experimental evaluation of a preschool language curriculum in relation to its influence on students' expressive language skills. Justice et al. found that the examined language curriculum helped preschool teachers provide effective language instruction and increased expressive language skills in the experimental group compared to the control group.

In another study, Fischel et al. (2007) used a mixed methods design to present an evaluation of curricular approaches used to enhance preschool early literacy skills. In this study, Fischel et al. compared two supplementary literacy curricula, Let's Begin with the Letter People and Waterford Early Reading program Level I, which were used in addition to the High Scope curriculum model. The control group used only High Scope while the experimental group used High Scope with the addition of the two supplemental literacy curricula. In their examination of students with delays in letter knowledge, vocabulary, and print concepts, Fischel et al. found that these delays in the development of literacy

skills often lead to long-term negative effects. They also found that skills improve when supplemental curricula is used.

In summary, researchers found that a developmentally appropriate curriculum increases literacy skills among preschool students. Many developmentally appropriate curricula that teachers use in preschool programs meet the NAEYC criteria for developmentally appropriate instruction. The Head Start program has adopted curricula that meets the Child Outcome Framework and is research-based. These curricula are focused on language development in relation to receptive and expressive language skills and phonological awareness.

Preschool Program Instruction

The NAEYC (2006) established criteria for developmentally appropriate instructional practices in preschool classrooms. The NAEYC recommended that instruction should emphasize the importance of play, social-emotional development, language development, and teacher child interactions. Specific criteria for these developmentally appropriate instructional practices are as follows: teachers should (a) provide inviting and engaging play opportunities; (b) use a variety of teaching strategies; (c) promote teacher and child initiated activities during play; (d) create a positive emotional classroom environment; (e) encourage self-reliance and exploration; (f) encourage children to share, take turns, problem solve, and negotiate; (g) be active listeners and participants in order to respond to questions and ask open-ended questions; (h) encourage students to build close relationships with their peers. The NAEYC maintained that these instructional strategies reflect the best developmentally appropriate

practices that teachers can use to strengthen literacy skills and academic and social-emotional growth.

In relation to these NAEYC guidelines, the Head Start (2010) program also requires teachers to provide children with the opportunity to explore and to participate in free play, and instruction must be intentionally appealing to young children. Instruction should be child focused with the child's best interests in mind when planning instruction. Head Start guidelines require that teachers should guide children through scaffolded instruction, which involves teaching new skills by building on a child's prior knowledge and previously learned skills. Such instructional practices reflect developmentally appropriate literacy instruction.

The research literature also revealed a number of current studies related to developmentally appropriate instruction in preschool programs. McGee and Ukrainetz (2009) used a phenomenological research design to examine how scaffolding improves instruction through teacher-child interaction. McGee and Ukrainetz investigated how the instructional strategy of scaffolding provides guidance to help preschool students master specific literacy skills. They found that, by scaffolding instruction, teachers determine how much support to give students so that they can master specific skills. In addition, teachers need to provide focused comments or clarifying questions to guide students toward this mastery. McGee and Ukrainetz concluded that high quality scaffolding involves asking many questions that vary in complexity and providing feedback to enhance the literacy development of students.

In another study about developmentally appropriate preschool instructional practices, Howes et al. (2008) examined the prediction of student outcomes at the end of kindergarten based on the quality of prekindergarten teaching, instruction, activities, and caregiver sensitivity. They compared data from different types of preschool programs offered across 11 states to a study conducted by the National Center for Early Development and Learning (2001). Howes et al. found that effective instruction requires sensitive interaction between teachers and students and that instruction should be play-based in order to encourage a positive social environment. Howes et al. also found that students' conversation with their teachers and peers enhances their oral language skills and that teachers facilitate learning by interacting with students through play and asking open-ended, higher level questions to promote creativity, problem-solving, and reasoning abilities.

In a related study about instruction in preschool programs, Schechter and Bye (2007) used a mixed methods design to examine the language achievement of students entering kindergarten. In this study, kindergarten students came from public preschool classrooms that were filled with students from low and middle-income families. Schechter and Bye found that students in an economically integrated classroom improved their language achievement more than those students who were enrolled in low-income only classrooms. Shechter and Bye attributed this increase in language achievement to a higher quality of oral language instruction in the integrated classrooms.

Culatta, Hall, Kovarsky, and Theadore (2007) also conducted a mixed methods investigation into the use of a contextualized approach to language and literacy. Culatta et

al. used pretests and posttests to examine instructional literacy models used in three different preschool programs. The participants of this study included 3-year-old and 4-year-old children in Head Start programs in two states. Culatta et al. examined the early literacy skills of letter knowledge and rhyme skills in relation to these three models of literacy instruction. The first model, explicit instruction, involved instruction in relation to a developmental sequence of skills, and a structured and systematic approach was used. The second model, implicit instruction, was instruction based on developmentally appropriate activities in which teachers emphasized engagement in learning through hands-on play. The third model, integrated instruction, combined explicit strategies through meaningful hands-on literacy activities. Culatta et al. found that student's engagement in learning increased when they interacted with the teacher. In addition, student's language development benefited from frequent and flexible reciprocal conversation with their teachers.

In summary, these studies indicate that the expectations for high quality and developmentally appropriate literacy instruction in preschool programs have changed over the past decade. The NAEYC and the Head Start program have endorsed the importance of teacher-child interaction and play as a part of developmentally appropriate instructional practice. The research studies described in this section also support the importance of teacher-child interaction in relation to quality literacy instruction, which often leads to academic success in kindergarten.

Preschool Program Assessment

The NAEYC (2006) also published recommendations concerning how teachers should use assessments in developmentally appropriate preschool classrooms. These assessments standards include the following: (a) using multiple types of assessment strategies in the classroom, including formal and informal assessments; (b) examining instructional goals, monitoring individual progress, and supporting learning; (c) including tests, observations, checklists, and portfolios; (d) including objectives for written lessons; (e) examining student cognition and language development; (f) being sensitive to culture, to disabilities, and to the home language; and (g) using assessments that are meaningful, accurate, reliable, and valid. Thus, the NAEYC established clear standards for assessment use in preschool classrooms.

A review of the research literature also revealed a number of studies that researchers have conducted on assessment strategies that teachers use in preschool programs. Roach, McGrath, Wilson, and Talapatra (2010) examined the alignment of an early childhood assessment to state kindergarten content standards through the application of a nationally recognized alignment framework. Roach et al. found that a connection between early childhood assessment and kindergarten standards. In their conclusion, they emphasized the importance of an alignment between kindergarten content standards and standardized assessments of Head Start programs used by local school districts and state and federal programs.

In a study about early literacy measures for improving student reading achievement, Marston et al. (2007) conducted a mixed methods investigation to examine

preschool literacy-screening tools known as curriculum-based measurements (CBM), which are often used to assess student achievement in relation to specific literacy skills such as letter and sound knowledge and phonemic identification and segmentation. Marston et al. conducted criterion validity and reliability test-retest analyses to examine the impact of phoneme identification on students' kindergarten readiness. Marston et al. found that teachers used the CBM data in relation to two different instructional models. Teachers used the problem-solving model to provide instruction for most students in the classroom. Teachers used the intervention model to provide specific types of intervention strategies for those students who were not mastering the learning. Marston et al. also found that teachers effectively used CBM data to determine benchmarks and design interventions.

In recent years, assessment of literacy skills has become a central concern for preschool educators, especially among students of low socioeconomic status who often enter school behind their peers. Students who master emergent literacy and numeracy concepts in preschool may experience later academic success. In their study about the timing of literacy assessment in kindergarten, Santi, York, Foreman, and Francis (2009) noted that kindergarten students are usually assessed in the fall and again in the spring to provide evidence of their strengths, weaknesses, and growth in learning. They found that assessment in the winter is more helpful to planning instruction than assessment in the fall.

In order to detect reading difficulties early, Invernizzi, Justice, Landrum, and Booker (2005) developed a literacy screening tool, known as the Phonological Awareness

Literacy Screener (PALS), to target potential reading difficulties for students who fall below the benchmark score. Invernizzi et al. described the widespread implementation of this instrument in the state of Virginia. The screening tool contains four main components, including phonological awareness, alphabet knowledge, print knowledge, and grapheme-phoneme correspondence. Invernizzi et al. maintained that PALS is broad-based, sensitive, effective, accurate, easy to use, efficient, valid, reliable, and provides transparent quantitative results. Invernizzi et al. also argued that this screening tool provides an accurate measurement of a student's current literacy skills that teachers should use to design effective interventions.

In another study about preschool assessment, Welsh, Nix, Blair, Bierman, and Nelson (2010) used a quantitative path analysis to examine the development of cognitive skills and gains in academic literacy skills for students from low-income families. Welsh et al. tested the specific factors of working memory and attention control to predict academic growth. Welsh et al. found that, as working memory and attention increased, language development improved as well as storage and retrieval of information in the brain.

In a related study on assessment and early literacy skills, Piasta and Wagner (2010) conducted a meta-analysis of studies about alphabet learning and instruction. Piasta and Wagner found that preschool students who struggle with letter recognition and sounds have more difficulty with reading in kindergarten. Piasta and Wagner also found that letter naming and sound knowledge predict reading and spelling achievement. In addition, they found that the duration of letter knowledge instruction improves learning

and that small group instruction is efficient and effective in improving student achievement in literacy. They concluded that instruction needs to be focused on the specific skill of letter knowledge instead of as part of a larger instructional objective.

In another study about assessment, Lonigan et al. (2009) used a cross-sectional confirmative factor analysis to examine the nature of preschool phonological processing abilities and their relations to vocabulary, general cognitive abilities, and print knowledge. Lonigan et al. defined phonological awareness as the oral manipulation of sounds that leads to the pre-reading concepts of letter sounds, blends, rhyme, and syllables. Phonological memory connects to understanding letter knowledge, phonemes, and word meaning, as well as to coding and decoding sounds in temporary memory. Lonigan et al. found that phonological skills are strongly influenced by oral language, cognitive development, and print knowledge. They concluded that a high level of phonological awareness is a predictor of kindergarten reading skills.

In a related study, Kendeou, White, Van Den Broek, and Lynch (2009) used a cross-sequential design to predict reading comprehension in early elementary school by examining the independent contributions of language and decoding skills. Kendeou et al. specifically examined the long-term effects of phonological awareness and decoding on the reading comprehension of preschool and kindergarten students. Kendeou et al. compared phonological awareness results with the development of oral language, decoding, and comprehension skills. Kendeou et al. questioned if oral language and decoding skills develop independently or interdependently. They found that oral language skills and decoding skills independently predict reading comprehension by second grade.

In another assessment study, DeThorne, Petrill, Schatschneider, and Cutting (2010) used a mixed methods design to conduct an investigation of conversational language use as a predictor of early reading. DeThorne et al. found that commonalities exist among the concepts of phonological awareness, oral language, and literacy development. DeThorne et al. also found that phonological awareness, working memory, and executive function play an important role in reading development and that oral language development ability predicts reading comprehension levels for upper elementary students. DeThorne et al. concluded that oral language affects reading comprehension through the development of oral vocabulary, which later enhances reading vocabulary and comprehension.

In summary, the research literature revealed a number of insightful studies about assessment issues related to preschool programs. The PALS provides an accurate measurement of a student's current literacy skills that teachers should consider using to design effective interventions. In addition, high level of phonological awareness is often a predictor of kindergarten reading skills and oral language skills and decoding skills often predict reading comprehension skills for elementary school students. In particular, oral language skills impact s reading comprehension skills, particularly in relation to the development of oral vocabulary.

Teacher-Child Interaction

The concept of teacher-child interaction as a foundation for developmentally appropriate practice emerges throughout the research literature as a key predictor of school readiness. When a teacher and child are engaged, each focuses on learning.

Teachers extend and expand a child's learning through conversation and individualized instruction. Teachers also enhance social play and language skills through the facilitation of conversation among students in peer groups (Rimm-Kaufman, LaParo, Downer, & Pianta, 2005).

The concept of teacher-child interactions appears frequently in the research literature about developmentally appropriate practice for preschool programs. In addition to new performance standards, the Head Start (2010) organization mandated the use of the CLASS instrument in order to examine the quality of the program, including teacher-child interaction. If the preschool program does not meet the minimum standards established by the CLASS instrument, Head Start personnel investigate the program to determine why and to consider improvements. In a similar fashion, administrators in this study evaluated the Title I preschool program and the state-funded preschool program by using the CLASS instrument to examine teacher-child interaction as partial evidence of program quality.

For many years, the ideal preschool classroom personified an environment of warmth, caring, and responsiveness, which was also motivating and engaging. Researchers did not examine the role that teacher-child interaction contributed to the learning environment. However, a number of current research studies found in this review focus on an examination of teacher-child interaction in relation to student learning. In a discussion of quality in kindergarten classrooms, LaParo et al. (2009) used a case study to examine observational evidence for the need to increase students' learning opportunities in early education classrooms. LaParo et al. believed that learning is related

to a child's interaction with the environment and the teacher. LaParo et al. conducted a comprehensive assessment of the quality and frequency of these interactions, using the ECERS and the CLASS instrument, which compared the relationship between the types of activities in the classroom and student learning opportunities. LaParo et al. found that ECERS and CLASS provide a strong picture of the quality of classroom instruction and the importance of teacher-child interaction in preschool instruction.

In a case study about teacher-child interaction, Rimm-Kaufman, LaParo, Downer, and Pianta (2005) investigated the contribution of classroom environment and quality of instruction to students' behavior in kindergarten classrooms. Rimm-Kaufman et al. wanted to know how classroom structure based on the teacher-child interaction model affected the behavior of preschool students. Rimm-Kaufman et al. found that teachers reported fewer behavior problems when students engage in learning and that the level of teacher-child interaction supports and improves emotional development and academic learning. Rim-Kaufman et al. concluded that effective teachers use scaffolding to support learning by asking questions and providing meaningful feedback to students.

In another case study about teacher-child interaction, Pianta and Hamre (2009) examined how the preschool classroom environment improves the interaction between young children and their teachers. Pianta and Hamre used the CLASS instrument to provide feedback to teachers on their instructional strengths and weaknesses in order to raise the quality of instruction. Pianta and Hamre proposed several changes that needed to be made to improve teacher-child interactions. One of these changes was that teachers should be trained in how to develop strong teacher-child interactions.

Downer, Kraft-Sayre, and Pianta (2009) also used a case study design to investigate ongoing, web-mediated professional development in preschool programs that were focused on teacher-child interaction. They began their study by describing a need to create a professional development program to provide training for preschool teachers in order to improve teacher-child interaction in the classroom. Downer et al. conducted observations using the CLASS instrument, and they provided feedback to teachers on the quality of teacher-child interactions that they observed. Downer et al. found that professional development on teacher-child interaction was critical to training teachers in how to properly interact with students to promote learning. Downer et al. also found that providing web-mediated consultation and web-based resources increased teacher engagement in learning how to improve teacher-child interactions as an instructional practice for literacy and language.

In another study, Curby, Grimm, and Pianta (2010) examined how teacher-child interaction changes during the school day. Curby et al. explored the stability of these interactions throughout the day in relation to consistency of instruction. They maintained that students need predictable classroom environments because unpredictable classroom environments negatively influence learning and behavior. Transitions between scheduled activities also naturally reduce these teacher-child interactions. Curby et al. discovered that during the first two hours of the day, instructional quality remains consistent, and classroom organization and emotional support does not seem to influence instruction.

Mashburn et al. (2008) used a case study research design to examine measures of classroom quality in preschool children's development of academic, language, and social

skills. Mashburn et al. used the ECERS and the CLASS observation tools to observe indicators of high quality in relation to program infrastructure and design, including teacher-child interaction. Mashburn et al. found that high quality teacher-child interactions contribute to student mastery of early literacy skills in prekindergarten classrooms.

In another case study, Chien et al. (2010) examined student engagement in learning and literacy skills gains in prekindergarten. Chien et al. used the ECERS and the CLASS observation tools to observe preschool classrooms in multiple states. In addition to observations of classrooms, Chien et al. assessed the language and literacy skills of the preschool students in these classrooms. Chien et al. found that students who received individualized instruction through quality teacher-child interactions made higher gains than students who received whole group instruction.

In a groundbreaking study, LaParo, Pianta, and Stuhlman (2004) gathered data from preschool programs in the state of Virginia, using the CLASS instrument to establish a set of common indicators of quality for preschool classrooms. LaParo et al. observed preschool classrooms in order to pilot the CLASS observation tool. They gathered data using a time sampling method. LaParo et al. found that strong teacher-child interaction consistently reflects high quality instructional practice. LaParo et al. also found that the cognitive development of preschool students was enhanced when teachers provided appropriate feedback to them. Feedback was defined as an exchange between the teacher and students through a series of open-ended questions to expand student

thinking. LaParo et al. concluded that teacher-child interaction is an indicator of high quality instruction.

Burchinal et al. (2008) used a mixed methods design to predict student learning outcomes at the end of kindergarten, based on prekindergarten teaching, instruction, activities, and caregiver sensibility. Burchinal et al. examined publically funded preschool classrooms by using the ECERS and the CLASS instruments. They specifically examined students at-risk for reading failure due to socio-economic factors. Burchinal et al. found that instructional quality is based on engaging students in literacy skills activities through teacher-child interaction and play. Burchinal et al. also found that the production of high quality instruction predicts the acquisition of the literacy skills needed in kindergarten.

In summary, these studies indicate that teacher-child interaction is a developmentally appropriate approach to improve literacy skills for preschool students. This interaction draws students into the learning and engages them in literacy activities through individualized instruction. In addition, this interaction through conversation expands students' literacy knowledge and skills and enhances their social skills through peer and adult play.

Role of Play

In his definition of play, Piaget (1962) maintained that play is different from other behaviors because it is a behavior without a specific objective or reason. Piaget also believed that play is balanced between states of disequilibrium and equilibrium as the child develops schema in order to exercise personal power and self-awareness. Piaget

believed that play is a spontaneous task. In other words, play is for pleasure and for the sake of itself. Piaget also argued that play often demonstrates a lack of organization and an avoidance of conflict. In addition, Piaget argued that play is an unrestricted, imaginative, and pleasurable activity that often involves symbolic representation, which is defined as using an object to represent another object (i.e. using a cube block to represent a car moving along a track). Piaget noted that "play is distinguishable by a modification, varying in degree, of the condition of equilibrium between reality and the ego" (p.150). Piaget believed that when children learn new information, they use the processes of accommodation and assimilation to connect the new information with past experience, and the new schema becomes part of their general knowledge during equilibrium. Therefore, play provides a balance between the reality of the world and the ego's need for a positive self-image.

Vygotsky (1986) supported Piaget's understanding of play because he believed that children learn cultural and social rules through fantasy play. Vygotsky argued that play gives children a chance to practice self-regulation of these rules without consequences. Play is a way for children to learn increasingly mature social behavior. Vygotsky also believed that as teachers and students interact in the zone of proximal development, the teacher is responsible for using play to scaffold instruction.

The NAEYC (2006) also developed national standards related to the role of play in early childhood education programs. These standards include: (a) play develops a deeper understanding of complex comcepts, (b) children are eager to play in order to understand the world around them, (c) play teaches children self-regulation, langague and

cognitive skills, and (d) play challenges children to work towards a higher level of skill. In a position statement, the NAEYC asserted that play is a critical element in relation to teacher use of developmentally appropriate practices in all early childhood programs. Teachers who use play as part of their instruction must consider developmentally appropriate practice that includes treating children as individuals and providing instruction to match their academic and developmental needs.

In relation to the field of psychology, Sutton-Smith (1997) suggested that play is an ambiguous behavior that occurs at all ages. Sutton-Smith also described various play forms. First, mind play, such as daydreaming, occurs internally. Second, solitary play, such as reading to a book or listening to music for pleasure, occurs in isolation. Third, playful behavior, such as making a joke, holding or putting a ball into play, and fair play, includes ambiguous behavior. Fourth, informal social play, such as parties, traveling, or dancing, occurs during informal social events. Fifth, audience play, such as watching movies, going to concerts, fairs, and festivals, and enjoying parks, occurs when a person participates as an audience member. Sixth, performance play, such as playing an instrument or acting, involves the intent of performing for an audience. Seventh, in celebration play, such as recognizing holidays or participating in contests and games, involves participating in enjoyable social events. Finally, risky play, such as rock climbing, rafting, and extreme sports and games, involves play with a high level of personal risk. Sutton-Smith also argued that play is influenced by heredity, culture, and social elements such as family, peer, and gender role differences. Sutton-Smith believed that play occurs universally among humans and some higher functioning animals and its

main function is to support a child's growth and socialization. Sutton-Smith maintained that the modern view on play emphasizes a child's sense of security, sensorimotor stimulation, exploratory curiosity, and need for socialization. Sutton-Smith also argued that play is a way for children to integrate and model situations in order to relive past events, understand present events, and anticipate future events.

Hirsh-Pasek and Golinkoff (2011) also discussed the importance of play in a recent book, maintaining that "playful learning is a whole-child approach to education that includes both free play and guided play, each of which is related to growth in academic and social outcomes" (p. 112). Hirsh-Pasek and Golinkoff noted that free play and dramatic play are enjoyable and have no specific goals. Free play is spontaneous, active, engaging, and is not literal. Guided play is structured and contains a goal. The teacher creates an environment to stimulate the child's natural curiosity and to promote exploration and discovery. Hirsh-Pasek and Golinkoff also contended that guided play often involves scaffolding with objects of varying developmental levels in order to provide a developmentally appropriate learning experience. Teachers interact with students to promote self-discovery and to ask open-ended questions in order to encourage exploration.

In their discussion of early childhood programs, Copple and Bredekamp (2009) also discussed different kinds of play, including physical play, object play, pretend play, dramatic play, constructive play, and games with rules. They believed that play serves an important role in all stages and categories of development, including physical, cognitive, language, emotional, and social. From infancy, children play as they interact and explore

the world around them for pleasure and to satisfy their curiosity. By the time children are

toddlers, they develop imaginative play. For example, children may imagine a banana as

a phone. In the preschool years, Copple and Bredekamp argued, children will often

involve others in their play as they act out imaginative roles and interact with others who

are also playing different roles.

The research on play and its importance in the field of early childhood education

has been well documented. In an examination of play and early literacy development,

Christie (1991) noted that psychologists began research into the role of play in the

education of young children in the 1930s. During the 1970s, research on the role of play

was found in over 200 books and journal articles. When the Head Start program became a

major focus in the prevention of the risk factors of poverty, Christie noted that their focus

was on developmental growth in social, language, and cognitive skills through play.

Christie also argued that the philosophy of constructivism influenced perspectives on the

cognitive complexities of play that enhance child development because play provides an

opportunity to practice the concepts of accommodation, assimilation, and equilibrium in a

developmentally appropriate way.

The research literature also supports the importance of play in early childhood

education, particularly in relation to the development of literacy skills. In a discussion of

using guided play to enhance students' conversation, creativity, and competence in

relation to literacy skills, Tsao (2008) noted that "play is a significant medium for

children's literacy development" (p. 515). Tsao believed that play is social engagement,

which supports Vygotsky's theory about the cognitive development of children through

social interaction. Through guided play, Tsao concluded, children develop literacy skills through engagement in play activities and conversation with peers that help them develop early reading and writing competence.

In a discussion of developmentally appropriate practice in the preschool years from ages three to five, Tomlinson and Hyson (2009) believed that play is an important contributor to language, cognitive, and social skills. They also believed that play helps children feel in control of their environment in addition to helping them develop vivid and meaningful mental pictures to accommodate new language and social competencies. Tomlinson and Hyson maintained that children interact with peers through play by imitating their speech and actions in order to learn basic language and social skills. Tomlinson and Hyson also believed that pretend play guided by a teacher contributes to significant growth in students' cognitive and language skills. When children interact with their peers, play becomes more complex, social, and less egocentric. As play becomes more complex, children are able to develop scenarios that are more sophisticated because they begin to substitute environmental objects for imaginary objects. Tomlinson and Hyson believed that the level of engagement increases in complexity as play becomes child-driven, and the child extends his or her imagination and creativity.

In other research related to play, Chien et al. (2010) used a mixed methods design to examine student's classroom engagement and literacy skills gains in prekindergarten. Chien et al. used two instruments, the ECERS and the CLASS, to measure the literacy skills of prekindergarten students. Chien et al. found that dramatic play gives preschool students an opportunity to experiment with symbolic thinking and to express creativity by

acting out imaginary stories. Preschool students who engage in dramatic play transform basic toys and other objects into imaginary cars, family activities, and complex scenarios. Chien et al. also found that teacher-child interaction through play resulted in higher student engagement in learning and improved scores on the literacy assessments.

In summary, the research literature clearly indicates developmentally appropriate practices in preschool programs involve the establishment of clearly defined standards and curricula, instruction, and assessments and an emphasis on teacher-child interaction and play. In particular, play is an important part of improving literacy skills for students in preschool classrooms. In order to ensure preschool program quality, the classroom teacher also needs to provide high quality teacher-child interaction. Administrators in Head Start preschool programs and many state-funded preschool programs also support the use of the CLASS instrument in order to develop high quality preschool programs. In order to achieve a high rating on the CLASS observation tool, quality teacher-child interaction is necessary and plays an important part in developmentally appropriate practice. The research indicates that literacy skills are often best learned through play as teachers engage preschoolers in conversation and ask higher level questions.

High Quality Preschool Classrooms

According to the NAEYC (2009), teachers in high quality preschool programs should use developmentally appropriate practices. The NAEYC also placed a strong emphasis on language and social development to address the socioeconomic achievement gap. The quality of preschool programs varies due to a lack of funding and the lack of a standardized accreditation process, and therefore, the NAEYC argued that standardized

quality indicators for the education and care of young children are important. The United States Department of Education also established specific requirements for all Title I programs, and the State Department of Education where this study was conducted created the Foundation Blocks standards for the state-funded preschool program. Each group mandated standards and requirements to define high quality programs.

A number of studies were found in the research literature in relation to the quality of preschool programs, particularly in relation to the instructional practices in the classroom. However, the establishment of quality standards continues to change, based on current research (Smart Beginnings, 2010). In order to evaluate quality, the State Department of Education where this study was conducted created a quality rating system known as the Star Quality Initiative. This rating system involved the use of the ECERS-R and the CLASS observation instruments. This rating system is described in the next few sections.

Star Quality Rating Initiative

The State Department of Education in this eastern state has placed a strong emphasis on the quality of preschool programs across the state. The State Department of Education created the Star Quality Rating Initiative system (SQRI), which consists of a rating system that uses from one to five stars. One star represents the lowest quality preschool program, and five stars represent the highest quality preschool program. In order to evaluate this quality, state educators use two research-based rating scales. Preschool educators use ECERS-R to examine the physical environment of the preschool classroom, and they use the CLASS instrument to examine the instructional strategies

used in the classroom for evidence of developmentally appropriate practice (Smart

Beginnings, 2010).

Smart Beginnings (2010) is a network of locally operated coalitions in this eastern

state that works to monitor the quality of early childhood programs. The director of Smart

Beginnings (2010) governs the SQRI, which mandates that high quality preschool

programs have common characteristics. Classrooms are assessed through the use of the

CLASS instrument and the ECERS-R. Smart Beginnings raters assess early childhood

programs to provide feedback on program quality and to communicate how to improve

instruction to teachers and other educators connected to these programs. The SQRI

clearly defines high quality standards and provides a framework of accountability. Smart

Beginnings raters use a five-star scale to show different levels of quality to inform the

public of the quality of the program. This rating system also consists of four overarching

standards: qualifications and training, interactions between teachers and students staff

ratio and group size, and the classroom environment and instruction.

Early Childhood Environmental Rating Scale Revised

Early childhood educators use the ECERS-R to examine the physical environment

of the classroom, making sure it is safe and healthy for all children. The checklist consists

of 43 individual indicators that include furniture, equipment, physical space, routines,

meals, rest, toileting, health, books, higher level questioning, informal interactions,

music, blocks, technology equipment, diversity, supervision, peer interactions, schedules,

disability services, staff provisions, and professional needs (FPG Child Development

Institute , 2012).

The ECERS-R was developed in the United States in the 1980s by Harms and Cliffords and revised in 1998 through collaboration with Columbia University, the University of Chicago, and Harvard University. Preschool program administrators use the ECERS-R during their observations of the preschool classroom environment. The ECERS-R is the most commonly used observation tool to evaluate preschool programs in a consistent manner (Sakai, Whitebrook, Wishard, & Howes, 2003). Preschool educators currently use the ECERS-R to rate preschool program quality, based on classroom environment, activities, and interactions. The ECERS-R is divided into seven criteria that are used to observe developmentally appropriate instructional practices used in the classroom, including personal care routines, space, and furnishings, language reasoning, activities, program structure, interactions, and parent and staff needs.

Classroom Assessment Scoring System

Early childhood educators use the CLASS instrument to observe the following indicators in a preschool classroom: (a) the climate of the classroom; (b) the sensitivity of the teachers to children's needs and perspectives; (c) appropriate behavior management; (d) the productivity of the flow of the classroom's routines and procedures; (e) provisions for learning objectives and materials which facilitate learning through the children's interests; (f) conceptual development; (g) how to provide quality feedback to enhance learning; and (h) modeling feedback through open-ended questions (Pianta, LaParo & Hamre, 2008).

LaParo, Pianta, and Stuhlman (2004) created the CLASS observation tool to examine teacher-child interactions in the classroom environment. They used the CLASS

instrument in a multistate study that included observations in 200 preschool classrooms. LaParo et al. began this study on the premise that high quality classrooms demonstrate high levels of activity and that preschool students with higher levels of academic learning also display a higher level of social competence. For this study, LaParo et al. used several different measurement instruments, including the ECERS-R. They also used the Classroom Practice Inventory that the NAEYC created in 2002 to examine developmentally appropriate practice. LaParo et al. used the Early Childhood Classroom Observation Measure to assess instructional practice and classroom climate. They also used the Observational Record of the Caregiving Environment, which consists of a time-sampling coding system, to analyze occurrences of caregiver interaction with children. In addition, they used the Caregiver Interaction Scale to examine teacher-child interactions. Thus, the CLASS instrument incorporated elements from each of these evaluation tools.

Figure 1 displays the conceptual model that explains the structure of the CLASS instrument. As this figure illustrates, the quality of a teacher's interaction is based on emotional support, classroom organization, and instructional support that will improve student outcomes and achievement. Emotional support consists of observable evidence of positive climate indicators, negative climate indicators, the teacher's sensitivity to the students; needs, and a regard for the students' perspectives. Positive climate indicators show an emotional nurturing environment. Negative climate indicators show an environment that may negatively influence a child. Classroom organization shows how the teacher's classroom is constructed to promote positive behavior through a consistent and emotionally supportive classroom management system. The classroom should be

organized for productive learning through instructional learning formats within a routine schedule. Instructional learning formats include time for whole group, small group, play, and individual attention to students. Instructional support includes procedures that promote learning skills where students can understand content through interaction with the teacher. Teachers facilitate learning by providing high quality feedback to students. This feedback is provided through questioning to encourage students to think creatively and articulate knowledge.

Figure 1. *Conceptual Model of CLASS*

Quality of Teacher-Structure Interaction

Emotional Support Positive climate Negative climate Teacher sensitivity Regard for student perspectives	Classroom Organization Behavior Management Productivity Instructional learning formats	Instructional Support Procedures and skills Content understanding Analysis and problem solving Quality of feedback

Student Outcomes Student Engagement

Figure 1. A graphic representation of the three dimensions and indicators of the Classroom Assessment Scoring System observation instrument. Adapted from "Classroom processes and positive youth development: Conceptualizing; measuring, and improving the capacity of interactions between teachers and students," by Pianta, R., & Hamre, C. (2009). *New Directions for Youth Development*, p. 35.

In summary, early childhood educators have established standards to ensure high quality preschool programs. In the state where this study was conducted, early childhood educators evaluated all preschool programs according to the standards established in the SQRI. A state-trained rater gives each preschool program a star rating based on results from the ECERS-R and the CLASS observation instruments.

Literacy Instruction in Preschool Programs

Literacy instruction in the Head Start program, the Title I program, and the state-funded preschool adheres to the goals for developmentally appropriate practices that the NAEYC (2009) published. This position statement argues that (a) all developmental domains are important and interrelated; (b) a child's development, knowledge, and skills are sequential and cumulative; (c) each individual child learns and develops at different rates across all areas; (d) a child learns and develops through maturation, experience, and interaction with the environment; (e) early experiences deeply impact a child's development and learning; (f) development proceeds toward greater complexity, self-regulation, and symbolic or representational capacities; (g) relationships with adults and peers impact development; (h) a child develops and learns within a social and cultural context; (i) a child learns in a variety of ways which require varied teaching strategies; (j) play is essential to the development of self-regulation, language, and cognition; (k) development and learning result through incremental challenges and practice above the individual child's mastery level; and (l) development and learning are effected by an individual child's motivations and disposition.

In addition to this position statement, the NAEYC (2009) supports teacher use of the following developmentally appropriate practices in literacy instruction in order to build reading success for preschool and kindergarten students: (a) reading aloud to children, (b) exposure to concepts about print, (c) vocabulary development, (d) repeated readings, (e) clarifying the concept of word, and (f) letter naming. The following sections include a review of the literature in relation to instructional practices that teachers

currently use to improve the literacy skills for students in each of the preschool programs involved in this study.

Head Start Preschool Program

In the school year 2010-2011, Head Start program personnel revised their performance standards to more closely match the national and state standards and assessments in reading and writing that were developed under the direction of the NCLB mandate. According to The Head Start Child Development and Early Learning Framework (Fuentes, 2010), these performance standards defined the literacy goals for kindergarten students. There are 11 domains, 37 elements, and 100 examples within the framework. The largest domain categories include: (a) literacy development; (b) cognitive development; (c) building prior knowledge; (d) approaches to learning; (e) large and small motor development; and (f) social-emotional development (p. 2-3). In relation to the domain of literacy development, performance standards were developed to address the following needs: (a) receptive language, (b) expressive language, (c) book appreciation, (d) phonological awareness, (e) alphabet knowledge, (f) print concepts and conventions, and (g) early writing (p. 6).

In a study about preschool literacy instruction, Magnuson, Ruhm, and Waldforgel (2007) examined the academic skills of students entering kindergarten from the Head Start program. They used a mixed methods design to examine the connection between reading skills and grade retention. Magnuson et al. found that students who came from public preschool programs, such as the Head Start program, entered kindergarten with higher academic skills in mathematics and literacy than their peers who came from

private child care programs. Magnuson et al. also found that when Head Start students were given high quality reading instruction that included letter recognition, phonemic awareness, and understanding of rhyme, and print awareness, they entered kindergarten ready to learn.

In a related study, O'Leary, Cockburn, Powell, and Diamond (2010) examined the instructional strategies that Head Start teachers used to improve students' phonological awareness and vocabulary knowledge. O'Leary et al. conducted group interviews with Head Start teachers to identify effective instructional strategies. O'Leary et al. found that teachers addressed phonological awareness skills by using flash cards, letter manipulatives, and read aloud books. Teachers taught vocabulary by drawing attention to a word when a child showed interest or confusion. Planned vocabulary lessons included selected words from stories. However, O'Leary et al. also found that teachers were often unsure if these strategies were effective.

Title I Preschool Programs

Literacy instruction for Title I preschool programs is defined in large part by the terms of federal grants that support specific initiatives. For the first time in the history of federal legislation, passage of the NCLB Act in 2001 allowed Title I funds to be used to improve student reading achievement through the establishment of Title I preschool programs. Traditionally, the purpose of Title I programs was to ensure that all children, regardless of income, were given a fair and equal opportunity to participate in a high quality education program. The NCLB Act also included provisions and grants for early reading initiatives, including Reading First, Early Reading, Even Start Family Literacy,

Improving Literacy through School Libraries, and Reading is Fundamental. These initiatives demonstrated the federal emphasis on reading (Ewen & Mathews, 2007).

The NCLB Act (2001) established specific criteria for the use of Title I funds and Reading First grants to preschool classrooms. Preschool teachers must meet the federal definition of highly qualified, which means that they must be certified to teach preschool students. In addition to this certification, the federal government requires preschool teachers to have a bachelor's degree in early childhood education and to pass an assessment related to early childhood education. Federal initiatives such as Reading First have also provided funding for family-based literacy programs so that teachers can support families in their efforts to read with their children at home. The NCLB Act (2001) also established six important elements of preschool literacy instruction, including (a) phonemic awareness, (b) phonics, (c) vocabulary development, (d) reading fluency, (e) oral reading skills, and (f) comprehension strategies.

In 2004, the United States Department of Education published a report titled Serving Preschool Children Under Title I: Non-Regulatory Guidance. This report stated that the purpose of the Title I preschool program was to provide opportunities for students to achieve academic success in school. This goal was based on past research that showed that a significant number of students, especially those in poverty, are three to four years behind grade level in reading. Based on this evidence, the report stated that teachers who provide instruction to students in high quality preschool programs can reduce the achievement gap, which justifies the use of Title I funds for preschool programs. This

report also included the following description of what a high quality preschool classroom should look like:

> The schedule of a high quality preschool classroom is often broken into blocks of time for different types of learning and instruction. Good teachers know when to teach directly, when to provide time for exploration and discovery, when to provide opportunities for children to practice skills, and when to encourage creativity. However, teachers should use the entire time during the preschool day in meaningful ways, regardless of whether the teacher is engaging in direct instruction. For example, teachers may point out new words or concepts during the daily book read-aloud, or provide opportunities for children to develop their language skills while transitioning to snack or outdoor time (p. 11).

This particular example provides some idea of the type of literacy instruction that teachers should provide in a Title I preschool classroom. However, research studies on this program are limited, due to its recent development.

State Funded Preschool Programs

Several research studies about literacy instruction in relation to the state-funded preschool program that was included in this study were found in this review. Glazer (2008) published the School Readiness Report to describe the outcomes of the state-funded preschool program. In the report, Glazer noted that students who entered kindergarten with literacy skills had a better chance of school success. One of the state's priorities is to ensure that children are ready to enter school, and to that end, support for

preschool programs has been provided by the state legislature. Based on the evidence, Glazer argued that the state was making significant progress towards their goals.

In another related study, Mashburn, Downer, Hamre, Justice, and Pianta (2010) examined the effectiveness of the MyTeachingPartner web-based resource. The resource was developed as a professional development web-based program to instruct teachers on how to implement developmentally appropriate practices in relation to literacy instruction through teacher-child interactions. An experimental group used the web-based resource for professional development while a control group did not. Participants were teachers and students from the state-funded preschool. Teachers administered language and literacy assessments to both groups of students. Mashburn et al. found that students whose teachers spent more hours using the web-based resources scored higher on the language and literacy tests.

Mashburn et al. (2008) conducted a study across multiple states that included 20,000 kindergarten students and teachers from a variety of Head Start and other federally funded and state funded preschool programs. They followed the kindergarten cohort of 1998 through Grade 8. Mashburn et al. collected student achievement data from several comprehensive assessments, including the Peabody Picture Vocabulary Test, the Oral Expression Scale, and the Woodcock-Johnson III Test of Achievement. They also administered the ECERS and the CLASS instruments to determine instructional quality in these preschool classrooms. Mashburn et al. found that preschool teachers provided high quality instruction for students, including strong teacher-child interactions to promote conceptual development and to scaffold skills.

In summary, the research literature in relation to these three preschool programs provides evidence that teachers share the same expectations about delivering high quality instruction for students. Early childhood education administrators expect teachers to use instructional strategies that are developmentally appropriate, such as teacher-child interaction, in all public preschool programs. As teachers are trained in these developmentally appropriate practices, the research literature indicates that teacher instruction and student literacy skills improve.

Perceptions of Preschool Teachers about Literacy Instruction

Teacher perceptions are important to this study because teachers are responsible for their students' academic success. However, teachers are not always trained in how to use research-based instructional strategies that are developmentally appropriate. Teachers may also have different beliefs about they should provide literacy instruction, the skills that students need for reading readiness, and how literacy skills should be defined. In addition, teacher perceptions about developmentally appropriate practices, particularly in relation to teacher-child interaction, also vary and impact the quality of instruction that students receive.

In a key study, Burgess, Lundgren, Lloyd, and Pianta (2001) examined the perceptions of state-funded preschool program teachers across the state in relation to teaching literacy skills to preschool students. In order to examine instructional effectiveness, preschool teachers in this study were asked to describe their perceptions about these instructional practices by participating in individual interviews. Preschool teachers also completed the Preschool Literacy Practices Checklist. The checklist was

used to collect data about teachers' beliefs and self-reported practices on literacy instruction in addition to demographic data on each participant. The survey consisted of three main sections: (a) teacher background and characteristics, (b) classroom characteristics, and (c) approaches to teaching. Burgess et al. found that teachers often held a bachelor's degree or higher and had formal training in reading. The majority of teachers believed in developmentally appropriate literacy instruction. Burgess et al. also found that teachers believed developmentally appropriate literacy instruction activities included listening to and talking about stories. Teachers also reported that developmentally appropriate literacy instruction included opportunities for students to emulate reading and writing, identify letters and sounds, and participate in language games.

In another related study, Barbarin et al. (2008) examined the perceptions of parents and teachers about literacy skills. Barbarin et al. administered surveys to parents of diverse ethnicity and socioeconomic status concerning their perceptions about the literacy skills of their preschool students. Barbarin et al. found that parent perceptions influenced family goals and choices in education. Parents wanted their children to be able to take turns, follow directions, enjoy learning, get along with peers, and communicate needs and wants. Barbarin et al. also found that teacher perceptions differed from parent perceptions. Teachers viewed school readiness in terms of the whole child, including attitude, behavior, and academic skill. Teachers believed that social competence, child self-management, and adaptation were more important than literacy, general knowledge, and other academic skills.

In another study that included a discussion of teacher perceptions about literacy instruction, Steckel (2009) used a case study design to examine the impact of literacy coaches in urban schools. Four literacy coaches in Massachusetts participated in the study. Steckel found that literacy instruction could be improved by implementing the following recommendations: (a) use a variety of assessments to create a full picture of the students' needs; (b) match material to the learning needs of individual students; (c) provide a classroom library; and (d) talk with students about their learning and provide feedback to them about how to improve their skills. Steckel also found that teachers were receptive to suggestions made by the literacy coaches.

In summary, the research literature about teacher perceptions of literacy instruction indicated that teachers understand developmentally appropriate practices and often include them in their literacy instruction in the preschool classroom. Teachers believe that social development plays a role in school success and that literacy coaches are helpful, particularly in suggesting that instruction should meet the students' individual learning needs. They also believe that instructional materials should match the objective and lesson and that a classroom library is important.

Challenges in Preschool Literacy Instruction

The research literature indicates that preschool teachers face several significant challenges in their classrooms. One major challenge that preschool teachers face is to provide high quality instruction for all students in their classrooms. In addition, preschool teachers face the challenge of how to improve and sustain parent involvement in their

children's education and how to encourage their participation in improving literacy skills at home. Each of these challenges is described in more detail below.

Providing High Quality Instruction

A continual challenge for preschool teachers is providing effective, high quality instruction to their students. Many studies presented in this review support the need for preschool teachers to provide high quality literacy instruction that emphasizes teacher-child interaction, vocabulary development, print awareness, and a variety of research-based instructional strategies, as well as providing interventions for those students who experience learning delays. The research also suggests that high quality literacy instruction happens in play, large and small group lessons; needs support through professional development; and the home influence is important because parent-child interaction is critical. Therefore, teachers who provide high quality literacy instruction need to be have knowledge of many complex factors. Studies that describe these complex factors in relation to the challenges that preschool teachers face in providing high quality literacy instruction are presented below.

Wong, Cook, Barnett, and Jung (2008) used a quasi-experimental design to examine and evaluate data from five state prekindergarten programs. In particular, Wong et al. examined receptive vocabulary and print awareness relative to this group of students. Wong et al. found that effective instructional practices that include vocabulary development and print awareness have a positive impact on students' academic performance in the elementary grades.

In an experimental study, Ball and Gettinger (2009) examined students' growth in early literacy skills in relation to the effects of administrative feedback on their performance and the classroom environment. Ball and Gettinger analyzed student performance with a literacy skills assessment tool, observed classroom instruction, and administered teacher surveys. Ball and Gettinger found that teachers provided high quality literacy instruction in large and small group lessons by using such strategies as reading aloud, asking questions, and providing feedback during free play in order to expand students' use of language.

In another study about the challenges related to high quality preschool literacy instruction, Cooke, Krelow, and Helf (2010) examined reading intervention strategies that teachers used in kindergarten classrooms in two urban schools. Cooke et al. used a screener to assess student reading abilities. Cooke et al. found that some kindergarten teachers choose to provide supplemental support at the beginning of the school year, while other teachers choose to intervene in the middle of the year. Cooke et al. concluded that interventions that begin as soon as students are identified with problems in reading are most effective in providing high quality reading instruction.

In a study that explored the relationship of high quality literacy instruction to professional development, Wasik, Bond, and Hindman (2006) examined language development activities that teachers in Head Start classrooms use to support oral language and phonological awareness skills, primarily through teacher-student interactions. Wasik et al. also examined professional development activities that helped teachers to improve their instructional practices in relation to literacy and language

development in these classrooms. Wasik et al. found that students whose teachers received professional development in literacy instruction showed an increase in vocabulary skills.

In an investigation of language development sub-contexts in Head Start classrooms, Gest, Holland-Coviello, Welsh, Eicher-Catt, and Gill (2006) argued that an additional challenge that preschool teachers face is engaging students in contextualized conversation. Gest et al. used a case study design to examine distinctive patterns of teacher talk during free play, mealtime, and book reading in Head Start classrooms. Gest et al. found that the verbal interaction between adults and students enhances many language development skills, including oral vocabulary, grammatical structures, and syntax, especially when they listen to a skilled speaker.

Preschool teachers also face the challenge of how to teach oral language and phonological awareness skills effectively to young children. Kendeou, White, van den Broek, and Lynch (2009) examined how to predict reading comprehension in early elementary school in relation to oral language and decoding skills. Kendeou et al. found that the key to students' comprehension of text is their ability to construct mental understandings of what is written by connecting statements and ideas through interpretation. Kendeou et al. concluded that reading comprehension consists of a group of higher level thinking skills, such as making inferences, understanding details, and reasoning in order to identify meaningful relationships between prior knowledge and the text. Thus, preschool teachers face the daunting challenge of addressing the diversity of prior knowledge and experiences that children bring to the preschool classroom.

Meeting the developmental challenges that young children present in relation to improving language and literacy skills is often difficult. In an experimental study, Wise, Sevcik, Morris, Lovett, and Wolfe (2007) investigated the relationship among receptive and expressive vocabulary, listening, comprehension, pre-reading skills, word identification skills, and reading comprehension by students with reading disabilities. Wise et al. noted that even though researchers connect oral language skills to reading achievement, they often do not subdivide oral language into multiple measures of language development, such as receptive vocabulary, expressive vocabulary, and listening comprehension. Wise et al. found that that reading achievement is developmental in nature and that students improve their reading by mastering a progressive sequence of pre-reading skills, including reading comprehension and vocabulary development. Wise et al. also found that word identification influences pre-reading skills, including the ability to hear the difference between onset and rhyme. Thus, preschool teachers are challenged in relation to the variety of oral language abilities students bring to the preschool classroom.

Improving and Sustaining Parental Involvement

Another challenge that preschool teachers face in relation to literacy instruction is to improve parent involvement in their children's education. In a study of preschool teachers' self-reported beliefs about literacy instruction, Burgess, Lundgren, Lloyd, and Pianta (2001) found that preschool teachers believe alphabetic knowledge, word and story knowledge, oral language, and student motivation are important in literacy instruction. In order to support this belief, teachers often send home books and other

literacy activities for parents to work on with their children. However, Burgess et al. found that many parents often do not complete these activities with their children.

In a study about promoting school and life success through early childhood family literacy, Swick (2009) used a case study research design to examine early childhood family literacy programs for components of quality. Swick believed that family involvement in children's literacy activities in school leads to a stronger foundation in literacy skills. Swick found that family involvement throughout students' educational experiences improves the literacy skills of the entire family. Swick concluded that one of the challenges of preschool literacy instruction is the need for educators to involve parents as partners in this instruction.

In another study about improving parent involvement, Buckley and Schoppe-Sullivan (2010) explored the involvement of fathers in the care and play of young children and in promoting positive social skills with their children. Buckley and Schoppe and Sullivan used self-reported and observational data. However, Buckley and Schoppe-Sullivan found that increased father involvement in play did not support positive social skills. Buckley and Schoppe-Sullivan concluded that further research was needed to examine the involvement of fathers in their children's education.

In a specific study about parent involvement in preschool programs, Hilado, Kallemeyn, Leow, Lundy, and Israel (2011) examined the connection between social resources and parent involvement in a birth-to-five program. Hilado et al. used survey and interview data to support their findings. Hilado et al. found that the number of social resources, such as social support networks, community resources, and social service

referrals, increased parent involvement. Hilado et al. concluded that a high quality early childhood program with appropriate resources supports students' academic learning and improves parent involvement.

In summary, these studies revealed that preschool teachers face many challenges in relation to literacy instruction. One of these challenges is that preschool teachers must know how to provide high quality instruction in relation to phonemic awareness and oral language. In addition, preschool teachers face the challenge of improving parental involvement in helping their children master specific literacy skills. Many parents are not willing to be active participants in their children's education; they often do not complete activities with children at home and they may have difficulty finding time to help their children with educational activities because they work fulltime. These studies indicate that only with appropriate resources will parents become active participants in their children's education.

Review of Case Study Methodologies

A review of the literature for this study revealed 34 quantitative studies, 18 mixed methods studies, and two qualitative studies, which indicates a clear need for more qualitative research. The two qualitative studies were case studies. These case studies are particularly significant to this investigation because the methodologies are similar to this study in that they include data from multiple sources, which is the strength of case study design. Therefore, in the following paragraphs, I describe the methodology of these two studies as well as the case study methodology that was used in the qualitative phase of one of the mixed methods studies.

In the first study, Steckel (2009) conducted a case study to explore how literacy coaches worked in urban schools and the impact they had on teaching and learning. The unit of analysis for the case study was the literacy coach, and four cases were presented. Steckel purposefully selected four literacy coaches from four different cities. For each case, Steckel collected data from multiple sources, including interviews and observations. Steckel observed each literacy coach for eight hours as he or she met with teachers, helped them with their instructional planning, and modeled literacy instruction in the classroom. Steckel also interviewed the literacy coaches and their teaching partners and school principals in order to understand the role and expectations of the coach. Steckel found that literacy coaches used a convergent thinking approach to assist and empower teachers to provide high quality literacy instruction. The coaches guided and encouraged teachers to use new instructional methods. Teachers reported positive outcomes in relation to their understanding of literacy instruction.

In the second example of a case study, Walpole, Justice and Invernizzi (2004) explored how faculty members at one elementary school attempted to close the gap in student literacy achievement by implementing a research-based, school-wide, literacy intervention program. The faculty members first established a classroom instructional model in order to provide intense instruction for specific literacy skills. Teachers at each grade level identified struggling students quickly. Once identified, teachers provided students at each grade level with targeted intensive instruction. Walpole et al. also noted that teachers participated in on-going staff development concerning "assessment-based decision making, curriculum coordination, small group instruction, efficient management,

ongoing data analysis, knowledgeable leadership, and persistence" (p. 278). They found

that students at this elementary school demonstrated a 6 year growth rate in literacy

skills.

In the third example of a case study, Downer, Kraft-Sayre, and Pianta (2009) used

a mixed methods design that included a case study design for the qualitative phase to

explore early childhood educators' usage rates and self-reported satisfaction as a result of

participation in a web-mediated professional development program focused on teacher-

child interactions. Participants were selected from a state-funded preschool program for

at-risk children. These participants included 134 preschool teachers who were divided

into a consultant group and a web access group. Both groups were given access to the

website. Teachers from both groups completed introductory surveys about their

professional and classroom demographics. Teacher interactions with students were also

videotaped and discussed among participants as part of their professional development.

At the end of the study, teachers from both groups completed a satisfaction survey. For

the quantitative phase, Downer et al. used analysis of variance to compare data related to

website usage, video logs, and surveys. For the qualitative phase, Downer et al. found

that teachers believed that this web-mediated professional development program

improved their instructional practices. Although the teachers thought the web-based

program was helpful, they favored direct assistance from a consultant because they

believed that the consultant feedback increased the effectiveness of their instruction.

In summary, these studies used multiple data sources in order to richly describe

the role of literacy coaches in improving instruction, to describe a school-wide literacy

reform program, and to describe a web-mediated professional development program designed to improve teacher-child interactions in the classroom. These studies are particularly significant to this study because they all used multiple data sources to present a rich description of the phenomenon under investigation.

Summary and Conclusions

In this chapter, a review of the literature was presented in relation to the following topics: (a) developmentally appropriate practices in preschool programs, (b) preschool program curriculum, (c) preschool program instruction, (d) preschool program assessment, (e) teacher-child interaction, (f) the role of play, (g) characteristics of high quality preschool programs in relation to rating scales such as the ECERS-R and the CLASS instrument, (h) literacy instruction in public preschool programs; (i) perceptions of preschool teachers about literacy instruction; (j) challenges that preschool teachers face in providing high quality literacy instruction; and (k) a review of case study methodologies.

This literature review also led to the identification of several important themes. The first theme that emerged from this review was that the most important indicator of high quality preschool programs is the developmentally appropriate practice of teacher-child interaction. This theme is supported by the SQRI that uses both the ECERS-R and the CLASS instrument. The SQRI uses trained personnel to rate programs by assigning a star rating to indicate the quality of the program and to provide feedback to staff members for program improvement purposes. This quality rating is also connected to the

development of literacy skills because literacy skill development is often a weakness found in results of preschool program evaluations using the CLASS instrument.

The second theme that emerged from the review was that the ECERS-R and the CLASS instrument are the most commonly used and perhaps most effective instruments to examine preschool classrooms for quality indicators, especially in connection with literacy development and the delivery of developmentally appropriate instruction. LaParo, Pianta, and Stuhlman (2004) created the CLASS instrument to examine teacher-child interaction as a key element in high quality preschool programs. In the state where this study was conducted, an evaluation system has been created to label high quality developmentally appropriate preschool programs, using the ECERS-R and the CLASS observation tools. The ECERS-R is used to measure the classroom environment for developmentally appropriate materials, equipment, and supplies. The CLASS instrument is used to observe teacher-child interaction conducive to learning that supports language and cognitive growth.

The third theme that emerged from this review was that alignment among standards, curriculum, instruction, and assessment is critical in order to develop a high quality preschool program in relation to the development of literacy skills for preschool students. In 2006, the NAEYC established quality standards for curriculum, instruction, and assessment. In addition, the national Head Start program also developed performance standards for curriculum, instruction, and assessment. These standards must be aligned with curriculum and instructional practice in order for a preschool program to demonstrate evidence of high quality developmentally appropriate practice. The research

literature also indicated that national and state preschool program standards determine the academic and developmental goals needed for successful school achievement for preschool students. The curriculum should be developmentally appropriate and address the instructional needs of the students. Developmentally appropriate instruction must be delivered through research-based high quality methods, especially in literacy. Assessments should be used to measure the standards in the context of the curriculum that is taught and the instructional practices that are used in order to provide preschool teachers with feedback on the strengths, weaknesses, and needs of the children in all areas, including literacy skills.

The final theme that emerged from the review was that teachers should present developmentally appropriate instruction through play. Play is closely aligned with teacher-child interaction. While a child plays, a teacher can engage the child in a conversation to build on their previous knowledge. As Rimm-Kaufman et al. (2005) noted, when a teacher and child interact, they both focus on learning. Teachers extend and expand a students' understanding through conversation. Teachers also enhance social play and language skills through the facilitation of conversation among students in peer groups. Burchinal et al. (2008) believed that instructional quality is based on engaging students in literacy skills activities through teacher-child interaction and play. In prior research, Vygotsky (1986) also believed that children learned emotional self-regulation through self-imposed rules in fantasy play. In play, Vygotsky argued that children experiment and imitate the social rules they have learned by watching others. Play also provides a low risk way to learn social lessons.

In addition to these major themes, several gaps and deficiencies were found in the literature. A lack of research exists concerning teachers' perceptions about literacy instruction in preschool classrooms and its relationship to the literacy skills of kindergarten students. In addition, a research gap exists concerning a close examination of the quality instructional practices used in different types of public preschool programs in relation to literacy skills. Therefore, this study addresses these research gaps by describing how preschool teachers used developmentally appropriate instructional practices to improve the literacy skills of preschool students in three different public preschool programs in a large urban public school district in an eastern state.

Chapter 3: Research Method

The design of this multiple case study was derived from the purpose of this study, which was to explore how preschool teachers used developmentally appropriate instructional practices to improve the literacy skills of students in three preschool programs in a public school district in an eastern state. In order to accomplish this purpose, I described the instructional practices that preschool teachers use in the classroom to improve the literacy skills of preschool students. In addition, I described the perceptions that preschool teachers have about the effectiveness of their instructional practices in improving literacy skills for preschool students. I also described the importance of play in improving the literacy skills for preschool students and how teacher and student interactions in the preschool classroom develop the oral language skills of these students, which is related to vocabulary development.

This chapter includes a description of the research approach that I used for this study, including the rationale for choosing the qualitative paradigm over the quantitative paradigm. This chapter also includes a description of the research design that I used for this study and the rationale for selecting that design. In addition, this chapter includes a description of the role of the researcher. In relation to the methodology, I also describe the participant selection logic, instrumentation, procedures for recruitment, participation, and data collection, and the data analysis plan. I also discuss issues of trustworthiness and ethical procedures related to qualitative research.

Research Design and Rationale

The research questions were based on the conceptual framework for this study, which is Piaget's (1926) theory of cognitive development and Vygotsky's (1986) theory of social development and language. Piaget and Vygotsky were both contributors to the philosophy of learning known as constructivism, which is the foundation for developmentally appropriate practice in preschool programs across the United States today. The key tenets of developmentally appropriate practice include high-quality teacher-child interaction and play, which are structured according to the developmental level of the child. Preschool is a time of cognitive and social development as children move from the sensorimotor stage through the preoperational stage. Both Piaget and Vygotsky advocated the importance of imaginary play and the teacher's role as a facilitator of learning. The research questions below are based on this conceptual framework:

Central Research Question

How do preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of preschool students?

Related Research Questions

1.   How do preschool teachers provide literacy instruction for preschool students?

2.   What perceptions do preschool teachers have about the effectiveness of the instructional practices they use to improve literacy skills for preschool students?

3.   How do preschool teachers use developmentally appropriate instruction

       through play to improve literacy skills for preschool students?

4.   How does teacher-child interaction develop oral language skills to

       enhance literacy for preschool students?

5.   What do documents about the three different preschool programs reveal

       about literacy instruction for preschool students?

I used a multiple case study design to conduct this study. Yin (2009) defined a

case study as "an empirical inquiry that investigates a contemporary phenomenon in

depth and within its real-life context especially when the boundaries between

phenomenon and context are not clearly evident" (p. 18). Yin also noted,

The case study inquiry copes with the technical distinctive situation in which

there will be many more variables of interest than data points, and as one result

relies on multiple sources of evidence, with data needing to converge in a

triangulating fashion, and as another result benefits from the prior development of

theoretical propositions to guide data collection and analysis. (p. 18)

Yin explained that the case study method provides a unique examination of a

phenomenon because the researcher collects data from multiple sources of evidence in

order to present a rich description of the phenomenon under investigation.

I chose a case study design for this study for several reasons. One of the reasons

that I chose this design is that case study design uses multiple sources of evidence, which

allowed me to present a richer picture of the phenomenon under investigation for this

study. The contemporary phenomenon that I examined was the developmentally

appropriate instructional practices that preschool teachers used to improve the literacy

skills of preschool students. The single unit of analysis or case was the literacy

instruction in a specific preschool program, and for this study, three cases were presented.

I collected data from multiple sources of evidence, including preschool teacher

interviews, observations of instructional lessons in literacy, and documents related to the

preschool programs at each site, including curriculum and standards, instructional

processes and practices, and assessments that teachers' used in each program, as well as

demographic data in order to describe the setting for each program. These multiple

sources of evidence allowed me to describe this complex phenomenon of

developmentally appropriate practices in literacy instruction for each preschool program.

I also chose a case study design because it allowed me to explore a phenomenon where

the boundaries between the phenomenon of developmentally appropriate practice in

relation to literacy skills and the context of the classroom were not clear.

Role of the Researcher

During this study, I assumed several roles. One of these roles was to collect data

during the interviews with preschool teachers and the observations of their literacy

instruction in the classroom. Merriam (2009) noted that in qualitative research, "the

researcher can assume one of several stances while collecting information as an observer"

(p. 124). These stances range from complete participant to complete observer. As a

participant observer, I maintained a balance between gathering rich information and

ensuring confidentiality. I attempted to stay detached yet focused during my observations

of how preschool teachers used developmentally appropriate practices in the classroom.

Another role that I assumed was to analyze and interpret the data. Merriam (2009) and Yin (2009) noted that the qualitative researcher is often the only person responsible for all data collection and analysis. Therefore, the potential for researcher bias exists. In order to address this bias, I described specific strategies that I used to improve the credibility, transferability, and dependability of this study. These descriptions are included in the section about issues of trustworthiness presented later in this chapter.

In relation to these strategies, I particularly emphasized the strategy of reflexivity (Merriam, 2009) by considering my personal experience as an educator in relation to any potential biases I might hold about preschool education. Creswell (2007) noted that qualitative research is interpretive and, therefore, the researcher collects and analyzes data through the lenses of personal experience, bias, values, and culture. With such considerations in mind, as the researcher, I reflected on my particular experiences in education as a middle class European American female. I lived in the school district in which this study was conducted. I have a background in early childhood education, including 7 years of teaching in public preschool settings including the Head Start and Title I programs. I have taught African American, European American, and Latino American students at the elementary school level, and many of these students came from impoverished backgrounds. I have taught students in Grades 3 and 4 in the school system in which I conducted this study; however, I am no longer employed by this school district. The school where I was employed was not involved in this study, and I did not have a professional relationship with any of the participants in this study.

Site Selection

The setting for this study included two research partners. The first research partner was the Head Start program, which was governed by the Office of Human Affairs that supervises the local Head Start program in the school systems in the eastern state where this study was conducted. The Office of Human Affairs was also responsible for the oversight of several preschool program sites within the city, and the program director granted permission to conduct this study. The Head Start program served 3-year-old and 4-year-old children.

The second research partner was a large urban public school district in this eastern state, which offers both the Title I preschool program and the state-funded preschool program. During the 2012-2013 school year, this public school district enrolled 33,829 students in two early childhood centers, 35 elementary schools, eight middle schools, and five high schools. During that school year, a total of 18,463 students were enrolled in the elementary schools and early childhood centers. Out of the 35 elementary schools, 22 were designated as Title I schools, based on the number of free-and-reduced price school lunches that students and their family's request. A total of 2,302 preschool children were enrolled in this school district for that school year (School District, personal communication, May 10, 2013).

The three cases or three different preschool programs for this study were determined by the coordinator of research and evaluation for this school district and the Head Start program director of the preschool program located in this district. The rationale for the three cases in this study was related the issue of transferability, which

involves the number of cases that are needed for the replication of this study. Yin (2009)

noted that" each case must be carefully selected so that it either (a) predicts similar

results (a literal replication), or (b) predicts contrasting results but for anticipatable

reasons (a theoretical replication) (p. 54). Yin also noted that two to three cases would be

considered literal replication, whereas four to six cases would be considered theoretical

replication. The goal for this study was literal replication of the results.

Participant Selection

For each case or preschool program, the number of preschool teachers at each site

usually ranged from one to 10, depending on the program, school population, and

funding. Since the site selection occurred in the spring, the director of the Head Start

program determined the site and the teachers for the study who all agreed to participate in

this study. The senior coordinator for research and evaluation for this public school

district selected the sites for the Title I and state-funded preschool program. The first site

included teachers from the Title I and state-funded preschool programs. All teachers at

the site were invited to participate in the study. However, only one Title I teacher

volunteered to participate so another site had to be selected. The coordinator for research

and development selected the second site, and another teacher agreed to participate in this

study.

Sampling Technique

Merriam (2009) noted that non-probability sampling is the method of choice for

most qualitative research because generalization in a statistical sense is not a goal. The

most common form of non-probabilistic sampling is called purposeful, which is based on

the assumption that the researcher wants to "discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p. 77). Therefore, I used purposeful sampling in order to collect the richest data possible for this study.

These participants were purposefully selected, based on specific inclusion criteria. This criteria included the following: (a) each preschool teacher must be employed at a full day preschool program, (b) each preschool teacher must hold, at minimum, an associate's degree in early childhood education, (c) each preschool teacher must have one year of experience in providing literacy instruction to preschool students, and (d) each preschool teacher must currently provide literacy instruction for students for at least one hour of the school day. Teachers who met this inclusion criterion were invited to participate in this study.

Instrumentation

Two data collection instruments were used to conduct this study. The first instrument was the oral questionnaire that I used to conduct the interviews with the preschool teachers. To enhance the reliability and validity of this instrument, I asked an expert panel of two or three colleagues with advanced degrees in education to determine if the interview questions were aligned with the research questions. In addition, I also aligned the interview questions with the research questions (see Appendix G). The second instrument that I used to collect data for this study was the CLASS instrument, which I used to observe literacy instruction in preschool classrooms. Pianta, LaParo, and Hamre (2008) field tested this instrument for reliability and validity. Both of these instruments are described in more detail in the sections below.

Oral Questionnaire

I designed an oral questionnaire that I used to conduct the individual interviews with preschool teachers at each site (see Appendix D). This oral questionnaire was comprised of nine open-ended interview questions, based on Merriam's (2009) guidelines for conducting effective interviews. The interview questions were predetermined, presented in an ordered format, and were open-ended in nature. The interview provided participants with an opportunity to describe their perceptions about how they used developmentally appropriate instructional practices in their classrooms to improve the literacy skills of preschool students. These interview questions were also aligned with the research questions for this study. The questions addressed the experiences, opinions, and knowledge of preschool teachers about developmentally appropriate practices related to literacy instruction.

Classroom Assessment Scoring System Instrument

The instrument that I used to observe instructional lessons in literacy in the preschool classroom was the CLASS observation tool, which LaPara, Pianta, and Stuhlman (2004) developed (see Appendix F). They modified elements from both the Observational Record of the Caregiving Environment and the Classroom Observation System, as well as from the current research literature on preschool education. Dr. Pianta granted permission to use the CLASS instrument for this study (see Appendix E).

LaPara, Pianta, and Stuhlman (2004) noted that the CLASS instrument consists of three major domains, including the emotional environment, classroom management, and instructional support. The emotional environment domain includes the dimensions of

positive climate, negative climate, teacher sensitivity, and regard for student perspectives. The classroom organization domain includes the dimensions of behavior management, productivity, and instructional learning formats. The instructional support domain includes the dimensions of concept development, quality of feedback, and language modeling. The CLASS manual provides teachers with guidance on how to conduct the observation and how to rate and code the observation, and it provides a definition for each indicator and examples of observable behavior.

LaParo et al. (2004) argued that the dimensions titled quality of feedback and language modeling are the most important dimensions of the CLASS observation tool because they represent developmentally appropriate practice and in-depth teacher-child interaction. They also are key elements in language development and literacy instruction. In addition, the quality of feedback dimension contains the scaffolding indicator, which is particularly important because teachers are expected to assist students in developing their oral language skills through developmentally appropriate teacher-child interaction.

The quality of feedback dimension includes the following five indicators: scaffolding, feedback loops, prompting thought processes, providing information, and encouragement of affirmation. For the scaffolding indicator, observers look for evidence that teachers provide hints and assistance to students in using more complex vocabulary in context. When providing feedback loops, observers look for evidence of a discussion between the teacher and student that is persistent because the teacher uses follow-up questions. When prompting thought processes, observers look for evidence that teachers prompt students to expand on their thinking. When providing information, observers look

for evidence that teachers expand and clarify information and provide specific feedback to students. In encouragement of affirmation, observers look for evidence that teachers acknowledge and reinforce student learning, encourage students to become engaged in learning activities, and support student persistence in these activities.

The language modeling dimension includes the following five indicators: frequent conversation, open-ended questions, repetition, and extension, self and parallel talk, and advanced language. In frequent conversation, observers look for evidence of a back and forth exchange between teacher and student through conversation. In open-ended questions, observers look for evidence that teachers ask questions that require students to provide extended answers and to encourage thoughtful responses. In repetition and extension, observers look for evidence that teachers repeat questions and information for clarification and enhance language by correcting misconceptions or expanding student responses. In self-talk and parallel talk, observers look for evidence that teachers plan their own actions in relation to their expectations for students. In advanced language, observers look for evidence that teachers use a variety of vocabulary words connected to familiar words, concepts, and ideas in order to build on students' prior knowledge and advance their personal vocabulary.

Observers rate each of the indicators in the CLASS observation tool using a rubric with a Likert scale of 1-7. Within each level, observers rate the consistency of teacher-child interaction. At the low level, a rating of 1or 2 means that the teacher either does not do any of the required activates or is inconsistent. At the middle level, a rating of 3, 4, or 5 means that the teacher occasionally provides the required categories and subcategories

but not to the extent needed for a higher score. At the high level, a rating of 6 or 7 means

that the teacher is consistent, expansive, and highly engaged in the student's learning and

understanding of concepts.

In order to field test the CLASS observation tool for validity and reliability,

LaPara, Pianta, and Stuhlman (2004) conducted a pilot study in six states involving 40

programs in each state with a total of 227 participating teachers. The participants

included 61% European Americans, 17% African Americans, 10% Latino Americans,

3% Asian Americans/Pacific Islander, and 10% other. LaPara et al. measured inter-rater

reliability by asking 24 trained data collectors to rate a video of classroom instruction and

then compared their ratings. In order to qualify to be a certified rater, each rater was

required to meet a consistency standard of 80%. In addition, two extensively trained

raters collected classroom data, using five subscales of the ECERS-R related to the

CLASS criteria, and LaPara et al. also compared their results to establish reliability. The

Snapshot is also a component used to create CLASS, which consists of an adaptation of

the Teacher-Child Engagement Scale. The data collectors entered a classroom on two

separate days. One collector observed the classroom and recorded notes on one day and

used the ECERS-R on the other day. The second collector used Snapshot and the CLASS

observation tool on both days. Collectors then compared results.

LaParo, Pianta, and Stuhlman (2004) examined internal validity by comparing the

results of the CLASS observation quality indicators with the same types of indicators on

the ECERS-R and Snapshot. They found that the emotional climate domain of the

CLASS instrument matched with the interactions subscale of ECERS-R. The CLASS

instrument also matched the levels for the scaffolding and teacher-child interaction indicators for Snapshot. LaPara et al. found that the CLASS observation tool correlated with comparable components on the ECERS and Snapshot. Although no independent evaluations of the CLASS instrument were found in the literature search, LaPara et al. continue to field test the instrument in various preschool programs in this eastern state in order to gather further evidence of the instrument's reliability and validity.

Procedures for Recruitment, Participation, and Data Collection

For this study, data sources include individual interviews with preschool teachers, observations of instructional lessons in literacy in preschool classrooms at each site using the CLASS observational instrument, and documents related to the preschool programs. All of these data sources were aligned with the research questions (see Appendix E). All data sources also addressed the central research question about how teachers used developmentally appropriate practice to improve the literacy skills of preschool students, particularly in relation to play and teacher-child interaction. Interview data also addressed the beliefs that preschool teachers have about the effectiveness of their instructional processes and practices in improving the literacy skills of their students. Documents related to the preschool programs provided supporting information about the standards, curricula, and assessments that are recommended for teacher use in each of these preschool programs. In addition to this alignment of the research questions with the data sources, strict adherence was made to the procedures for recruitment, participation, and data collection in order to enhance the trustworthiness of this study. These procedures are described below.

Recruitment and Participation

The recruitment procedures adhered to the requirements of the Institutional

Review Board (IRB) at Walden University. I first contacted the senior coordinator for

research and evaluation for this public school district in order to obtain a signed letter of

cooperation to conduct my study (see Appendix A). After I obtained a signed letter of

cooperation and district approval to conduct this study, I contacted the director of the

Head Start program to determine the research site for the Head Start program. I again

contacted the senior coordinator for research and evaluation for the school district to

determine the research sites for the Title I preschool program and for the state-funded

preschool program. I then met with the principals at each program site to obtain signed

letters of cooperation (see Appendix B).

During my meeting with the senior coordinator for research and evaluation, we

discussed the purpose of this study, participant selection, and data collection procedures.

Preschool teachers were invited to participate in this study, based on specific inclusion

criteria that I have describedOriginally, I mailed invitation letters to all preschool

teachers who met the inclusion criteria at the sites that the senior coordinator for research

and evaluation had selected (see Appendix B). However, no one responded so I met with

teachers at each site to explain the purpose of this study and to answer questions. Then I

distributed invitations to all of the teachers present. Within a few days, two teachers from

the state-funded preschool program and one teacher from the Title I preschool program

agreed to participate in this study. When I was not able to recruit a second Title I teacher,

the senior coordinator for research and evaluation from the school district selected

another site, and one Title I preschool teacher expressed interest in participating in this study.

Data Collection

In relation to the interviews, I met individually with selected teachers at each site to schedule the times and dates for the interviews. I conducted the interviews with Title I and state-funded preschool program teachers at their respective school sites in a conference room for purposes of privacy. However, I conducted the Head Start interviews in teachers' classrooms while the classroom assistant monitored breakfast for students. The classroom site was located in a community center, and the Head Start program teachers did not have access to other space in the building. At the beginning of the interview, I reviewed the purpose of the study, the amount of time needed to complete the interviews, and my plans for sharing the results of the study. After transcribing the interviews, I asked each participant to review his/her transcript for accuracy, and later, I asked each participant to review the tentative findings of the study for plausibility.

I also asked same preschool teachers who participated in the interviews to participate in the classroom observations. Therefore, a similar protocol was followed. Once the informed consent form had been signed, I met with each teacher to schedule the date and time for the observation of an instructional lesson in literacy in his or her classroom. Because the observations focused on instructional lessons, informed consent was not required from parents and students in order to conduct these observations. During this meeting, I also provided each participating teacher with a copy of the observation criteria to review before the scheduled observation. Once the time and date for the

observation were agreed upon, I conducted the observation using the CLASS observation instrument. Each observation covered the entire instructional period, and I recorded field notes on the observation data collection form.

I also collected documents related to the preschool program at each site. First, I examined information from the United States Census Bureau in relation to the number of children under the age of five who were enrolled in preschool programs across the state and in the school district during that time that I conducted this study. I also asked the coordinator of research and evaluation and the director of the Head Start program to provide information on how many preschool students were enrolled at each preschool program site, including the number of preschool teachers and staff support for each preschool program. In addition, I asked the coordinator of research and development and the director of the Head Start program to provide written information about the preschool standards, the literacy curriculum in terms of expected learning outcomes and/or program standards, the instructional processes and practices in literacy that teachers are expected to use to improve teaching and learning, and assessment results in relation to student achievement in literacy.

Data Analysis Plan

For the first level of analysis, which was the single case analysis, I used the specific analytic techniques of coding and category construction to examine the interview data from each single case or pre-school program, which was the unit of analysis for this study. I used line-by-line coding recommended by Charmaz (2006) for the interview data, with an emphasis on –ing words to keep the codes as active and close to the data as

possible. I also used the constant comparative method recommended by Merriam (2009) to construct the major categories and themes. I presented the results of my observations of literacy instruction in the preschool classrooms in the form of tables, using descriptive statistics to present these results, according to each of the ten CLASS indicators. I used a content analysis to describe the purpose, organization, and use for each document that I collected from each site.

For the second level of analysis, which was the cross case analysis, I examined data across all sources of evidence for all three cases. I examined the categorized data from the interviews with preschool teachers, the results from the observations of literacy instruction, and the content analysis from the document review for emerging patterns, themes, and relationships. Once the major themes were described, I determined the key findings or results for this study. Discrepant data was also presented. This cross case analysis was presented in relation to the central and related research questions for this study.

Issues of Trustworthiness

Merriam (2009) stated, "All research is concerned with producing valid and reliable knowledge in an ethical manner. Being able to trust research results is especially important to professionals in applied fields because practitioners intervene in people's lives" (p. 209). Trustworthiness relies on adhering to the rigor of a qualitative study. In order for the results of a study to be trustworthy, researchers must have confidence in the how the study was conducted. Trustworthiness means that data has been collected,

analyzed, and interpreted in a rigorous and ethical manner. In order to be trustworthy, the study must be credible, transferable, dependable, and confirmable.

Credibility

Merriam (2009) noted that credibility or "internal validity deals with the question of how research findings match reality" (p. 213). In order to enhance the credibility of a qualitative study, Merriam recommended the following strategies: triangulation, member checks or respondent validation, adequate engagement in data collection, and peer examination or peer review. Triangulation of data means collecting data from multiple sources in order to create the opportunity to crosscheck data and compare the results. Member checks involve allowing the participants to provide feedback on the emergent findings of the study in order to determine the plausibility of the findings. Adequate engagement means the consideration of how much time is needed to reach the saturation point, which occurs when the responses among participants become consistent. Peer review consists of knowledgeable peer examination of the topic and methodology of the study to make sure the study is high quality.

In order to produce credible results, I used triangulation by collecting data from multiple sources, including interviews with preschool teachers, observations of instruction in literacy skills, and document review in order to crosscheck the data and compare the results for conflicting findings. In addition, I used member checks by asking participants to review the tentative findings of the study to determine their plausibility. I used adequate engagement to make sure that I collected enough data from the participants in order to substantiate the conclusions drawn. I also used peer examination by asking

several colleagues to scan some of the raw data and assess whether or not the findings were plausible based on this data.

Transferability

Transferability in a qualitative study is the ability to generalize the data so other studies may gather similar data in another setting (Merriam, 2009). It is also the ability to transfer and generalize outcomes and findings. Merriam noted that in order for a qualitative study to be transferable, there must be an equivalency among conditions, population, and sample because other researchers may decide to conduct a similar study or apply the findings to other situations. Merriam noted that the most common strategies used to enhance transferability in qualitative research are to produce a rich, thick description of the setting and the findings of the study and to make sure that the study sample has either maximum variation or typicality of the site or participants.

In order to ensure transferability for this study, I used rich, thick description to present the setting and participants of the study, the data collection protocols, the data analysis protocols, and the findings of the study. I provided this rich, thick description so that readers may generalize the findings of this study to their particular situations and in order to replicate this study in other similar settings. In addition, I used the strategy of typicality in that I selected preschool programs that were typical of preschool programs across the state and the country.

Dependability

Reliability or dependability represents the consistency of the study (Merriam, 2009). Dependability focuses on the assumption that if the study is repeated, the results

should remain the same. Merriam noted that it is very difficult to produce reliability in social science research due to the variability of human behavior. Although a repeat of the exact same study may not produce the same results, there should be some similarities in the findings. Merriam argued that the strategy of triangulation is often used to improve the consistency of a study. Peer examination and an audit trail are also strategies that can be used to enhance the dependability of a study.

To ensure the dependability of this study, I used triangulation by collecting data from multiple sources, including interviews, observation, and documents. I used an audit trail to document exactly how the data was collected, the categories found, and the decisions that I made throughout the data collection and analysis process. I also maintained a research journal that included my reflections, questions, and decisions during the course of this study in order to document problems, issues, or ideas. In addition, the audit trail also included letters of cooperation and consent, the data collection instruments, and a coding sample for the interview data.

Confirmability

Merriam (2009) stated, "investigators need to explain their biases, dispositions, and assumptions regarding the research to be undertaken" (p. 219). Confirmability is recognizing that the researcher needs to clarify and acknowledge their biases, dispositions, and assumptions. Merriam referred to this process of reflecting critically on the self as researcher as the strategy of reflexivity (p. 219). Merriam also argued that researchers need to explain their biases, dispositions, and assumptions regarding the

study so that the reader can better understand how the individual researcher might have come to a particular interpretation of the data.

To ensure the confirmability of this study, I reflected on my own biases, dispositions, and assumptions regarding this study in my researcher's journal. I reflected that I am an early childhood educator and understand language development. However, I approached this study with certain biases. I have strong feelings about what a high quality preschool classroom should look like. I also believe that play in a preschool classroom is extremely important. In addition, I believe in the importance of developmentally appropriate literacy instruction. I also believe that teacher-child interaction greatly improves oral language skills and builds strong vocabulary for students. I minimized these biases by maintaining a reflective research journal and following strict protocols for data collection and analysis and by trying to remain as close to the data as possible without influencing the interpretation of it.

Ethical Procedures

Merriam (2009) noted that it is critical that the researcher has integrity and can be trusted to present a valid and reliable study. The ethics of the researcher provides credibility for the researcher and for the study. Ethical behavior on the part of the researcher is developed through appropriate training, experience, and self-belief in professionalism and competence. The researcher must follow a code of ethics and ethical procedures when conducting a study. In a qualitative study, Merriam noted, the caution about ethical behavior involves the integrity of the data collection and data analysis

process in order to produce valid and reliable findings because the potential for researcher bias is so strong.

In order to ensure that my behavior as a researcher was ethical and that my study was credible, I sought approval from the Institutional Review Board (IRB) at Walden University to conduct my study. My approval number was 03-06-13-0118983. I obtained letters of cooperation from personnel in the school district where the three preschool programs were located and from the principal at each proposed site. I also obtained a signed consent form from each of the participating teachers. I also used pseudonyms to protect the privacy of the school district, the preschool program sites, and the participants. All data was kept confidential and in a locked file cabinet in my home.

Summary

In conclusion, the purpose of this chapter was to describe the methodology that I used to conduct this study. In this chapter, I included an explanation of the case study design and the rationale for its selection. In relation to the case study design selected for this study, the unit of analysis or 'case' for this study was a preschool program in the purposefully selected public school district. A total of three cases were presented; one case was a Head Start preschool program, another case was a Title I preschool program, and another case was a state funded preschool program. I selectedsix preschool teachers to participate in this study, including two teachers from each preschool program. I asked these teachers to participate in an individual interview that was 15-20 minutes in length. I also asked these teachers for permission to conduct an observation of literacy instruction for preschool students in their classrooms, including whole group and small group

instruction, teacher-child interaction, and play. I also collected documents related to each of the preschool programs. I analyzed the data at two levels. Level one analysis involved coding and categorization of the data for each single case. Level two analyses involved a cross case review in which I examined all data for patterns, themes, and relationships and for discrepant data in order to determine the findings for this study. The study was also held to appropriate standards for trustworthiness and ethical procedures.

In Chapter 4, I present the results of the study, including a description of the setting of the study, relevant participant demographics, and a review of the data collection process. For the first level of analysis, which is the single case analysis, I include a description of how the categories were constructed for the interview data. I also analyze the observation data using descriptive statistics, and I use a content analysis for the documents. For the second level of analysis, which is the cross case analysis, I include a description of the patterns, themes, and relationships that were found across all the cases to determine the findings of the study. I alos present evidence of the study's credibility, transferability, dependability, and objectivity. I conclude this chapter with a presentation of the results of the study in relation to the central and related research questions.

Chapter 4: Results

The research design of this multiple case study was derived from the purpose of this study, which was to explore how preschool teachers used developmentally appropriate instructional practices to improve the literacy skills of students in three preschool programs in a large public school district in an eastern state. In order to accomplish this purpose, I described the instructional practices that preschool teachers used in the classroom to improve the literacy skills of preschool students. In addition, I described the perceptions that preschool teachers have about the effectiveness of their instructional practices in improving literacy skills for preschool students. I also analyzed the standards, curriculum, and assessments that preschool teachers used at each research site.

The following central research question was used to guide the data analysis for this study: How do preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of preschool students? The related research questions were as follows:

1. How do preschool teachers provide literacy instruction for preschool students?

2. What perceptions do preschool teachers have about the effectiveness of the instructional practices they use to improve literacy skills for preschool students?

3. How do preschool teachers use developmentally appropriate instruction through play to improve literacy skills for preschool students?

4. How does teacher-child interaction develop oral language skills to enhance literacy for preschool students?

5. What do documents about the three different preschool programs reveal about literacy instruction for preschool students?

This chapter includes the results of this study. For the introductory section, I present a description of the setting, the participant demographics, and the data collection process. For the second section, I include an explanation of how the data were analyzed. For each single case, I used line-by-line coding and category construction for the interview data, comparative incident-by-incident coding and category construction for the observation data, and a content analysis and category construction for the documents. I also include an analysis of themes and discrepant data that emerged from the cross-case analysis, using the constant comparative method Merriam (2009) recommended for qualitative research. For the last section, I include a discussion of evidence of trustworthiness in relation to the constructs of credibility, transferability, dependability, and objectivity, and I present the results of the study in relation to the central and related research questions.

Setting

This study was conducted in the Garapan Public School District (pseudonym) in the eastern part of the United States. According to United States census data (2010), the state's population at that time was approximately 8 million with 6.3% of children under 5 years of age. In addition, 10% of the population lived below the poverty level, according to federal guidelines. The Garapan Public School District is located in an urban city with

a population of 240,000 with 6.8% of children under 5 years of age. In addition, 17% of the city's population lives below the poverty level. During the 2011-2012 school year, the Garapan Public School District, which managed the Title I preschool program and the state-funded preschool program, enrolled 2,380 students out of a total population of 33,500 (State Department of Education, 2013). The Garapan Public School District offered 17 Title I classrooms located in 10 different sites, including one early childhood center and nine elementary school sites. The district also offered 35 state-funded preschool program classrooms located in 31 elementary schools, one in the early childhood center, one in the technical training center, one in a city community center, and one rented classroom space in a private childcare center.

Case 1: Head Start Preschool Program

The Head Start preschool program reported an enrollment of 14,500 students across the state in 2010 (Children's Defense Fund, 2012). The program was a mixed age model that included 3- and 4-year-olds in the same classroom. The Head Start preschool program was not under the jurisdiction of the Garapan Public School District, but rather under the jurisdiction of the Office of Human Affairs, which governed a large region of six cities with a combined population of over 1,000,000 (Executive Head Start Director, personal communication, May, 2013).

The Head Start preschool program consisted of 18 classrooms split between seven separate sites. These programs were located in the middle of small communities of low-income housing so that parents were able to access the program and walk their children to the site. A total of 339 students from birth to 4 years were enrolled in the Early Head

Start and Head Start preschool program during the 2012-2013 school year. Of that number, 81 students were 3 years of age, and 108 students were 4 years of age. All of the students lived in family households below the poverty line, according to federal guidelines. According to the demographic data, 82% of the students were African Americans, 5% were European Americans, and 4% were Latino Americans.

For this study, the Head Start preschool program site was located in the heart of the downtown area in public housing designed for families living in poverty. The Head Start preschool program was located in a large gymnasium-sized room in a community center consisting of one large room with three classrooms cabinets. One Head Start classroom operated as a half-day program with a morning and afternoon group of students. The other Head Start classroom operated as a full-day program.

Case 2: Title I Preschool Program

The Garapan Public School District governed the Title I preschool program included in this study, which served only 3-year-old students. Two sites were selected for the Title I program. The first site was Marian Elementary School (pseudonym), a PreK-5 elementary school located on the eastern outskirts of the city. Marian Elementary School included three preschool classrooms with 45 enrolled students, including one Title I-funded classroom and two state-funded preschool program classrooms. For the 2012-2013 school year, 313 students were enrolled at this site in 18 pre-K-5 classrooms. Educators at Marian Elementary School identified 88% of the student population as economically disadvantaged because they received free or reduced lunch. In relation to racial and ethnic subgroups, 97% of the students in this school were reported as African

American, and the remaining 3% were reported as American Indian, European American, or interracial. The second Title I site was located in the only early childhood center in the Garapan Public School District. This site contained only preschool classrooms, and a district assigned principal supervised all preschool teachers at this site. For 2012-2013, the early childhood center included three Title I classrooms.

Case 3: State-funded Preschool Program

The Garapan Public School District governed the state-funded preschool program involved in this study. The site was located in the early learning center in the same building as the Title I preschool program. In addition to the three Title I classrooms, this site also contained nine state-funded preschool program classrooms with one teacher, one paraprofessional, and 18 students in each classroom. The three Title I classrooms and nine state-funded preschool program classrooms included a total of 128 students and 12 classroom teachers. The racial and ethnic population was almost 100% African Americans with the exception of one American Indian child. Out of the 128 students enrolled, 90% were reported as economically disadvantaged.

In terms of site selection, the senior coordinator of research and evaluation for the Garapan Public School District chose the public school sites for this study; therefore, not every preschool teacher in the district was given an opportunity to participate in this study. The senior coordinator of research and evaluation considered the early childhood center the most suitable site for this study so that statewide testing for students in Grades 3 and 5 would not be disturbed. However, out of the three Title I classrooms in the center, only one teacher volunteered to participate in this study so the senior coordinator for

research and evaluation selected an additional elementary school with a high performance

rating on the statewide assessments as a site for this study. The school included one Title

I classroom, and the Title I teacher was willing to participate in this study.

Participant Demographics

A total of six preschool teachers participated in this study. Two preschool

teachers, Alice and Amanda (pseudonyms), represented the Head Start preschool

program for this study. Alice was an African American preschool teacher who taught

half-day programs for 5 years who often used direct instruction and focused on academic

skills. Amanda was also an African American preschool teacher who taught Head Start

for over 10 years as a full-day program.

Two preschool teachers, Christine and Catherine (pseudonyms), represented the

Title I preschool program for this study. Christine was a European American preschool

teacher who had taught preschool for over 10 years. Christine reported that she believed

in engaging students in learning and in addressing the developmental learning needs of

each student in her classroom. Catherine was an African American preschool teacher who

had also taught preschool for over 10 years. Catherine placed a strong emphasis on letter

recognition skills. Catherine also enjoyed playing music for students.

The state-funded preschool program teachers, Beth and Betty (pseudonyms) were

both European American. Beth had taught in the state-funded preschool program for

almost 20 years. Beth reported that she focused on making learning enjoyable and

keeping all students engaged in activities. Beth believed that students learned academic

concepts through engaging learning experiences. Betty had taught in the early childhood

center for 10 years, and she previously had taught students in a Title I classroom. Betty reported that she focused on the academic needs of students primarily through direct instruction. Betty also spent several years in the Navy as an electrician. Once Betty left the Navy, she completed a 2-year program to obtain licensure in preschool education.

Data Collection

For this case study, I collected data from multiple sources, including interviews with preschool teachers, observations of literacy instruction in preschool classrooms, and documents related to each preschool program that were found in the public domain. I conducted all interviews and observations during April and May 2013. I conducted the first three observations and interviews related to the Title I program and the state-funded preschool program at the Garapan Public School District Early Childhood Center. The second group of observations and interviews that I conducted were in a Title I classroom at Marian Elementary School in the Garapan Public School District. The last group of observations and interviews that I conducted were at the Head Start program site.

Case 1: Head Start Preschool Program

For this preschool program, I conducted the first interview and observation with Alice at the Head Start site. Alice asked me to observe an instructional lesson in literacy skills during the afternoon class, so I arrived at noon on May 7, 2013. I provided Alice with a brief explanation about how I was going to conduct the interview and observation. Alice asked that I conduct the interview in the classroom, and she did not want the interview recorded so I complied with her request, even though she had signed a consent form granting permission for an audio recording. Following the interview, I used the

CLASS instrument to conduct the observation of the instructional lesson in literacy skills. I wrote a running record while completing three observation cycles that included a large group activity, a small group activity, and play time. I rated each cycle according to the CLASS criteria and provided examples from my observations to justify the score. Small group time took place during playtime. I spent the first 15 minutes of that time observing and recording the small group activity and the last cycle observing and recording the play time cycle.

I conducted the second interview and observation at the same Head Start site with Amanda, who taught the full-day program. I arrived around 9:00 a. m. on May 9, 2013. I gave Amanda a brief explanation about how I was going to conduct the interview and the observation. Amanda informed me that no facilities were available to conduct the interview in private so I conducted the interview in the classroom. After the students arrived, I completed three observation cycles and rated each cycle using the CLASS criteria.

Case 2: Title I Preschool Program

I conducted the first Title I preschool program interview with Christine at the Garapan Public Schools Early Childhood Center. I arrived at 8:30 a. m. on April 23, 2013. I explained how I planned to conducted the interview and the observation. As soon as the school announcements were finished, I observed a large group activity, which lasted 15 minutes. Christine immediately transitioned to a small group activity by assigning students to two groups. One group worked on a sorting activity with Christine, while the assistant worked with the other group on an art project. The small group

activity lasted 15 minutes. As soon as the groups were finished with their tasks, Christine helped students transition to playtime. After completing these three cycles of observations, I rated each cycle using the CLASS criteria. Christine and I agreed to conduct the interview during rest time. I waited in the teacher's lounge until 1:00 p. m. When Christine arrived, I conducted the interview in a small conference room.

I conducted the second Title I preschool program interview with Catherine at Marian Elementary School. I arrived at 8:30 a. m. on April 29, 2013, and I explained the observation and interview procedures to her. As soon as students arrived, I observed the large group activity, which was a song. The large group activity lasted longer than 15 minutes, so I only wrote the running record during the beginning of the activity. The students then moved to centers, and I recorded the first 15 minutes of playtime. After an hour of playtime, Catherine assigned students to three groups and played number bingo with each group. This small group activity was not related to literacy instruction. After completing three observation cycles, I rated each cycle using the CLASS instrument criteria. I conducted the interview with Catherine in a small conference room near the library during lunchtime.

Case 3: State-funded Preschool Program

I conducted the first state-funded preschool program interview with Beth at the Garapan Public School District Early Childhood Center at 8:30 a. m. on April 22, 2013. I first explained the observation and interview procedures. I first observed a large group activity about the parts of a plant. Following the large group activity, Beth separated students into three small groups. Beth called a few of the students to the computer to

work on a game, while another group worked on an art project, and another group created a caterpillar with circles and letters of their names. As soon as students finished their small group activities, they moved to centers. After completing three observation cycles, I rated each cycle using the CLASS instrument criteria. That day, Beth was scheduled to be at a meeting during students' naptime, so we scheduled the interview the following day on April 23, 2013 at 1:30 p. m.

I conducted the second state-funded preschool program interview with Betty at the Garapan Public School District early childhood center at 8:30 a. m. on April 24, 2013. I explained the observation and interview procedures. I observed a large group activity about a book about spring. Following this activity, Betty separated students into three groups and called a few students to the computer to work on the Breakthough to Literacy computer program. One group worked with the instructional assistant on planting grass seeds, while Betty asked students in her group to name three items that were a certain color, draw them, and label them by writing the word. As soon as students finished their small group activities, they moved to centers, and others were called to her table to complete the small group activity. During playtime, Betty continued working with students in her group on the activity while the instructional assistant monitored progress for the rest of the students. The small group activity consumed the entire small group and learning center time. After completing three observation cycles, I rated each cycle using the CLASS instrument criteria. At 3:00 p. m., once the instructional day ended, I conducted the interview with Betty.

One variation in relation to the original data collection plan was that the senior coordinator of research and evaluation for the Garapan Public School District selected the Title I and state-funded preschool sites for this study so that the sample for this study was limited to those preschool sites that met qualifications for state accreditation and were not on probation for adequate yearly progress, based on state assessment results. Thus, every preschool teacher in the district was not given an opportunity to participate in this study. This selection process impacted this study by limiting the number of possible participants who might have added richer data.

Another variation in relation to the original data collection plan was the inconsistent routine for literacy instruction that some of the preschool teachers followed. Some teachers conducted literacy activities during circle time, small group, and learning center time, while others did not. Some instruction included literacy activities that could be rated, while at other times, teachers used activities that matched the CLASS requirements. Sometimes I observed classroom instruction that demonstrated little connection to literacy skills.

Data Analysis

For this study, I conducted data analysis at two levels. For the first level of analysis, which was the single case analysis, I used coding and category construction to examine the interview data from each single case or preschool program. I used line-by-line coding recommended by Charmaz (2006) for the interview data, with an emphasis on using *–ing* words to keep the codes as active and close to the data as possible. I also used the constant comparative method recommended by Merriam (2009) to construct the

major categories. I presented my analysis of the observations of literacy instruction in the preschool classrooms in the form of summary tables, using descriptive statistics to present these results, according to the two CLASS dimensions, quality of feedback and language modeling, that I used to examine literacy instruction. I used a content analysis to describe the purpose, organization, and use for each document that I collected from each site.

For the second level of analysis, which was the cross case analysis, I examined data across all sources of evidence for all three cases. I examined the categorized data from the interviews with preschool teachers, the results from the observations of literacy instruction, and the content analysis from the document review for emerging patterns, themes, and relationships. I also examined the categorized data from all sources across all cases for discrepant data. From these themes and discrepant data, I determined the key findings or results for this study. I presented the results of this study later in this chapter in relation to the central and related research questions for this study.

Analysis of Interview Data

Interview Question 1 asked, "*How do you define literacy skills*?"

The two Head Start preschool teachers, Alice and Amanda, defined literacy skills in similar ways. Both teachers agreed that literacy skills are the skills needed for reading and writing. Alice noted that "literacy to me means guiding the students to taking their critical steps towards reading, writing, and communicating." Amanda believed that literacy skills involved phonemic awareness skills and added,

We have our phonological awareness exercises, alphabet activities, rhyme,

alliteration, and beginning sound[s]. They also print. They write their names.

There are so many ways that we do it. Each uses storybook reading, and role-

playing anywhere they can play. I guess we're doing an exercise where they will

put together a puzzle and have to spell out words, and sound out letters.

Both Amanda and Alice defined literacy skills as reading and writing skills such as letter

identification and recognition of letter sounds.

The two Title I preschool teachers, Catherine and Christine, both agreed that

literacy skills consist of oral language skills and processes that are the basis of learning

how to read. Christine concentrated on the importance of "talking in everyday situations."

Christine used journals to encourage students to write about their experiences. Catherine

had difficulty defining literacy skills, describing them as "learning how to read."

The two state-funded preschool program teachers, Betty and Beth, defined

literacy skills differently from each other. Beth defined literacy as a group of skills that

support students' reading readiness. However, Betty provided specific examples of

literacy skills, such as identifying the letters of the alphabet and recognizing letter

sounds. Betty also believed literacy skills included book knowledge and book sense such

as knowing that reading tracks left to right and top to bottom and identifying the front and

back covers of a book.

Interview Question 2 asked, "*How do you provide literacy instruction in your*

preschool classroom?"

The two Head Start preschool teachers, Amanda and Alice, expressed different views about how to provide literacy instruction in the classroom. Amanda focused on "phonological awareness exercises, alphabet activities, rhyme, alliteration, and beginning sounds" as well as print knowledge. Amanda asked students to "put together a puzzle and have them spell out words and sound out letters." However, Alice viewed literacy instruction as "giving the children positive communication and allowing the children to talk about their experiences." She added, "We model literacy through their names, print out stuff for around the room, and read books."

The two Title I preschool teachers, Christine and Catherine, described their literacy instruction differently. Christine commented,

Some of it is very structured, like when they're writing in their journal maybe about planting a seed. We're talking about a definite experience. I incorporate language if it is a concept to be taught that would be through language, through literacy, and especially planning for work. The children have to convey some sort of skill or share with others.

Catherine, on the other hand, reported that she used hands-on activities. She also incorporated oral language into literacy lessons by encouraging students to use their words. For example, Catherine asked students to use a microphone to present a short talk about themselves She also focused on teaching students how to recognize the letters in their names.

The two state-funded preschool program teachers, Betty and Beth, also reported their literacy instruction differently. Betty focused on instruction such as using circle time

to review the alphabet with a letter of the week, reading stories, presenting a print rich environment, and showing letters that students recognized as part of their names. Betty also evaluated phonological awareness skills by asking students to identify letters and sounds for each letter. Betty used a computer program to teach students how to track words in a book and other pre-reading skills such as alphabet and letter sound recognition. The program also provided definitions for specific vocabulary words. In contrast, Betty believed that teaching literacy instruction involved providing activities that support emergent reading skills such as language development, vocabulary, pre-writing, handwriting, reading, and [a] print rich environment.

Interview Question 3 asked, "*How do you use play to teach literacy skills*?"

The two Head Start preschool teachers, Alice and Amanda, described similar examples of how they used play to teach literacy skills. Both teachers focused on using role play to prompt students' imaginations. Alice used prompts and hand-on experiences to encourage rich vocabulary. Alice also encouraged students to pretend to be other people by dressing up. For example, students who pretended to be doctors used props and vocabulary to describe such medical instruments as a stethoscope and blood pressure monitor. When students pretended to be firemen, Amanda talked with them about calling 911 in the case of an emergency. Amanda shared an example of a specific play event that supported vocabulary development:

I had one girl in the housekeeping area washing her hair in the sink. I said, "What are you doing"? She said, "Oh, we [are] at a beauty salon". I said, "ok." I thought

beauty salon; it is amazing the words they are using, I wouldn't think they know

that word, but they knew.

Both Amanda and Alice used play to teach literacy skills by building vocabulary related

to the play activity.

The two Title I preschool teachers, Catherine and Christine, both agreed that they

use play to encourage students to communicate their thoughts with others. Catherine

believed that play encourages verbal communication:

We do many small group activities dealing with emotions, using the toys and the

dolls. That has the name on it and the facial expression and they will look at it and

verbally communicate what they think about it. Just providing a range of age-

appropriate fun activities, whether they're in centers, associating with food items,

or something with it, and mak[ing] it fun for them.

Christine believed that students learn to talk all of the time in the classroom, outside at

play, and during meals. During playtime, Christine asked students to plan where they

were going to play and to describe what they were going to do when they arrived.

Christine also asked students to play games in order to reinforce skills, such as learning to

recognize colors, describing objects, and getting along with others.

The two state-funded preschool program teachers, Betty and Beth, also reported

using play to teach literacy skills. Betty believed that talking, listening, asking questions,

and expanding on and showing an interest in students' ideas are important factors in

helping students improve their literacy skills. Betty provided one example of how she

used play during center time to provide literacy instruction:

Something I know that I could do is to put a clipboard with paper in those centers so that anytime they want to write, they could. A lot of times they say, "Will you read this to me"? And if they're writing it, I could say "Can you read this to me?"

Beth also focused on using play to provide literacy instruction in several different learning situations. Through play, Beth believed that she could teach rhyming skills, letter recognition, vocabulary, and writing in a non-threatening way. For example, Beth asked students to write a list for the grocery store to improve their writing skills and to perform a puppet show from a story to develop oral language skills.

Interview Question 4 asked, "*What should preschool children know and be able to do in order to achieve proficiency in literacy skills*?"

The two Head Start preschool teachers, Alice and Amanda, both emphasized the importance of phonological awareness skills in order to achieve proficiency in literacy skills. Alice stated,

I think they should be able to identify and hear the sounds and learning the letters in order, alphabetical order, from left to right. Once they identify the individual sounds and process the individual letters in order, they can begin to put words together. They can learn rhyming words like cat, hat, and bat.

Amanda also believed that preschool students should master a broader range of literacy skills including (a) knowledge of print, (b) alphabet recognition, (c) understanding that books are a form of enjoyment, (d) social skills so they can relate to others, (e) writing their names, and (f) identifying letter sounds. Amanda also noted that she often provided instruction about these skills through finger plays and songs.

The two Title I preschool teachers, Catherine and Christine, focused on the importance of oral language skills in achieving literacy proficiency. Catherine stated:

Definitely letter-sound recognition, and as far as letter-sound recognition [is concerned], it's making connections that letters can form words, as far as with their names and to be able to articulate, using oral language, to express their needs and wants. They can kind of repeat what is being said to them, hearing and listening.

Christine believed that students should be able to master oral language skills in order to achieve proficiency in literacy skills. Christine believed that these skills are developed when students have simple conversations with the teacher and share information about themselves. Christine also believed that student attitudes about learning and school are important to the development of strong oral language skills.

The two state-funded preschool program teachers, Betty and Beth, expressed different views about the skills students should know and be able to do in order to achieve proficiency in literacy skills. Betty focused on phonological awareness skills such as letter recognition, letter sounds, and recognition of small and familiar words. Betty noted that she discusses how to read with students and teaches them how to hold a book, how to differentiate the back from the front of the book, and how to track words on a page. Betty also emphasized fine motor skills such as holding a pencil, working with play dough, squeezing a ball, and opening snacks and milk boxes. Beth, however, believed that students need an awareness of rhyme, an awareness of words that sound the same, how words and letters connect, and a rich vocabulary in order to be proficient in

literacy skills. Beth did not believe that students should be rushed into reading and writing instruction. She added, "I don't think it's good to learn to write a whole list of words, and then you do not understand what any of those words are." Thus, both teachers focused on different elements related to reading such as phonological awareness, book knowledge, and understanding the use of words to create a story.

Interview Question 5 asked, "*What challenges do you face when preparing children for literacy instruction in your classroom*?"

The two Head Start preschool teachers, Alice and Amanda, agreed that a significant challenge to literacy instruction is that student behavior problems often interfere with learning. Alice added,

The main challenge is keeping the children focused and engaged. Some children have some behavior problems. This generation there [are] a lot of behavior problems that interfere with their learning. The attention span is so short, so we keep it simple and try to make it fun for them and keep them engaged.

Amanda also believed that it is important to teach listening skills because parents have not taught their students to focus and listen, and therefore, this inability to listen at school often results in behavior problems that interfere with learning literacy skills.

The two Title I preschool teachers, Catherine and Christine, expressed different views about the challenges they faced when providing literacy instruction. Catherine expressed concern about meeting the academic needs of all students and the lack of support from parents. Catherine was also concerned about students coming to school without their basic needs being met, and believed in feeding students if they were hungry

and comforting them if they were frightened. Catherine noted that she first wants students to feel comfortable in her classroom. Catherine also pointed out that students often come to school with different developmental levels, which makes literacy instruction challenging. Christine also believed that it is very difficult to get parents to help with their children's learning. Christine added that she sends an informational packet home to parents so that they can help their students spell their names. This packet provides explicit directions for that activity, which Christine believed parents find helpful.

The two state-funded preschool program teachers, Betty and Beth, also presented different responses about the challenges they face when preparing students for literacy instruction. Betty believed that it is difficult to motivate students to read and to make literacy instruction "fun" for them. Some of the activities that Betty provided in the classroom to make learning more enjoyable included drawing and writing, asking students to tell a story, and using art to tell a story. In contrast, Beth was concerned with "the challenges we have put upon ourselves to have everybody moving, not at the same pace, but the pressure to have everybody meet the benchmarks." Beth believed that teachers lose sight of students' learning needs because they are focused only on state assessments and do not spend enough time allowing students to do "child things." Beth was also concerned with parents' lack of understanding about the skills that their students need to learn. Beth noted that she does not send worksheets home with students, and as a result, parents often believe that their students are not doing anything in school.

Interview Question 6 asked, "*How would you describe a developmentally appropriate classroom?*"

The two Head Start preschool teachers, Alice and Amanda, agreed that a developmentally appropriate classroom should support students' academic and social needs. Alice described the developmentally appropriate classroom as "a place to meet the needs of students so that everything is age appropriate as it should be" and "children are given choices." Amanda described a developmentally appropriate classroom as a place where "the setting and the curriculum are focused toward the positive and fit the abilities of the children as based on developmentally appropriate theories." Amanda also believed the developmentally appropriate classroom needs to focus on students' strengths and weaknesses. The instructional material and the physical arrangement of the classroom, Amanda believed, should be age appropriate.

The two Title I preschool teachers, Catherine and Christine, agreed that a developmentally appropriate classroom should be focused on instructional activities that are challenging and encourage curiosity. Catherine described a developmentally appropriate classroom as "geared toward the children." Catherine added,

> I think a developmentally appropriate classroom would be geared towards the children. The children will be able to move around the classroom freely. The teacher will serve as a facilitator in most aspects, as far as, like making their lunch choices.

Christine believed that a developmentally appropriate classroom should be

> one in which all of the children are not doing the same thing. Like I said, they're at different levels. A developmentally appropriate classroom would be one that has things out and accessible that are appropriate for the children, but there should

be some challenging and encouraging things in the classroom for those more

curious and more able.

Both Catherine and Christine agreed that a developmentally appropriate classroom should

be a place where children freely choose where to play and how to play.

The two state-funded preschool program teachers, Betty and Beth, agreed that a

developmentally appropriate classroom should be child focused and meet the academic

and social needs of all students. Betty believed that materials and activities should be at

an age-appropriate level in order to help students achieve academic success. These

activities should include leveled books, a writing center, word games, matching words,

differentiated instruction, and child-directed instruction. Beth described a

developmentally appropriate classroom as designed to meet all of the academic and social

needs of students with interesting learning centers that encourage them to be creative and

to move about freely. Beth insisted that the developmentally appropriate classroom

should not be a mini-kindergarten classroom.

Interview Question 7 asked "*Describe the strategies you use to develop oral

language skills with students.*"

The two Head Start preschool teachers, Alice and Amanda, both agree that oral

language skills need to provide opportunities for students to talk every day. Alice noted:

We use open-ended questions, ask a lot of questions, and allow them to express

their ideas and feelings. When the children are doing their art work, we invite the

children to dictate what their writing or work is about.

Amanda expressed a different point of view. She noted,

I think the first thing in oral language; they have to know the rules of language.

We take turns, and we keep our voices down. I focus first to get them to focus and

pay attention.

Alice and Amanda agreed that the development of oral language skills involved using

open-ended questions and following the rules of language in conversation.

The two Title I preschool teachers, Catherine and Christine, believed that reading

stories helps students develop oral language skills. Catherine noted, "I like to provide

opportunities for students to model appropriate speaking in complete sentences." In

addition, Catherine demonstrated how to read a book and provided opportunities for

students to talk and sing. Instead of pointing and nodding, Catherine encouraged students

to use their own words to express their wants and needs. Christine also reported that she

used several strategies to help students develop oral language skills, including journal

writing, sharing time to talk about everyday life, talking about items in the guessing bag,

and working on the computer. Christine also noted that she loves to use stories and finger

plays to help students develop oral language skills.

The two state-funded preschool program teachers, Betty and Beth, reported using

different strategies to develop oral language skills. Betty used oral language strategies

such as asking many questions, encouraging students to say what they intend to do when

they play, speaking to students in full sentences, asking students to share their thoughts,

providing frequent opportunities for students to speak, talking with and listening to

students, emphasizing new vocabulary, listening to nursery rhymes, and singing. In

addition, Betty noted that she provides new words when a student does not know what to

say. Betty also noted that she gives students individual time with her in order to help them feel comfortable speaking in front of others. However, Beth focused on singing by finding songs for every literacy theme. Beth also noted that she focuses on presenting new vocabulary to fit each theme. Beth also encouraged students to use a microphone so they could hear themselves talk. In addition, Beth used word cards to ask students to echo read.

Interview Question 8 asked, "*How do you use teacher-child interaction to teach literacy skills?"*

The two Head Start preschool teachers, Alice and Amanda, used teacher-child interaction to improve their listening and speaking skills. Alice used story time, small groups, music and movement activities, poems, and nursery rhymes to engage students. Amanda believed that teacher-child interaction happens "all of the time." Amanda noted the importance of observing and understanding what students know and are able to do. Amanda also believed in the importance of understanding how each student feels and identifies personal emotions.

The two Title I preschool teachers, Catherine and Christine, believed that teachers should use teacher-child interaction to teach oral language skills in order to communicate effectively with peers and adults. Catherine focused on giving students time to communicate. When a problem developed between peers, Catherine guided them to find possible solutions. In a whole group setting, Catherine reported providing scenarios of difficult situations so students could brainstorm ideas about how to address problems peacefully. Christine focused on students' understanding of concepts and skills. Christine

noted that she constantly asks questions as part of her evaluation of each student's specific academic and social needs. Christine also reinforced learning through repetition and recall to help struggling students understand basic literacy concepts.

The two state-funded preschool program teachers, Betty and Beth, used teacher-child interactions to improve students' speaking and listening skills. Betty noted that she provides students with her undivided attention by listening to what they want to discuss. Betty added that she asks higher order questions in order to prompt students to answer with detailed responses. Betty also encouraged students to use descriptive words and encouraged them to lead the conversation. In contrast, Beth believed that play time is an opportunity for teacher-child interaction. Beth added that "breakfast and lunch is a great time to have conversations" because students to learn how to speak in complete sentences. Beth also noted that she enjoys engaging students in conversation that provides her with an opportunity to ask them more extensive questions.

Interview Question 9 asked, "*What else would you like to share concerning your perceptions about developmentally appropriate practices in relation to literacy instruction in the preschool classroom?"*

The two Head Start preschool teachers, Alice and Amanda, shared different concerns about developmentally appropriate practices relative to literacy instruction in the preschool classroom. Alice noted,

> The big picture for me is when the children verbalize and we as educators can
> foster their language and continue to label our surroundings in the class. Continue

to ask questions and answer their questions and encourage them to ask questions

and answer them and continue to nurture the children and keep them safe.

Amanda added, "I think that all children can learn when it comes to literacy." Amanda

also noted that students from different economic backgrounds understand and speak

differently. The words they use come from where they live. Therefore, Amanda believed

that teachers need to be understanding about where students live. Amanda also believed

that teachers need to be aware that students often have academic and developmental

problems that need attention.

The two Title I preschool teachers, Catherine and Christine, responded in a

similar way to this question. Christine believed that developmentally appropriate learning

needs to be relevant and engaging. Christine also believed that students need to be able to

understand beginning sounds, how to hold a pencil, and how to write their names.

Catherine shared some additional ideas about how to encourage oral language and help

all students learn. For example, Catherine would like to introduce instruction in sign

language and Spanish. Catherine also believed that students need to know basic colors,

letters, and numbers and should utilize all of their senses in learning.

The two state-funded preschool program teachers, Betty and Beth, responded to

this interview question differently. Betty was upset at the loss of the computer program

because she believed that this program was important in teaching literacy skills. Beth,

however, discussed her belief in developmentally appropriate practice instead of teaching

to the test and pushing academic learning at the expense of other kinds of learning. Beth

believed that students should be happy and should learn through a variety of modes such

as singing, dancing, and art. Beth also believed that a developmentally appropriate classroom is a place where students explore and engage in hands-on activities.

Table 1 presents a summary of the major categories that I constructed from the interview data.

Table 1: *Categories from Preschool Teachers Interview Data*

Question	Topic	Categories
Q 1	Literacy skills	Written expression
		Oral language
		Letter recognition
		Letter sound recognition
Q 2	Literacy instruction	Oral language
		Phonological awareness
Q 3	Play	Variety of choices
		Child centered
		Developmentally appropriate
		Fun
Q 4	Proficiency	Phonological awareness
		Book awareness
		Oral language
Q 5	Challenges	Parental support
		Developmental differences
Q 6	Developmentally Appropriate	Child centered
		Variety of engaging activities
		Child autonomy
Q 7	Oral language	Using open-ended questions
		Modeling rules of language
		Attending to structure of language
Q 8	Teacher-child Interaction	DAP classroom environment
		Using open-ended questions
		Conducting individual conversations
Q 9	Additional Perceptions	Learning should be enjoyable
		Learning should be relevant
		Variety of activities should be used
		Emphasis on academic skills

Analysis of Observation Data

I conducted the observations of preschool literacy instruction by recording field notes during three, 15-minute cycles. I observed 15 minutes of a large group, small group, and free play activities. Once I had completed observing each cycle, I used the field notes to evaluate the 10 dimensions of the CLASS instrument. These dimensions included the following: (a) positive climate; (b) negative climate; (c) teacher sensitivity; (d) regard for student perspective; (e) behavior management; (f) productivity; (g) instructional learning formats; (h) concept development; (i) quality of feedback, and (j) language modeling (LaParo, Pianta, & Hamre, 2008). For this study, I used the ratings on the two dimensions that were related to literacy instruction: quality of feedback and language modeling.

Literacy Dimensions. In the CLASS manual, the quality of feedback dimension includes five indicators and their behavior markers, which are short descriptions of the indicator that are used as a guide when rating that indicator. These five indicators include (a) scaffolding, (b) feedback loops, (c) prompting through process, (d) providing information, and (e) encouragement and affirmation. The language modeling dimension also includes five indicators and their behavioral markers that are used as a guide when rating each indicator. These five indicators include (a) frequent conversations, (b) open-ended questions, (c) repetition and extension, (d) self and parallel talk, and (e) advanced language.

Table 2 describes the indicators and indicators for the dimensions of quality

feedback and language modeling, which are the two dimensions related to literacy

instruction on the CLASS instrument.

Table 2: The Quality of Feedback and Language Modeling Dimension

Dimension	Indicator	Behavioral Markers
Quality of feedback	Scaffolding	Hints Assistance
	Feedback loops	Back-and-forth exchange Persistence by teacher Follow-up questions
	Prompting through process	Asking students to explain thinking Querying responses and actions
	Providing information	Expansion Clarification Specific feedback
	Encouragement & affirmation	Recognition Reinforcement Student persistence
Language modeling	Frequent conversation	Back-and-forth exchange Contingent responding Peer conversation
	Open-ended questions	Asking questions that require more than a one-word response Student responses
	Repetition & extension	Repeats Extends & elaborates
	Self & parallel talk	Maps own actions with language Maps student actions with language
	Advanced language	Uses a variety of words Connecs to familiar words

Note: LaParo, K., Pianta, R. & Hamre, B. (2008). *The Classroom Assessment Scoring System: Manual Pre-K.* Baltimore, MD: Paul H Brookes Publishing.

Rating System. For each of the indicators related to the dimensions, the CLASS instrument also includes a rating system. LaParo et al. (2008) noted that each indicator for each dimension must be rated in terms of low (1-2), middle (3-5), and high (6-7). The main difference between these scores is the frequency with which the behaviors occur. The low range (1-2) is labeled *rarely*, the mid-range (3-5) is labeled *occasionally*, and the high-range (6-7) is labeled *often*. Each indicator has a specific description in order to clarify the rating. For example, if the specific criteria are not matched, the score is low and the rating *rarely* is used. Each indicator must be supported by data. The CLASS instrument is designed to give a glimpse of one day's literacy instruction and does not represent everyday instruction. The rating is based on notes taken during each 15 minute cycle, which must be scored between cycles for accuracy.

Quality of Feedback. In relation to the quality of feedback dimension, LaParo et al. (2008) described each of the five indicators in relation to the criteria for the rarely, occasionally, and frequent ranges. Scaffolding is the first indicator for this dimension. For the low range score, LaParo et al. noted, "the teacher rarely provides scaffolding to students but rather dismisses responses or actions as incorrect or ignores problems in understanding" (p. 69). For the mid-range score, LaParo et al. noted, "a teacher acknowledges where a student is starting and provides the necessary level of help" (p. 71). For the high range score, LaParo et al. noted, "a teacher acknowledges where a student is starting and provides the necessary level of help to allow the student to succeed or complete a tasks" (p. 73).

Concerning the feedback loop indicator, for the low range score, LaParo et al. (2008) noted, "The teacher may not interact with students in a way that allows him or her to provide feedback" (p. 70). For the mid-range score, LaParo et al. (2008) stated that "the teacher's feedback helps students expand and elaborate on their learning, but these efforts by the teacher are not sustained for long" (p. 71). For the high range score, LaParo et al. (2008) noted that this score must provide evidence of:

Multiple instances in which a teacher responds to a student's comments, actions, or performance by engaging with the student in a sustained back-and-forth exchange with the intention of helping him or her understand ideas or reach the correct answer. The teacher persists in these efforts rather than just stopping with one clarifying comment. (p.73)

In relation to the prompting through process indicator, for the low range, LaParo et al. (2008) noted, "When a student provides an incorrect answer, the teacher simply continues with the lesson rather than taking the time to help the student think about how he/she arrived at his/her answer" (p. 70). For the mid-range score, LaParo et al. noted, "In response to student comments or actions, the teacher occasionally will ask why questions to prompt the student to explain his/her thinking, however, this does not occur often or is typically a brief exchange" (p. 71). For the high range score, LaParo et al. stated, "The teacher often asks why that prompts the students to explain their thinking question" (p. 73).

In relation to the providing information indicator, for the low range score, LaParo et al. (2008) noted, "Once a student responds to a question or completes an action, the

teacher does not follow up with expansions or clarifications" (p. 70). For the mid-range score, LaParo et al. stated, "The teacher sometimes goes beyond perfunctory feedback such as saying that a response is correct or incorrect, but this does not represent his/her typical style of response" (p. 72). For the high range score, LaParo et al. noted, "The teacher consistently goes beyond simply saying that a response is correct or incorrect, and at this level, the teacher frequently gives very specific feedback" (p. 74).

Concerning encouragement and affirmation indicator, for the low range score, LaParo et al. (2008) noted, "The teacher appears to measure student's progress by how well they conform to his/her expectations by providing general praise rather than providing students with feedback about their work" (p. 71). For the mid-range score, LaParo et al. noted, "The process of learning includes a focus on developing understanding, personal improvement, effort, persistence, and trying new strategies" (p.72). For the high range score, LaParo et al. stated, "The teacher's primary concern when giving feedback is to increase students' understanding, personal improvement, effort, and persistence or get students to try new strategies." (p. 74).

Language Modeling. For the language modeling dimension, LaParo et al. (2008) used the same ratings for each of the five indicators in order to reflect the frequency of observed occurrences. Concerning the first indicator of frequent conversation, for the low range score, LaParo et al. noted, "The teacher rarely initiates conversation with students and does not engage conversationally with students during center time or other open periods of time." (p. 76). For the mid-range score, LaParo et al. stated, "The teacher talks regularly with and to the students and appears somewhat interested in the students;

however, conversations typically are limited to one or two back and forth exchanges rather than a conversation" (p. 77). For the high range score, LaParo et al. noted, "Many conversations occur between and among students and the teacher that promote opportunities for language use. The teacher often initiates conversations with students and there is a natural flow in the exchange of information during open periods of time" (p. 79).

In relation to the open-ended questions indicator, for the low range score, LaParo et al. (2008) noted, "The teacher asks questions that require no more than a one-word answer or short sentence" (p. 76). For the mid-range score, LaParo et al. stated, "The teacher sometimes asks questions that require the students to use more complex language; however, the majority of questions are close-ended and require only short responses" (p. 78). For the high range score, LaParo et al. noted, "Open-ended questions are those that often ask questions for which the answer is unknown, such as 'what do you think?' Open-ended questions require students to put together language to communicate more complex ideas" (p. 79).

In relation to the repetition and extension indicator, for the low range score, LaParo et al. 2008) noted, "When students make comments or ask questions, the teacher does not respond to the comment or answer the question and/or ignores the student's communicative attempt" (p. 76). For the mid-range score, LaParo et al. (2008) stated, "When students make comments, the teacher sometimes acknowledges these responses by repeating them or offering a bit more information; other times, however, the teacher ignores these comments" (p. 78). For the high range score, LaParo et al. noted, "The

teacher focuses first on students' attempts to communicate and then builds directly on the student's contribution" (p. 79).

Concerning the self and parallel talk indicator, for the low range score, LaParo, et al. (2008) noted, "The teacher maps his/her own actions and the students' actions through language and in conversation or instruction" (p. 77). For the mid-range score, LaParo et al. stated, "The teacher sometimes uses self-talk and parallel talk to model language for students; however, in the mid-range, the teacher occasionally uses this strategy" (p. 78). For the high range score, LaParo et al. noted,

> The teacher uses self-talk and parallel talk as a means of expanding the students' language. In self-talk, the teacher simply says what she is doing, linking words to actions. In parallel talk, the teacher provides language for the students' actions. (p. 80)

In relation to the advanced language indicator, for the low range score, LaParo, et al. (2008) noted, "The vocabulary that the teacher uses to explain concepts to the students is limited and lacks variety" (p. 77). For the mid-range score, LaParo et al. stated, "The teacher may use a variety of nouns, adjectives, verbs, and vocabulary terms to explain or clarify information, and at other times he/she may not" (p. 78). For the high range score, LaParo et al. noted, "Teachers use a variety of nouns, verbs, adverbs, adjectives, prepositions and other forms of language that are new to the students but that map onto concepts already understood by the students" (p. 80).

Table 3 below is a summary of the specific language used to describe the low,

mid, and high ranges of the indicators for the quality of feedback and language modeling

dimensions.

Table 3*: Indicators and Scoring Criteria for QF and LM Dimensions*

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<table>
<tr><td colspan="4" align="center">Quality of Feedback</td></tr>
<tr><td>Indicators</td><td>Low (1-2)</td><td>Mid (3-5)</td><td>High (6-7)</td></tr>
<tr><td>Scaffolding</td><td>Rarely</td><td>Occasionally</td><td>Often</td></tr>
<tr><td>Feedback loops</td><td>Perfunctory</td><td>Occasionally</td><td>Frequent</td></tr>
<tr><td>Prompting through process</td><td>Rarely</td><td>Occasionally</td><td>Often</td></tr>
<tr><td>Providing information</td><td>Rarely</td><td>Occasionally</td><td>Often</td></tr>
<tr><td>Encouragement & affirmation</td><td>Rarely</td><td>Occasionally</td><td>Often</td></tr>
<tr><td colspan="4" align="center">Language Modeling</td></tr>
<tr><td>Indicators</td><td>Low (1-2)</td><td>Mid (3-5)</td><td>High (6-7)</td></tr>
<tr><td>Frequent conversation</td><td>Few</td><td>Limited</td><td>Frequent</td></tr>
<tr><td>Open-ended questions</td><td>Few</td><td>Mixed</td><td>Many</td></tr>
<tr><td>Repetition & extension</td><td>Rarely</td><td>Sometimes</td><td>Often</td></tr>
<tr><td>Self & parallel talk</td><td>Rarely</td><td>Occasionally</td><td>Consistently</td></tr>
<tr><td>Advanced language</td><td>Does not use</td><td>Limited</td><td>Often</td></tr>
</table>

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Note: LaParo, K., Pianta, R. & Hamre, B. (2008). *The Classroom Assessment Scoring System: Manual Pre-K*. Baltimore, MD: Paul H Brookes Publishing.

Table 4 below is a summary of the statistical data for the quality of feedback (QF)

and language modeling (LM) dimensions for each single case. The data in this table is

based on an average of the scores that I obtained from the three cycles of observations

that I conducted at each site. No scores for individual observations are presented. In the

appendix of the CLASS scoring manual, LaParo et al. (2008) presented the mean,

standard deviation, and range, based on the MyTeachingPartner study conducted by

Pianta (2007). The mean for the QF dimension for that study was 2.87 with a SD of 0.85

and a range of 1.0-6.0. The mean for the LM dimension was 2.85 with a SD of 0.73 and a

range of 10-5.0. Thus, the scores from this study for both the QF and LM dimensions

were in the low range. In addition, individual from Teachstone who provided training on

the CLASS instrument indicated that scores related to the QF and LM dimensions had not

changed significantly since the manual was published in 2008 (personal communication,

Teachstone trainer, 2013).

Table 4: *Results for the QF and LM Dimensions by Case*

	Case 1 Head Start		Case 2 Title I		Case 3 State-funded Preschool	
Descriptive Statistics	*QF*	*LM*	*QF*	*LM*	*QF*	*LM*
Mean	1.3	2.0	1.65	2.65	1.85	2.3
Standard Error	0	0.7	0.35	0.35	0.15	1.0
Median	1.3	2.0	1.65	2.65	1.85	2.3
Standard Deviation	0	0.98	0.49	0.49	0.21	1.41
Sample Variance	0	0.98	0.24	0.24	0.04	2.00
Range	0	1.4	0.7	0.7	0.3	2.0
Minimum	1.3	1.3	1.3	2.3	1.7	1.3
Maximum	1.3	2.7	2.0	3.0	2.0	3.3
Sum	2.6	4.0	3.3	5.2	3.7	4.6
Count	2.0	2.0	2.0	2.0	2.0	2.0

Concerning an analysis of this data for all three cases, the QF dimension received

lower scores than the LM dimension. However, it is difficult to determine if this

difference is significant considering the small sample size of this study, which did not

include all preschool teachers in the school district or in the Head Start program.

Preschool teachers also face significant challenges in providing quality feedback to their

students, especially when they work with a large group of students. In addition, this

dimension is difficult to observe because preschool teachers may know how to talk with

students, but may be challenged to hold a sustained back-and-forth conversation using

open-ended questions if class size is large. Teachers are also challenged to provide

appropriate hints and clues without telling students the answers. The observer also needs to be in close proximity to the teacher and student in order to hear the conversation. However, the observer must also maintain some distance in order to avoid interrupting the lesson.

Table 5 presents the results of literacy instruction for each case in relation to the combined scores of the quality of feedback and the language modeling dimensions. To present this data, I added the quality of feedback scores and the language modeling scores from each case and divided by two to obtain the average literacy instruction score by case.

Table 5: *Average Literacy Instruction Score for Each Case*

	Head Start	Title I Preschool	State-funded Preschool
Mean	1.65	2.15	2.07
Standard Error	0.35	0.35	0.43
Median	1.30	2.15	1.85
Standard Deviation	0.70	0.70	0.86
Sample Variance	0.49	0.49	0.74
Range	1.40	1.70	2.00
Minimum	1.30	1.30	1.30
Maximum	2.70	3.00	3.30
Sum	6.60	8.60	8.30
Count	4.00	4.00	4.00

Concerning an analysis of this data, the mean and median for literacy instruction was lowest for the Head Start preschool program and highest for the Title I preschool program. However, the range for all three preschool programs was from 1.4 to 2.0, which was in the low range but yet was only a difference of 0.6 among the three cases. The minimum range for all three preschool programs was the same at 1.30. The difference among these scores is not statistically significant.

Analysis of Documents

For this study, I first organized these documents according to type. The types of documents that I collected included standards for the preschool programs, curricular materials, and assessment instruments. The following five documents were collected: (a) Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year Olds, (b) Head Start Program Performance Standards, (c) Creative Curriculum, (d) High/Scope Curriculum, and (e) Phonological Awareness Literacy Screener (PALS). I analyzed each of these documents using a content analysis, which involves explaining the purpose of the document, how the content of the document is organized and presented, the scope of the content, and how the document has been used.

Foundation Blocks Standards. Teachers in each of the three preschool programs involved in this study used the document titled Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds (Heckman, 2013). These standards were aligned with the K-12 standards in order to provided consistency and continuity for PreK-12. Teachers were expected to design lesson objectives based on these standards. The State Department of Education developed this document to establish minimum standards in reading and mathematics in order for four-year-olds to be successful in kindergarten. The document is organized by blocks that are divided into sub-categories. The blocks include (a) literacy, (b) mathematics, (c) science, (d) history and social studies, (e) physical and motor development, and (f) personal and social development. The literacy block is divided into six categories: (a) oral expression, (b) vocabulary, (c) phonological awareness, (d) letter knowledge and early word recognition, (e) print and book

awareness, and (f) written expression. Each indicator is aligned with the established

Kindergarten Standards of Learning, the Phonological Awareness Literacy Screening

(Invernizzi et al., 2005). The purpose of the Foundation Blocks document is to establish

research-based standards in literacy and mathematics in order to build the foundations for

school success (Training and Technical Assistance Center, 2005). Teachers use this

document to guide their lesson planning and instruction. The Foundation Blocks

document and the PALS also share the following objectives for student mastery of

specific literacy skills: (a) identify rhyming pairs; (b) detect beginning sounds; (c)

identify 10-18 upper-case letters; (d) recognize words and letters in books; (e) identify

the front, back, and title of a book; (f) turn the pages of a book; and (g) demonstrate left

to right direction of words while tracking them with a finger. All lesson plans are

required to be turned in to the school principal. The principal checks to make sure the

lesson plans match the set standards. However, except for the PALS, teachers assess

preschool skills by using the assessments that are included in the commercially prepared

curriculum adopted by each preschool program.

Head Start Program Performance Standards. Teachers in the Head Start

program used a document titled Head Start Program Performance Standards (2009) in

addition to the Foundation Blocks document. This document has been revised several

times since the beginning of the Head Start program in the 1960s. The performance

standards for the Head Start program were first created by the Office of Head Start as a

part of the Administration of Children and Families subsection of the U.S. Department of

Health and Human Services. The document is divided into two subchapters: A and B.

Part A addresses the administration of the Early Head Start program for children from birth to age 3. For this study, I only described Subchapter B, which is about the administration of the Head Start program. I focused on (a) program performances standards for the operation of Head Start programs; (b) early childhood development and health services, and (c) education and early childhood development.

This document addressed the educational needs of all students, including students with disabilities and students from diverse cultural backgrounds. In this document, the Head Start program goals are to build trust, independence, encouragement, support, and respect for students and their families. This document also stated that the Head Start program supports individualism and autonomy for students and places an emphasis on supporting all developmental areas, including (a) social and emotional, (b) cognitive, (c) language, (d) personal care, and (e) physical (Office of Human Development Services, HHS, 2009). In this document, specific performance standards have been developed to meet these developmentally appropriate goals.

The most recent change to this document was in 2011, when the framework for the Head Start program was revised. Now titled The Head Start Child Development and Early Learning Framework (2011), this document is organized into 11 domains and 37 domain elements, with over 100 examples. The domains include (a) physical development and health, (b) social and emotional development, (c) approaches to learning, (d) language development, (e) literacy skills, (f) mathematics skills, (g) science skills, (h) creative expression, (i) logic and reasoning, (j) social studies skills, and (k) English language development. Head Start program teachers use this document to make

curriculum, instruction, and assessment decisions. In addition, these decisions also must consider the demographics of cultural diversity, second language acquisition, and specific learning disabilities.

For this study, I concentrated on the domains in this document titled approaches to learning, language development, and literacy knowledge and skills. The approaches to learning domain "refers to observable behaviors that indicate ways students become engaged in social interactions and learning experiences" (Office of Head Start, 2011, p. 11). According to this document, the approach to learning domain includes the student's ability to stay focused and engaged in activities. This domain consists of three elements and 10 examples. The language development domain focuses on receptive and expressive use of language. This domain is divided into two elements and 11 examples. The literacy knowledge and skills domain focuses on the academic skills needed to build reading and writing. The domain is divided into five elements with 21 examples. In the language development domain, receptive language is defined as "the ability to comprehend or understand language" (p. 13). This domain includes (a) attending to different types of conversation, (b) understanding more complex vocabulary, (c) understanding different types of language including questions, and (d) understanding the rules of language. The expressing language domain is defined as "the ability to use language" (p. 13). This domain includes (a) engaging in conversation with adults and peers, (b) express ideas verbally, (c) use complex vocabulary, (d) use a variety of language, (e) use proper grammar, and (f) tell stories (Office of Head Start, 2011).

The Office of Head Start (2011) also listed objectives for literacy knowledge and skills. First, book appreciation is defined as "interest in books and their characteristics and the ability to understand and get meaning from stories and information and books and other texts" (p. 14). This objective includes (a) shows interest in books, (b) recognizes basic elements of books, such as, front-to-back, turn pages, recognizes title, author, and illustrator, (c) asks and answers questions, (d) shows interest in different genre of books, and (e) retells stories. Second, phonological awareness is defined as "an awareness that language can be broken into words, syllables, and smaller pieces of sound" (p. 14). This objective includes being able to identify and discriminate between (a) words in language, (b) syllables, and (c) sounds and phonemes, such as beginning and ending sounds. Alphabet knowledge is defined as "the names and sounds associated with letters" (p. 15). This objective includes (a) recognizes the visual symbols represent letters that have individual names, (b) connects letters and sounds, (c) notices beginning sounds in words, and (d) connects letters and corresponding sounds. Print concepts are defined as "the concepts about print and early decoding" (p. 15). These concepts include (a) recognizes print in surroundings, (b) understands print has meaning, (c) understands reading print is conducted from left to right and top to bottom, and (d) recognizes a connection between spoken and written words. Early writing is defined as "the familiarity with writing implements, conversations, emerging skills to communicate through written representations, symbols, and letters" (p. 15). It includes (a) uses writing tools, (b) understands writing has a purpose, (c) uses material to develop fine motor skills, and (d) copies and traces letters. All lesson plans are required to be turned in to the site director.

The director checks to make sure that the lesson plans match the Head Start standards. Teachers assess preschool skills by using the assessments included in the commercially prepared curriculum for the Head Start program.

   Curriculum for Head Start Preschool Program. The preschool teachers for the Head Start program used a commercially prepared curriculum titled Creative Curriculum during the 2012-2013 school year. The first edition was published by Teaching Strategies in 1978 with additional editions published in 1988, 1992, 2002, and 2010. The 2010 edition is a multiple component package that includes the following resources: (a) teacher's guides, (b) strategy professional books, and (c) assessment guides that include 38 developmentally appropriate objectives. Creative Curriculum is based on the following five research-based principles: (a) positive teacher-child interactions, (b) a positive learning environment, (c) purposeful play, (d) strong teacher and family connections, and (e) social-emotional competence. In order to support language and literacy development, the 2010 edition of Creative Curriculum includes the following resources: (a) Creative Curriculum for Preschool, Volume 3: Literacy, (b) Creative Curriculum for Preschool Teaching Guides, (c) Intentional Teaching Cards for Literacy, (d) Mighty Minutes, (e) Book Discussion Cards, (f) Reading Right From the Start: A Parent's Guide to the First Five Years, and (g) Building Your Baby's Brain: A Parent's Guide to the First Five Years.

   In relation to assessment, Creative Curriculum includes an online tool that preschool teachers use to gather evidence focused on key outcomes and standards. Teachers use the observation-based assessment tool Snapshot Report for children from

birth through kindergarten. The assessment focuses on each student's individual progress. The assessment package includes 36 objectives that are organized into the following nine developmental elements: (a) social-emotional, (b) physical, (c) oral language, (d) cognitive, (e) literacy, (f) mathematics, (g) science and technology, (h) social studies, and (i) the arts. In relation to the element of oral language development, the objectives include (a) listening and understanding complex language, (b) use of language to express thoughts and needs, and (c) use of appropriate conversational skills to communicate. In relation to the element of literacy, the objectives include (a) phonological awareness, (b) alphabet knowledge, (c) print knowledge, (d) book and word knowledge, and (e) emergent writing. The assessment is closely aligned with the Head Start Performance Standards and the state's Foundation Blocks.

Curriculum for Title I Preschool and State-Funded Preschool Programs.

Preschool teachers in both the Title I preschool program and the state-funded preschool used the High/Scope curriculum during the 2012-2013 school year. According to a related document titled Validity of the High/Scope Preschool Education Model, the High/Scope curriculum was developed by Weikart in the 1960s. This curriculum was based on the constructivist point of view about student development and influenced by Piaget's research on cognitive development. The goal of the High/Scope curriculum is to "enable young children to achieve greater school success and adult socioeconomic success and social responsibility by giving them opportunities to initiative and engage in learning activities that contribute to their cognitive, affective, and physical development"

(Schweinhart, 2003). The High/Scope curriculum features daily routine activities, a set of key developmental indicators, and an observational assessment.

In a discussion published by the High/Scope Press, Epstein (2007) noted that this preschool curriculum includes the following seven components that are the basis for high quality early childhood programs: (a) child development curriculum, (b) low enrollment limits, (c) staff trained in early childhood, (d) supervisory support and professional development, (e) parent involvement, (f) sensitivity to children's emotional needs, and (g) developmentally appropriate evaluation. Epstein noted that these components are based on developmental research, long-term research, and classroom instructional practice. The High/Scope curriculum contains a set of teaching practices, curriculum activities to support school readiness, key developmental indicators, assessment tools, and a training model. According to Epstein (2007), the High/Scope curriculum includes the following five dimensions of school readiness: (a) approaches to learning; (b) language, literacy, and communication; (c) social and emotional development; (d) physical development, health, and well-being; and (e) arts and sciences. Within the five dimensions, 58 key developmental indicators are presented. In the language, literacy, and communication dimension, the indicators include (a) comprehension, (b) speaking, (c) vocabulary, (d) phonological awareness, (e) alphabetic knowledge, (f) reading, (g) concepts of print, (h) book knowledge, and (i) writing.

Epstein (2007) also noted that the principles of the High/Scope curriculum are based on a concept called the wheel of learning. The active learner is the center of the wheel. Around the student are the key developmental indicators. The four components

located around the wheel are the following teacher's responsibilities in relation to the

child's learning: (a) adult-child interactions, (b) learning environment, (c) daily routine,

and (d) ongoing assessment of a child's progress. The adult-child interactions component

include (a) interaction strategies, (b) encouragement, and (c) behavioral problem solving.

The teacher is responsible for establishing an active learning environment through the

creation of interest centers with engaging materials. Daily routines consist of small and

large group instruction, and teacher use of a plan-do-review process.

Epstein (2007) maintained that in order for students to actively participate in this

curriculum, they need a diverse and developmentally appropriate learning environment

and curricular materials that are appealing to them. Epstein also maintained that

preschool students need to have concrete materials to manipulate, observe, and use in a

variety of ways. In the High/Scope curriculum, Epstein noted that teachers should be

encouraged to give students choice in materials, peers, friends, and activities according to

their individual learning needs. In order to promote language development, Epstein

argued, preschool students need the opportunity to describe and understand concepts and

to communicate verbally and nonverbally in order to think about their actions and

accommodate new information. The High/Scope curriculum recommends that teachers

scaffold instruction by building on students' prior knowledge, as advocated by Piaget and

Vygotsky.

Epstein (2007) also noted that the High/Scope curriculum includes three

assessments. The first assessment is the Preschool Program Quality Assessment, which is

a program evaluation tool that teachers use to assess classroom and program operations in

relation to the expectations of this curriculum. The second assessment is the Early

Literacy Skills Assessment, which was developed by DeBruin-Parecki, who is the current

director of the High/Scope Early Childhood Reading Institute. The assessment measures

four key elements of literacy, including comprehension, phonological awareness,

alphabetic principles, and concepts about print. Finally, the core of the High/Scope

curriculum, according to Epstein, is key experiences for students based on a plan-do-

review sequence of activities. Therefore, the final assessment is the Child Observation

Record that teachers use to measure the development of each student. Teachers conduct

this assessment by writing anecdotal notes describing each student's behavior.

Figure 2 presents a summary of this assessment for each component of the High/Scope

assessment in relation to the student observation record.

Figure2. High/Scope Assessment: Child Observation Record

Initiative Making choices & plans Solving problems with materials Initiating play Taking care of personal needs	**Social Relations** Relating to adults Relating to other children Resolving interpersonal conflict Understanding & expressing feelings
Math & Science Sorting objects Identifying patterns Identifying sequence, change, & causality Identifying materials & properties Identifying natural & living objects	**Language & Literacy** Listening to & understanding speech Using vocabulary Using complex patterns of speech Showing awareness of sounds in words Demonstrating knowledge about books Reading & writing
Creative Representation Making & building models Drawing & painting pictures Pretending	**Music & Movement** Moving in various ways Moving with objects Feeling & expressing a steady beat Moving to music Singing

Figure 2. I have designed this figure as a summary of the categories of the High/Scope assessment in relation to the child observation record.. Adapted from Epstein, A., (2007), *Essentials of active learning in preschool: Getting to know the High/Scope Curriculum*. Ypsilanti, MI: High/Scope Press (p. 197).

Thus, the High/Scope assessment focuses on a wide range of skills in six different categories. The language and literacy category emphasizes developmental rather than academic goals. The goals represent a progression of language understanding. Epstein (2007) noted that students need to be able to listen to, understand, and use words to understand the complexity of language before they can work on the academic skills of sound-word connections, book knowledge, and the fundamentals of reading and writing.

Phonological Awareness Literacy Screener. Preschool teachers in the state-funded preschool and Head Start programs used the PALS for all 4-year-old students. However, Title I preschool program teachers do not use the PALS because it was not designed for 3 year old students. Because the Head Start preschool program includes a mixture of 3-year-old and 4-year-old students, teachers in this program only used the PALS to assess the 4-year-old students.

The PALS is a phonological awareness assessment tool, which was developed by Invernizzi, Juel, Swank, and Meier (2004) to identify students at risk for reading difficulties. Preschool teachers used the PALS to assess students' foundational skills for reading. The PALS is based on the rationale that "children's literacy experiences before formal schooling can play an important role in their future success and achievement" (Invernizzi, Juel, Swank, & Meier, 2006). Because students with strong literacy skills become successful readers in the primary grades, PALS measures a variety of essential literacy and reading fundamental skills, including (a) name writing, (b) alphabet recognition and letter sounds, (c) beginning sound awareness, (d) print and word awareness, (e) rhyme awareness, and (f) knowledge of nursery rhymes. The PALS establishes a rigorous set of skills related to beginning reading. These skills are emphasized in classroom literacy instruction.

As a set of standards, the Foundation Blocks document and the Head Start Framework have several similarities in the domains of literacy development and letter knowledge and skills. Both sets of standards place priority on the following objectives for students: (a) listens attentively to stories and conversations; (b) uses words to express

needs and wants; (c) uses more complex vocabulary; (c) engages in conversation; (d) distinguishes between phonemes at the beginning and end of words; and (e) recognizes upper-case and lower-case letters. The Head Start Framework is less specific about the specific phonemic awareness skills than the Foundation Blocks. The Foundation Blocks document focuses on academic skills related to reading and is closely aligned to the PALS. The Foundation Blocks document matches the criteria of PALS by specifying the following student objectives: (a) identifies rhyme and beginning sounds; (b) identifies 10-18 upper-case letters; (c) identifies 8-10 letter sounds; (d) identifies the front and back and title of a book; (e) identifies the first word on a page; (f) demonstrates tracking left to right; and (h) distinguishes between print and picture.

Creative Curriculum and High/Scope include somewhat different goals. Similar to the standards, Creative Curriculum is concentrated on the following student objectives: (a) expressing wants and needs; (b) following directions; (c) asking and answering questions, and (d) participating in conversation. Creative Curriculum includes the academic skills related for beginning reading, such as understanding the concept of print, alphabet knowledge, and the meaning of print. The High/Scope curriculum defines skills using a developmental approach and providing less detailed direction. The High/Scope curriculum also focuses on conversation, providing description, the developmental process of writing, telling stories, and understanding signs and symbols. Each curriculum includes an assessment component that provides teachers with opportunities to document each student's mastery of specific literacy skills.

Thus, the most important assessment tool to the Head Start and state-funded preschool programs is the PALS because the state requires preschool teachers to assess every 4-year-old child at the beginning and ending of each school year in relation to the Foundation Blocks standards. The PALS assessment, the Foundation Blocks, and the Head Start Performance standards are aligned to each other and to the kindergarten reading objectives to prepare preschool students for learning to read in kindergarten.

Table 6 presents a summary of the major categories that I constructed from my analysis of the documents. This table indicates that alignment exists between the pre-reading skills included in the standards, the High/Scope Curriculum and Creative Curriculum, and the skills measured on the PALS. These pre-reading skills include (a) oral language including listening and speaking, (b) phonological awareness including letter knowledge, letter sound, rhyme, and beginning sound, and (c) print knowledge, and (d) writing.

Table 6: *Summary of Categories from Documents*

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Standards

Literacy Foundation Blocks	**Head Start Framework**
Oral language expression	Receptive and expressive
Phonological awareness	Phonological awareness
Letter knowledge	Alphabet knowledge
Print and book awareness	Book knowledge

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Curriculum

High/Scope	**Creative Curriculum**
Listening & speaking	Listening & speaking
Reading & writing	Reading & writing

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Assessments

Phonological Awareness Literacy Screening (PALS)
Name writing
Print & word awareness
Nursery rhyme awareness
Beginning sounds
Alphabet knowledge
Letter sounds
Rhyme awareness

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Emerging Themes

  The following themes emerged from an analysis of the categorized data across all

sources of evidence for all cases. These themes reflect the similarities in beliefs that

preschool teachers reported in the interviews in relation to literacy instruction in their

classrooms. These themes also reflect similarities related to the observations of literacy

instruction in the preschool classroom. In addition, these themes reflect commonalities

found in the documents related to preschool literacy curriculum, instruction, and

assessment.

Theme 1: Preschool teachers struggled to define literacy skills but generally agreed that they included skills in phonological awareness, oral language, and written expression.

Theme 2: Preschool teachers believed that they provided literacy instruction by emphasizing phonological awareness and oral language skills.

Theme 3: Preschool teachers believed that they used play to teach literacy skills by providing a variety of choices, developmentally appropriate practice, and child-centered activities that were enjoyable.

Theme 4: Preschool teachers believed that preschool students should be proficient in phonological awareness skills, print awareness, and oral language skills.

Theme 5: Preschool teachers believed that the major challenges to literacy instruction were lack of parental support and the wide range of students' language abilities found in the classroom.

Theme 6: Preschool teachers believed that a developmentally appropriate classroom should be child-centered and include a variety of engaging activities and choices for play and learning.

Theme 7: Preschool teachers believed that they helped students improve their oral language skills by using open-ended questions and modeling the rules of language.

Theme 8: Preschool teachers believed that they used teacher-child interaction to teach literacy skills by presenting open-ended questions and conducting individual conversations with students.

Theme 9: Preschool teachers scored in the low range in relation to the quality of feedback and language modeling dimensions on the CLASS instrument.

Theme 10: Document analysis revealed that the state standards placed a strong emphasis on phonological awareness skills and oral language expression.

Theme 11: Document analysis revealed that the school district preschool curriculum included a strong emphasis on listening, speaking, pre-reading, and writing skills.

Theme 12: Document analysis revealed that the district preschool assessments included a strong emphasis on the following phonological skills: (a) name writing, (b) print and word awareness, (c) alphabet knowledge, (d) letter sounds, (e) rhyme awareness, (f) nursery rhyme awareness, and (g) beginning sounds.

Discrepant Data

Discrepancies emerged between the interview data from the preschool teachers and the observation data of literacy instruction in the preschool classrooms. These discrepancies emerged in relation to the quality of feedback and the language modeling dimensions for literacy instruction on the CLASS instrument. In relation to the quality of feedback dimension, LaParo et al. (2008) noted that the purpose of this dimension is to "assess the degree to which the teacher provides feedback that extends learning and understanding and encourages continued participation" (p. 69). The observation data indicated that the mean score for this dimension in each case was in the low range from 1.30 to 1.85. However, during the interviews, when I asked preschool teachers about the quality of their feedback in relation to teacher-child interaction, they reported that they provided sufficient feedback to help students understand literacy concepts. One of the state-funded preschool teachers believed that she used play to provide feedback to students by expanding on what students were talking about and asking questions. Yet,

during center time, I observed that this teacher asked only a few questions and rarely expanded on what students were talking about. Both of the Title I teachers believed that they used play to provide feedback to students by encouraging students to talk about what they were doing. However, during the observations, one of the Title I teachers gave only general praise and nonspecific feedback to students, and the other Title I teacher did not communicate with students at all during center time while they played Number Bingo.

In relation to the language-modeling dimension, LaParo et al. (2008) noted that the purpose of this dimension is to "captures the quality and amount of the teacher's use of language stimulation and language facilitation techniques" (p. 75). The observation data indicated that the mean score for the language-modeling dimension for all cases or programs ranged from 2.00 to 2.65, which means that I rated the language-modeling dimension in the low to mid-range for all of the observations of literacy instruction that I conducted. However, the interview data indicated that preschool teachers believed that they knew how to model language for students. One of the preschool teachers reported modeling language use through large group, small group, and one-on-one instruction. Yet, during the observation, this teacher asked few open-ended questions of students to encourage their use of language. Another preschool teacher reported modeling language use for students through an emphasis on reading books. However, during the observation, this teacher asked questions that only required one-word answers. One of the teachers reported modeling language by using new vocabulary words. However, during the observation, I did not observe this teacher using any complex or new words to introduce the book to students.

Another discrepancy emerged between the documents and the interview and observation data. An analysis of the documents did not reveal an emphasis on teacher-child interaction, particularly in relation to the preschool standards and assessments. The interview and observation data, on the other hand, indicated that preschool teachers were aware of the importance of teacher-child interaction as a factor in improving literacy skills. The Head Start preschool program teachers reported that they emphasized teacher-child interaction during large group, small group, and playtime in order to help students develop oral language skills. In addition, during center time, preschool teachers from all programs spent time interacting with students by asking questions and teaching phonemic awareness skills. Observation data also indicated that preschool teachers might need additional professional development in order to become more effective in providing quality feedback to students, which is an important dimension in relation to teacher-child interaction.

Thus, the discrepancy between the ideal preschool program that researchers would like to implement and the real preschool programs that are implemented still needs to be addressed. Some of the preschool teachers in this study presented a verbal understanding of the concepts related to developmentally appropriate practices; however, they did not always translate this knowledge into their own instructional practice in the classroom. These discrepancies between data sources are important for a researcher to consider because they can determine the findings of a qualitative study (Merriam, 2009).

Evidence of Trustworthiness

For the results of a qualitative study to be trustworthy, Merriam (2009) noted that the researcher needs to use specific strategies. Therefore, I used specific strategies to improve the credibility, transferability, dependability, and objectivity of this study. In this section, I describe how I used these strategies to conduct this qualitative research in a rigorous and ethical manner.

Credibility

In order to produce credible results, I used triangulation by collecting data from multiple sources, including interviews with preschool teachers, observations of instruction in literacy skills, and document review in order to crosscheck and compare this data to determine the key results. In addition, I used member checks by asking participants to review their individual findings to determine their plausibility. However, teachers did not give me any feedback. I used adequate engagement in the data collection and data analysis process by reviewing the data until I saw the same patterns and themes over and over again and no new information surfaced. I also used probing questions during the interviews in order to elicit more specific responses. In addition, I used peer examination by asking three educational colleagues to scan the data and to assess whether or not the findings were plausible. All of these colleagues agreed that the findings seemed plausible. In addition, I sent an email to all participants on March 24, 2014 asking them to assess the plausibility of the tentative findings for this study, but I received no responses.

Transferability

In order to ensure transferability for this study, I used rich, thick description to present the setting and participants of the study, the data collection protocols, the data analysis protocols, and the findings of the study. I provided this rich, thick description so that readers could generalize the findings of this study to their particular situations and in order to replicate this study in other similar settings. In addition, I used the strategy of typicality in that I selected preschool programs that were typical of public preschool programs in the United States.

Dependability

To ensure the dependability of this study, I used triangulation by collecting data from multiple sources, including interviews, observation, and documents in order to crosscheck data and compare results from different data sources and different cases. In addition, I used an audit trail in the form of a research log to document how I collected the data, how I analyzed the data in relation to category construction and the development of themes and discrepant data, and the decisions that I made throughout the research process. In this log, I also included my reflections and questions about the research process. In addition, I included letters of cooperation and consent, the data collection instruments, and the alignment of these instruments with the research questions in the appendices of this study.

Confirmability

To ensure the confirmability or objectivity of this study, I reflected on my own biases, dispositions, and assumptions regarding this study in a researcher's log. For

example, I reflected that I am a licensed PreK-6 teacher since 2001. I have worked as an early childhood educator for many years. I have also received training in relation to several evaluation tools, including CLASS, in order to evaluate the instructional quality for preschool classrooms. I received two years of training in the preschool CLASS instrument in order to maintain certification. Currently, I am an early childhood education instructor and advisor for a college located in a United States federal territory. Therefore, I was aware that I approached this study with certain biases about literacy instruction for preschool students. I believed a high quality preschool classroom should be developmentally appropriate, and I believed that preschool teachers should provide literacy instruction through teacher-child interaction and play to improve oral language skills and build strong vocabulary. I also believed that preschool teachers should provide instruction in phonological awareness skills. However, I also believed that these skills are often over-emphasized in the preschool classroom, based on state and district accountability requirements. I minimized these biases by following strict data collection and analysis procedures and by using strategies to enhance the trustworthiness of this study, including an audit trail and maintaininga researcher's journal, in which I wrote my reflections about the decisions that I made during the research process.

Results

The results or findings of this study are presented in relation to the central and related research questions. I begin with the related research questions because the central research question serves as a synthesis of the key findings from the related research questions and therefore, these results are presented last. For each question, I provide

supporting data from the interviews, the observations, and the documents to confirm these findings.

Related Research Question 1: How do preschool teachers provide literacy instruction for preschool students?

Interview and observation data indicated that preschool teachers provided literacy instruction in relation to phonological awareness skills and oral language skills. These instructional practices are described below.

Phonological awareness skills. Interview data indicated that preschool teachers at all three program sites reported providing literacy instruction for students by teaching phonological awareness skills. Both Title I preschool teachers reported that they provided literacy instruction by emphasizing phonological awareness skills such as letter identification and sound recognition. The state-funded preschool teachers reported a broader range of literacy instruction, including vocabulary development, oral language skills, writing skills, and an emphasis on a print rich environment. The Head Start preschool teachers reported an emphasis on alphabet recognition, alliteration, beginning sounds, and print.

Observation data also indicated that preschool teachers at all three program sites provided literacy instruction for preschool students by emphasizing the phonological awareness skills of alphabet knowledge, letter sounds, and print and word awareness. The Head Start preschool teachers provided literacy instruction by asking students to recite all of the upper and lower case letters. The Title I preschool teachers focused on letter recognition by asking students to recite the letters of the alphabet. The state-funded

preschool teachers conducted small group activities in which students were required to recognize the letters in their names. Each of these activities focused on the memorization of letters and their related sounds consistent with the skills of phonemic awareness.

In relation to document analysis, documents related to all cases emphasized phonological awareness skills. The standards of the Title I and state-funded preschool programs, which included the Foundation Blocks and the Head Start Performance Standards documents, emphasized phonological awareness in relation to literacy skills. The Creative Curriculum and High/Scope documents also placed an emphasis on phonological awareness skills. Teachers at all sites also assessed these skills using the PALS assessment.

Oral language skills. Interview data also indicated that preschool teachers at all three sites reported providing literacy instruction by providing opportunities for students to talk about their experiences in order to support the development of their oral language skills. Head Start preschool teachers reported that they asked students open-ended questions that encouraged them to express their opinions. Title I preschool teachers provided students with many opportunities to talk during circle time. The state-funded preschool program teachers reported that they helped students develop oral language skills by teaching them a rich vocabulary through the use of synonyms and an emphasis on new words.

However, in relation to oral language skills, observation data at all three sites indicated that preschool teachers rarely used open-ended questions to help students develop these skills. All preschool teachers read books to their students and asked open-

ended questions in relation to those readings; however, they often accepted one-word answers from students and did not ask probing questions to elicit more detailed responses.

In relation to document analysis, documents related to all cases emphasized oral language skills. The standards of the Title I and state-funded preschool programs, which included the Foundation Blocks and the Head Start Performance Standards documents, emphasized oral language in relation to literacy skills. The Creative Curriculum and High/Scope documents also placed an emphasis on oral language skills. However, the PALS assessment did not address oral language skills.

Related Research Question 2: What perceptions do preschool teachers have about the effectiveness of the instructional practices they use to improve literacy skills for preschool students?

Interview data indicated that preschool teachers at all sites reported using specific instructional practices that they believed were effective in improving literacy skills for preschool students. These practices are described below.

Identifying letters. Preschool teachers at all sites believed that one of the most effective instructional practices that they used to improve the literacy skills for preschool students was asking students to identify the letters of the alphabet. Head Start preschool teachers believed it was important for students to recognize and name each letter of the alphabet. Title I preschool teachers, reported that they used a variety of games and activities to help students recognize letters. State-funded preschool teachers also believed students needed to recognize alphabet letters and sounds. Thus, all preschool teachers

believed that letter recognition was one of the most effective instructional practices they used to improve literacy skills for students.

Reading books. Another instructional practice that preschool teachers at all sites believed was effective in improving the literacy skills of students was to read books to them daily and to ask questions about these books. Head Start preschool teachers believed that students should be able to point to words in a "left to right" direction in order to understand how books are read. They also reported using open-ended questions to help students understand what they read. State-funded preschool teachers believed it is important for students to build a rich vocabulary, and reading books to them helps students do that. Title I preschool teachers maintained that reading books helps students to make connections between letters and words.

Writing skills. Preschool teachers at all sites believed that one of the most effective instructional practices that they used to improve the literacy skills for preschool students was to encourage students to write daily. State-funded preschool teachers believed that students should begin learning how to write by scribbling and writing random letters. However, Title I preschool teachers believed that daily journal writing daily encourages students to learn how to write. Head Start preschool teachers believed it was important for students to learn to write their names.

Related Research Question 3: How do preschool teachers use developmentally appropriate instruction through play to improve literacy skills for preschool students?

Both interview and observation data supported the finding that preschool teachers at all sites used the developmentally appropriate practice of play by implementing the following instructional strategies to improve literacy skills for students.

Role playing activities. Interview data indicated that in all three cases preschool teachers reported that they encouraged students to engage in role playing activities in dramatic play centers in order to engage in peer conversation to improve oral language skills. Head Start preschool teachers believed that dramatic play provides an opportunity for students to engage in pretend play. State-funded preschool teachers reported that they engaged in role playing activities with students to model oral language skills. Title I preschool teachers believed that students learn many language skills through role-playing activities and peer conversation. Thus, all preschool teachers believed that participation in role playing activities improved students' oral language skills.

Observation data indicated that preschool teachers at all sites had designed dramatic play center time to provide opportunities for students to interact with their peers in order to improve their oral language skills. For example, in a Head Start classroom, students role-played living in a house. In a state-funded classroom, students pretended to talk to each other by using blocks as cell phones. In a Title I classroom, students used cardboard blocks to build a wall around them to make a house. Thus, preschool teachers at each site used many different types of role playing activities to help students improve their oral language skills.

Developmentally appropriate materials. Observation data indicated that preschool teachers in all three cases integrated play into their instruction to improve

literacy skills for students by encouraging students to play with developmentally appropriate materials. These materials serve two purposes in literacy instruction. First, these materials often prompt engagement in an activity through peer conversation, enhancing students' oral language skills. Second, when teachers interact with students during play, they have the opportunity to provide instruction in specific literacy skills, including vocabulary, oral language skills, and phonemic awareness. For example, state-funded preschool teachers provided paper and pencils in play areas so students could pretend to write grocery lists, which supported the development of their writing skills. Head Start preschool teachers used a variety of developmentally appropriate materials in the dramatic play, writing, and reading learning centers to encourage oral language development, including toy cash registers, toy phones, sample newspapers, sample menus, blocks, puzzles, puppets, toy dolls, and a variety of books. Title I preschool teachers also used foam and magnetic letters, posters of the alphabet, and labeled pictures to encourage letter recognition.

Related Research Question 4: How does teacher-child interaction develop oral language skills to enhance literacy for preschool students?

Observation data revealed that preschool teachers in all three cases used the developmentally appropriate practice of teacher-child interaction in limited ways to improve literacy skills for preschool students. In particular, they provided limited feedback to students about their learning and did not consistently model language in order to help preschool students develop their oral language skills. The observation data indicated a low range score for teachers at all sites in relation to providing quality

feedback to students and a mid-range score for teachers at all sites in relation to modeling advanced language. LaParo et al. (2008) maintained that teachers are challenged to score in the mid-range or high range in the dimensions of quality feedback and modeling advanced language. Teachers may do well in one or two indicators for each of these dimensions, but their overall score might still be in the low range.

Limited quality feedback. In relation to the CLASS instrument, observation data revealed a low level of teacher-child interaction in all three preschool programs, based on the indicators.

Concerning the scaffolding indicator, the behavioral markers included "providing hints and assistance" (LaParo et al., 2008, p. 69). Observation data indicated that state-funded preschool teachers read books to students during circle time. However, I did not observe any evidence of scaffolding instruction because teachers rarely provided hints or assistance to help students master specific literacy skills. During observations of literacy instruction in the Head Start program, preschool teachers asked students to identify the letters of the alphabet. However, I did not observe any evidence of scaffolded instruction because teachers emphasized memorization and recitation of the letters. Title I preschool teachers also provided minimal assistance to students during literacy instruction because they asked few open-ended questions to probe for understanding. Thus, preschool teachers at all sites rarely used scaffolding or providing assistance to students to support their learning.

In relation to feedback loops, the behavioral markers included "back and forth exchanges, persistence by teachers, and follow-up questions" (LaParo et al., 2008, p. 69).

Observation data indicated that preschool teachers at all sites rarely became involved in back-and-forth exchanges with students, demonstrating persistence in encouraging more specific responses from students, or asking follow-up questions about their learning during literacy instruction. Title I teachers did not engage students in follow-up questions when teaching literacy skills. State-funded preschool teachers attempted feedback loops during small group activities by asking limited follow-up questions to engage students in conversation, but feedback from students was often perfunctory. Head Start teachers read stories to their students but did not persist in engaging students in conversation with them about these stories.

In relation to the prompting through process indicator, the behavioral markers included "asks students to explain thinking and queries responses and actions" (LaParo et al., 2008, p. 69). Observation data indicated that preschool teachers at all sites rarely used these strategies during literacy instruction. Concerning asking students to explain their thinking, Title I preschool teachers often answered their own questions after reading a book to the students without waiting for their responses. Head Start preschool teachers asked students to recognize letters of the alphabet but did not ask them to explain their thinking after incorrectly identifying a letter. State-funded preschool teachers asked students questions during circle time about features of plants. However, they did not ask students to explain their thinking beyond a simple answer. Thus, preschool teachers at all sites rarely prompted students to explain their thinking or to provide explanations for wrong answers.

In relation to the providing information indicator, the behavioral markers included "expansion, clarification, and specific feedback" (LaParo et al., 2008, p. 69). Observation data also indicated that preschool teachers at all sites rarely provided opportunities for expanding and clarifying information or providing specific feedback during literacy instruction. Head Start preschool teachers did not give specific feedback to students when they provided answers to questions on the content of a story. However, Title I preschool teachers reviewed previous science lessons and expanded on some of the information about seeds that students planted earlier in the week. State-funded preschool teachers watched students working in small groups finding letters and drawing pictures and provided minimal feedback to students in order to clarify the objective of the lesson.

Concerning the encouragement and affirmation indicator, the behavioral markers included "recognition, reinforcement, and student persistence" (LaParo et al., 2008, p. 69). For this indicator, preschool teachers are expected to understand why they call attention to student work, which is intended to reinforce student persistence. Observation data indicated that Head Start preschool teachers rarely provided encouragement and affirmation to students in relation to recognition, reinforcement, and student persistence during literacy instruction. Head Start teachers expected students to conform to expectations and provided limited praise, such as "good job". State-funded preschool teachers encouraged student persistence during small group activities by encouraging students to continue to find the correct letters and color patterns for their names. Title I preschool teachers encouraged and affirmed student participation in literacy activities

during a circle time activity; however, this encouragement and affirmation was limited because teachers gave limited praise, such as "nice work".

Limited language modeling. In relation to the CLASS instrument, observation data indicated limited language modeling in relation to the five indicators. Overall, teachers scored higher on this dimension than on the quality of feedback dimension, but the indicators for this dimension also required less intense or sustained conversation between the teacher and the student.

The behavioral markers for the frequent conversation indicator included "back and forth exchanges, contingent responding, and peer conversations" (LaParo et al., 2008, p. 75). Concerning back and forth exchanges, Title I preschool teachers engaged in brief conversations with individual students during center time about their play activities in order to stimulate oral language. In relation to contingent responding, Head Start preschool teachers kept students on task through direct instruction and did not wait for students to respond to their close-ended questions. In relation to peer conversation, state-funded preschool teachers encouraged students to engage in conversations about their play activities, even though teachers did not participate in these conversations. Observation data indicated that in all three preschool programs, students interacted with their peers but only on a limited basis with teachers. Thus, without frequent teacher and student engagement, this indicator remained in the low range.

The behavioral markers for the open-ended questions indicator included asking "questions requiring more than a one-word response and repeating student responses" (LaParo et al., 2008, p. 75). Observation data indicated that when preschool teachers at

all sites rarely asked questions requiring more than a one-word response and rarely repeated student responses. Head Start preschool teachers read books to their students during circle time and asked some open-ended questions about the stories; however, when students responded with brief answers, teachers did probe for more detailed responses. State-funded preschool teachers also asked open-ended questions during circle time; however, when students responded with one-word answers, teachers did not ask students to explain their thinking. Title I preschool teachers asked many questions during small group writing activities, but even when student responded with brief answers, teachers often ignored their responses. Thus, preschool teachers asked open-ended questions, but rarely repeated student responses or probed for more detailed answers to their questions.

In relation to the repetition and extension indicator, the behavioral markers included " repeats and extends and elaborates" (LaParo et al., 2008, p. 75). For this indicator, some preschool teachers scored in the mid-range because they repeated student responses and added information in order to model language for students. In their science lessons, state-funded preschool teachers scored in the mid-range in "extends and elaborates" by sometimes acknowledging student responses and offering more information about the plants they were studying. During circle time activities, Head Start teachers repeated student responses and add more information while talking about dinosaurs in order to model oral language skills. Title I preschool teachers repeated and extended an activity related to using letters to make their names by helping students identify letters. Thus, observation data indicated that all preschool teachers provided

limited repetition and extension in relation to oral language and phonemic awareness skill instruction.

Concerning the self and parallel talk indicator, the behavioral markers included "the teacher maps own actions with language, and the teacher maps student actions with language" (LaParo et al., 2008, p. 75). The purpose of this indicator is to encourage teachers to narrate actions in order to model descriptive language. Observation data for this study indicated that preschool teachers inconsistently used self and parallel talk in relation to literacy instruction. Head Start preschool teachers rarely used self and parallel talk during literacy instruction. During the observations, Head Start teachers only used self-talk while explaining how to draw a picture. Title I preschool teachers demonstrated some use of parallel talk during small group instruction by describing the actions that students performed while choosing letters in their name. State-funded preschool teachers did not demonstrate any instances of self-talk or parallel talk during the observations.

In relation to the advanced language indicator, the behavioral markers included using a variety of words and making connections to familiar words and ideas (LaParo et al., 2008, p. 75). The difference between the low and mid-level score on this indicator is due to the complexity and clarification of the vocabulary that teachers introduce to students during instruction. Observation data indicated that many of the preschool teachers demonstrated limited use of advanced language during instruction. Head Start teachers did not introduce any new words during my observations of literacy instruction. Title I preschool teachers introduced a few new vocabulary words to students during a science lesson, such as "soil" as a synonym for "dirt," and "insect" for "bug"; however,

they did not provide definitions, synonyms, or examples for these words. One of the state-funded preschool teachers explained that a "reservoir" holds water but she did not define the word. As a result, all of the preschool teachers scored in the low range on the advanced language indicator.

Related Research Question 5: What do documents about the three different preschool programs reveal about literacy instruction for preschool students?

The documents about the three different preschool programs revealed the following key finding about literacy instruction for preschool students.

Emphasis on phonological awareness and oral language skills. The key finding in relation to this research question was that all of the documents emphasized phonological awareness skills and oral language skills. The Foundation Blocks document placed an emphasis on the following skills: (a) oral expression, (b) vocabulary, (c) phonological awareness, (d) letter knowledge and early word recognition, (e) print and book awareness, and (f) written expression. The language goals for the Head Start Performance Standards document included the following: (a) attending to different types of conversation, (b) understanding more complex vocabulary, (c) understanding different types of language including questions, and (d) understanding the rules of language. In addition, curriculum documents also emphasized phonological awareness and oral language skills. Creative Curriculum included the following oral language skills: (a) listening and understanding complex language, (b) use of language to express thoughts and needs, and (c) use of appropriate conversational skills to communicate. In addition, the indicators for the language, literacy, and communication dimension of the

High/Scope curriculum included the following skills: (a) comprehension, (b) speaking, (c) vocabulary, (d) phonological awareness, (e) alphabetic knowledge, (f) reading, (g) concepts of print, (h) book knowledge, and (i) writing. The PALS required that preschool students must be able to do the following: (a) identify rhyming pairs; (b) detect beginning sounds; (c) identify 10-18 upper-case letters; (d) recognize words and letters in books; (e) identify the front, back, and title of a book; (f) turn the pages of a book; and (g) demonstrate left to right direction of words while tracking them with a finger.

Central research question: How do preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of preschool students?

The findings for this central research question reflect a synthesis of the findings for the related research questions. This synthesis is presented in relation to all data sources for all cases.

Emphasis on phonological awareness, oral language, and written expression. The first finding in relation to this central research question is that preschool teachers used the developmentally appropriate practice of emphasizing phonological awareness, oral language, and written expression in order to improve literacy skills for students. Preschool teachers emphasized phonological awareness skills by conducting activities involving letter recognition such as asking students to identify upper and lower case letters in a recitation and playing alphabet bingo. During circle time during several of the observations, preschool teachers provided instruction related to letter recognition as a routine activity. Several preschool teachers also introduced students to some new vocabulary words by using synonyms or definitions to provide meaning for such words

as "soil", "reservoir", "fierce", and "insect". All preschool teachers also emphasized written expression skills by asking students to write in their journals at the beginning of the day and by providing opportunities for students to use phonetic spelling to label objects.

The documents also placed a strong emphasis on phonological awareness, oral language, and written expression. The preschool standards documents supported phonological awareness, through an emphasis on alphabet letter recognition, related sound recognition, and print and book awareness. Both of the preschool curriculums emphasized reading, writing, listening, and speaking skills. In addition, teachers used the PALS to measure the following literacy skills: (a) name writing, (b) print and word awareness, (c) nursery rhyme awareness, (d) beginning sounds, (e) alphabet knowledge, (f) letter sounds, and (g) rhyme awareness.

Supporting play through learning centers. A second finding of this study is that preschool teachers used the developmentally appropriate practice of play by designing learning centers to improve literacy skills. In particular, the purpose of these learning centers was to improve oral language skills by engaging students in imaginative and explorative play with peers and to encourage students to use vocabulary in context by acting out these vocabulary words during play. During the interviews, preschool teachers reported that they designed learning centers to be child-centered, engaging, and enjoyable. Head Start preschool teachers reported that students engaged in role-playing scenarios connected to monthly themes. Title I preschool teachers also used learning centers to improve literacy skills through play by encouraging students to engage in

conversations with their peers. State-funded preschool teachers encouraged students to read their daily journal entries, which were often a mixture of random letters and pictures.

Observation data also revealed that preschool teachers supported play through several different kinds of learning centers that they had designed to improve literacy skills for students. All of the preschool classrooms included a learning center on books so that students could look at books independently. In addition, all of the preschool teachers created a learning center for dramatic play, which gave students the opportunity to act out stories, pretend to read stories, or interpret stories based on pictures in the books. All of the preschool teachers also created a writing and arts learning center to improve fine motor skills, particularly in relation to name writing. The purpose of these learning centers was to help students develop their oral language skills through play. However, literacy instruction through play might become even more purposeful if preschool teachers would consistently provide quality feedback and language modeling to students. Observation data indicated that preschool teachers rarely talked to students during play.

Limited teacher-child interaction through quality feedback. A third finding is that preschool teachers demonstrated limited use of the developmentally appropriate practice of teacher-–child interaction in relation to the quality feedback dimension as described in the CLASS instrument. During the interviews, preschool teachers maintained that they provided quality feedback to students. State-funded preschool teachers reported that they provided feedback to students about their literacy skills through such instructional activities as spelling, letter matching, and word matching games. Title I preschool teachers reported that they provided quality feedback to students

by asking open-ended questions when they read books to students. Head Start teachers believed that they provided quality feedback to students about their literacy skills by helping students use a variety of words. Observation data, however, indicated that teachers inconsistently provided feedback to students, and this feedback was often brief in duration and content. Head Start preschool teachers demonstrated this feedback in different ways. One teacher did not provide feedback to students at all while they played in the dramatic play center, and the other teacher only briefly engaged in conversation with students while they drew maps. Title I preschool teachers also demonstrated this feedback in different ways. One teacher engaged students in conversation while they sorted letters while the other teacher did not talk to students at all while they wrote the names of objects. The two state-funded preschool teachers also provided quality feedback in different ways. Both demonstrated perfunctory interaction with students during learning center time. One teacher only engaged with students when conflicts occurred, and the other teacher helped a student put together a puzzle. Thus, the preschool teachers at all sites provided limited quality feedback to students through their interactions with them.

Document analysis did not support an emphasis on the developmentally appropriate practice of teacher-child interaction through quality feedback. The standards included a strong emphasis on phonological awareness and oral language skills. The curriculum documents included an instructional guide for preschool teachers in relation to how to sequence specific literacy skills and how to use the instructional materials.

However, none of the documents cited the importance of teacher-child interaction in improving literacy skills for students.

Limited teacher-child interaction through language modeling. A fourth finding was that preschool teachers' demonstrated limited and inconsistent use of the developmentally appropriate practice of teacher-child interaction through the dimension of language modeling as described in the CLASS instrument. Interview data indicated that preschool teachers at all sites believed they supported teacher-child interaction by modeling language. Head Start preschool teachers believed that they modeled language by talking to students about their feelings. State-funded preschool teachers believed that they modeled language by asking students open-ended questions about the stories that they read to the group. Title I preschool teachers believed that they modeled language by engaging in frequent conversations with students as they walked around the classroom during center time while students were playing. Therefore, preschool teachers at all sites believed that they modeled language to improve students' literacy skills. However, observation data indicated that preschool teachers inconsistently demonstrated language modeling during literacy instruction. State-funded preschool teachers used advanced language in a science lesson when they used the word "reservoir" to identify a place that holds water. Title I preschool teachers used self-talk to encourage students to think aloud while drawing and labeling pictures. Head Start preschool teachers used repetition and extension to prompt conversation while students played with developmentally appropriate toys. Thus, observation data indicated that preschool teachers used language modeling on a limited basis to help students improve their literacy skills.

Document analysis did not reveal any emphasis on teacher-child interaction in relation to language modeling. It is possible that because the research on the importance of teacher-child interaction is relatively recent (CLASS, 2010), the standards, curriculum, and assessment documents were not updated to address this change. It is also possible that these dimensions are difficult to assess because they require direct observation to measure these skills, which is time consuming and costly.

Challenges. A fifth finding in relation to this central research question is that all of the preschool teachers believed that a lack of parental support, a wide range of student abilities in the classroom, accountability demands, and poor student motivation were the major challenges that they faced in using developmentally appropriate practices in relation to literacy instruction. Title I preschool teachers believed that the biggest challenge in relation to improving students' literacy skills were parents who are not supportive. State-funded preschool teachers, however, believed that the biggest challenge was the wide range of student abilities found in preschool classrooms and the high accountability demands in relation to the PALS. Head Start preschool teachers believed that the main challenge to improving students' literacy skills was keeping students focused and engaged on instruction in the classroom.

Table 7 provides a summary of the results or key findings for this study in relation to the related and central research questions.

Table 7: *Summary of Key Findings for Research Questions*

Research Questions	Key Findings
RRQ 1: Providing literacy instruction	Emphasized phonological awareness skills Emphasized oral language skills
RRQ 2:Perceptions of effective instruction	Emphasized identification of letters Read books to students Emphasized writing skills
RRQ 3: Play	Designed role playing activities and used developmentally appropriate materials to improve phonemic awareness and oral language skills
RRQ 4: Teacher-–child interaction	Provided limited quality feedback to students Provided limited language modeling to students
RRQ 5: Documents	Emphasized phonological awareness skills Emphasized oral language skills
Central RQ: Use of developmentally appropriate instruction to improve literacy skills	Emphasized oral language skills Emphasized written expression skills Emphasized phonological awareness Supported play through learning centers Limited teacher-child interaction: quality feedback Limited teacher-child interaction: language modeling Faced difficult challenges: 　　lack of parental support 　　wide range of student abilities 　　accountability demands 　　poor student motivation

Summary

In summary, this chapter included the results for this study. I described the setting for this study, participant demographics, and the data collection protocols that I followed. For the first level of analysis, I described how I used the specific analytic techniques of coding and category construction to analyze the interview data from each single case or preschool program. I also described how I used descriptive statistics to

analyze the observation data for each case in relation to the CLASS instrument. In addition, I described how I used a content analysis to review the documents that I collected for this study. For the second level of analysis, which was the cross case, I examined data across all sources of evidence for all three cases in order to determine the emerging themes and discrepant data. From these themes and discrepancies, I presented the results of this study in a cross case analysis in relation to the central and related research questions.

In Chapter 5, I include a discussion, conclusions, and recommendations for this study. I include a summary of the findings presented in Chapter 4 and an interpretation of the findings in relation to the literature review and the conceptual framework presented in Chapter 2. In addition, I include the limitations of the study, recommendations for future research, implications for social change, and a conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this multiple case study was to explore how preschool teachers used developmentally appropriate instructional practices to improve the literacy skills of students in three different preschool programs. To accomplish this purpose, I used a multiple case study research design. The case or unit of analysis was literacy instruction in an individual preschool program in a large urban school district in an eastern state. The three cases included the Head Start preschool program, the Title I preschool program, and the state-funded preschool program. I conducted this study because researchers have conducted few qualitative studies on publically funded preschool programs in relation to the impact of developmentally appropriate practices on the literacy skills of preschool students. Therefore, this study contributes to the body of knowledge on this topic by comparing and contrasting literacy instruction in three different public preschool programs.

Several key findings emerged from this study in relation to the related research questions. In the first related research question, I asked how preschool teachers provided literacy instruction for preschool students. I found that preschool teachers emphasized phonological awareness skills and oral language skills in their literacy instruction. The second related research question concerned perceptions that preschool teachers have about the effectiveness of the instructional practices that they use to improve literacy skills for preschool students. I found that preschool teachers emphasized the identification of letters, read books to students, and emphasized writing skills. The third related research question concerned the use of developmentally appropriate play to

improve literacy skills for preschool students. According to study findings, preschool teachers designed role-playing activities to improve oral language skills and used developmentally appropriate materials. The fourth related research question was about the use of teacher-child interaction to improve literacy skills for preschool students. I found that preschool teachers provided limited quality of feedback and limited language modeling to students. The fifth related research question concerned district documents related to literacy skills instruction in preschool programs. In these documents, phonological awareness and oral language skills were emphasized.

In relation to the central research question, several key findings also emerged in relation to how preschool teachers used developmentally appropriate instructional practices to improve the literacy skills of students. The first finding was that teachers emphasized phonological awareness, oral language, and written expression skills. The second finding was that teachers supported play through learning centers. The third finding was that teachers provided limited quality feedback and used limited language modeling through their interactions with students in order to improve students' literacy skills. The final finding was that teachers believed they faced the difficult challenges of a lack of parental support, a wide range of student abilities found in the classroom, increasing accountability demands, and poor student motivation.

This chapter includes a summary and interpretation of the findings in relation to the conceptual framework and the literature review. In addition, this chapter includes a discussion of the limitations of the study, possible recommendations for future research, and implications for social change.

Interpretation of Findings

The findings for this study are interpreted in relation to the conceptual framework and the literature review for this study. This interpretation is presented using the related and central research questions as the organizational structure. The central research question is presented last because it is a synthesis of the interpreted findings for the related questions.

Related Research Question 1: How do preschool teachers provide literacy instruction for preschool teachers?

For this study, preschool teachers emphasized phonological awareness and oral language skills. Researchers support this finding. In a quasi-experimental study about instructional approaches to fostering alphabet knowledge development, Piasta, Purpura, and Wagner (2010) explored how students receive letter-name instruction. Piasta et al. administered pre and posttests to an experimental group and a control group and found that specific instruction on alphabet knowledge and other phonological awareness skills benefits students' emergent literacy skills. In a study about research implications for preschool early literacy instruction, Callaghan and Madelaine (2012) examined specific instructional strategies and their effect on oral language skills. Callaghan and Madelaine found that shared book reading and phonological awareness instruction are necessary for early literacy instruction. Gonzalez et al. (2011) conducted an evaluation of the Early Reading First preschool enrichment program on language and literacy skills and found that preschool students who participated in this program scored high in oral language,

alphabet knowledge, and awareness of print concepts. All three scholars claimed that phonological awareness and oral language skills are important to literacy instruction.

Related Research Question 2: What perceptions do preschool teachers have about the effectiveness of the instructional practices they used to improve literacy skills for preschool students?

For this study, preschool teachers believed that instructional practices related to identifying letters, reading books to students, and writing skills were critical to improving literacy skills for students. Researchers support these findings. Goh, Yamauchi, and Ratliffe (2012) explored instructional conversation between teacher and students in order to integrate prior knowledge into the acquisition of new concepts. Goh et al. found that instructional conversation between teacher and students develops oral language skills and builds strong social relationships between teachers and students and among their peers. In a related study, Alghazo and Al-Hilawani (2010) examined the knowledge, skills, and instructional practices of preschool teachers in relation to phonological awareness. Alghazo and Al-Hilawani found that students must be proficient in phonemic awareness in order to be ready for reading instruction in kindergarten. Alghazo and Al-Hilawani also found a significant difference between teacher knowledge of phonological awareness skills and actual practice in phonological awareness instruction. In another study, Diamond and Powell (2011) examined an iterative approach to a professional development intervention for Head Start teachers. Diamond and Powell found that teachers are often more comfortable teaching phonological awareness skills, such as alphabet recognition and letter sounds than oral language skills because

vocabulary skills are built through spontaneous conversation with students, which is difficult to measure. Molfese et al. (2010) examined the development of early writing skills for preschool students. Molfese et al. used a rubric to rate students' ability to form letters correctly, to understand left to right orientation, and to sequence letters. Molfese et al. found that using a rubric helped teachers predict the writing skills students need for kindergarten. Gonzalez et al. (2011) examined oral language vocabulary in science and social studies through shared reading. Gonzalez et al. hypothesized that student exposure to science and social studies vocabulary from teachers reading content-focused books builds content knowledge needed for success in school. Gonzalez et al. found an increase in students' oral language content vocabulary as a result of these instructional practices. Preschool teachers believed an emphasis on identification of letters, reading books to students, and writing skills were effective instructional practices in improving literacy skills for students.

Related Research Question 3: How do preschool teachers use developmentally appropriate instruction through play to improve literacy skills for preschool students?

The first key finding was that treschool teachers emphasized role-playing activities and used developmentally appropriate materials to encourage phonemic awareness and oral language skills. Researchers also support these findings. Massey (2012) explored how preschool teachers use story time to encourage students to interact with the story and how teachers use props to act out the story through guided play. Massey hypothesized that when students act out a story through play, they develop complex oral language skills. Massey found that when students interact with stories

through guided play, this experience improves their vocabulary and reading comprehension skills. In another study, Mielonen and Paterson (2009) explored how teachers use play to enhance literacy skills. Mielonen and Paterson found that teachers who use developmentally appropriate materials through imaginary play and peer conversation in creative and engaging ways inspire students to improve their oral language skills. Guo, Justice, Kaderavek, and McGinty (2012) explored the physical and psychological literacy environment of preschool classrooms and how they contribute to students' emergent literacy growth. Guo et al. found that a rich literacy environment was a predictor of students' understanding of the alphabet. Rrole-playing activities and developmentally appropriate materials improve phonemic awareness and oral language skills.

Another key finding for this related research question was thatpreschool teachers emphasized role-playing activities and used developmentally appropriate materials to encourage phonemic awareness and oral language skills. Research also supports these findings. Welsh, Nix, Blair, Bierman, and Nelson (2010) investigated the development of cognitive skills and gains in academic literacy skills for students from low-income families and who were enrolled in a Head Start program. Welsh et al. found that memory and attention play an important role in the development of academic skills and problem solving skills for young children. Welsh et al. concluded that teachers and administrators in preschool programs must carefully choose developmentally appropriate curriculum materials in order to deliver effective literacy instruction.

Related Research Question 4: How does teacher-child interaction develop oral language skills to enhance literacy for preschool students?

A key finding for this related research question was that preschool teachers provided limited quality feedback and limited language modeling to students. Research also supportst this finding. Gates (2012) believed that teachers are challenged to provide quality of feedback and modeling to students. Booren, Downer, and Vitiello (2012) examined teacher-child interaction using the CLASS observation tool in different classroom settings. Booren et al. hypothesized that the quality of teacher-child interaction across a variety of activities provides a positive experience in oral literacy instruction for students. Booren et al. found that teachers scored higher in other teacher-child interaction dimension of the CLASS instrument, such as positive interaction, teacher sensitivity, regard for student perspective, discipline, productivity, and instructional learning formats, than in the quality of feedback and language modeling dimensions. In another study, Hamre et al. (2012) explored the impact of a course on effective teacher-child interactions on teacher beliefs, knowledge, and observed practice. The experimental teacher group was given extensive training in how to create quality teacher-child interactions, and the other group was the control group, which did not receive any treatment. Hamre et al. used the CLASS instrument to evaluate these teacher-child interactions. Hamre et al. found that in the quality of feedback indicator, the mean score in the experimental group was 3.11, and in in the control group, it was 2.76. In relation to the language-modeling indicator, the mean score in the experimental group was 3.2, and in the control group, it was 2.77. Even though the difference between the experimental

and control group was insignificant, Hamre et al. concluded that teachers benefit from staff development in teacher-child interaction. Sabol, Hong, Pianta, and Burchinal (2013) explored how ratings of Pre-K programs predict student learning. Sabol et al. used archival data collected from the quality rating system results of several states and compared this data to end-of-year student outcome measures. Sabol et al. found that, overall, a high level of teacher-child interactions coincided with higher end-of-year student outcomes. However, they found no significant differences between the quality of feedback or language modeling dimensions and end-of-year student outcomes. Sabol et al. concluded that use of a quality rating system increased the quality of preschool programs. Thus, these studies support the idea that preschool teachers need to provide quality feedback and language modeling to students in order to help them develop strong literacy skills and to improve the quality of the preschool program.

Related Research Question 5: What do documents about the three different preschool programs reveal about literacy instruction for preschool students?

The key finding for this related research question was that documents emphasized phonological awareness skills and oral language skills. Studies also support the importance of these skills in improving literacy for preschool students. Mohler, Ah Yun, Carter, and Kasak (2009) used an experimental design to explore the effect of curriculum, coaching, and professional development on the literacy skills of preschool students. The treatment group, which included 22 state preschool classrooms, received professional development in phonological awareness and oral language literacy instruction and the assistance of a literacy coach. The control group did not receive any training or

assistance. Mohler et al. found that students in the experimental group scored higher on measures on phonological awareness and oral language skills than the control group. In another study, Lonigan, Allan, and Lerner (2011) examined the nature of the role of assessment in improving preschool phonological processing and its relation to vocabulary, general cognitive abilities, and print knowledge. Lonigan et al. found that the level of development in oral language, phonological awareness, and print knowledge are strong indicators of students' reading success. Lonigan et al. also found that screening assessments provide valuable information that teachers should use in order to improve students' literacy skills. Bierman et al. (2013) examined the effects of a specific intervention, known as the Research-based Developmental Informed (REDI), on Head Start students' outcomes one year later in different kindergarten contexts. Bierman et al. found that students who participated in this intervention demonstrated improved phonemic awareness skills one year later.

Central research question: How do preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of preschool students?

The first key finding for this central research question was that preschool teachers in this study used developmentally appropriate instructional practices to improve the literacy skills of preschool students by emphasizing phonological awareness, oral language, and written expression skills. Research supports this finding. O'Leary, Cockburn, Powell, and Diamond (2010) explored Head Start teachers' views of phonological awareness and vocabulary knowledge instruction. O'Leary et al. conducted group interviews to gather teacher perspectives on literacy instruction. O'Leary et al.

found that teachers believed that they emphasized phonological awareness and oral language skills by talking to students and introducing new vocabulary. Adams, Simmons, Willis, and Porter (2013) examined the connection between oral vocabulary in context and writing. Adams et al. found that students listen to a word spoken in context, transcribe letters of the alphabet by writing, and then learn to read and understand the word correctly. Adams et al. concluded that a close relationship exists between writing and learning content vocabulary in context. In a related study, Cabell, Tortorelli, and Gerde (2013) examined how early writing develops and is linked to literacy. Cabell et al. found that providing writing materials in learning centers gives students an opportunity to experiment with writing. Cabell et al. concluded that teachers often reinforce phonemic awareness by requiring them to practice beginning and ending sounds when they write.

Another key findings in relation to this central research question was that teachers used developmentally appropriate instruction to improve literacy skills by creating learning centers that supported the concept of play. Research was also found to support this finding. Rushton, Juola-Rushton, and Larkin (2010) examined how teachers use the classroom environment to support developmentally appropriate instruction. Rushton et al. believed that the learning environment is essential in motivating students to learn. Rushton et al. maintained that academic learning centers, such as computer stations, writing stations, and dramatic play, support learning through teacher-child interaction and stimulating conversation. Rushton et al. found that students exposed to oral language modeling and open dialogue with teachers and peers during play improve their literacy skills. Yelland (2011) examined how teachers scaffold instruction and extend learning

while interacting with students in play. Yelland found that developmentally appropriate play is essential in quality preschool programs. Yelland recommended that play should be reconceptualized as a mix of spontaneous and planned activities that are linked to learning.

A third key findings in relation to the central research question was that preschool teachers provided only limited teacher-child interaction to students during literacy instruction, particularly in relation to feedback and language modeling. However, research supports the importance of providing quality feedback and language modeling to preschool students. Curby, Downer, and Booren (2014) examined the effect of teacher-child interaction and literacy achievement for kindergarten by investigating the link between students' mastery of phonological awareness literacy skills and their first grade reading skills. Curby et al. found that high quality teacher-child interaction in kindergarten increased engagement in phonological awareness literacy skills for first grade students. Hamre, Hatfield, Pianta, and Jamil (2013) explored the connection between teacher-child interaction and preschool students' development. Hamre et al. examined early childhood classrooms using the CLASS instrument and focused on general teacher-child interaction and the three domains of the CLASS instrument: emotional support, classroom organization, and instructional support. Hamre et al. found modest gains in quality of feedback and language modeling skills.

A fourth key finding related to this central research question was that preschool teachers believed they often faced a variety of challenges in providing developmentally appropriate instruction to improve literacy skills. These challenges included a lack of

parental support, a wide range of student abilities found in the classroom, accountability demands, and poor student motivation. Research supports the finding that preschool teachers need parental support in order to help students improve their literacy skills. In a study about the connection between teacher and parents, Mahmood (2013) examined how early childhood programs support collaborative efforts between parents and teachers. Mahood found three specific challenges between early childhood programs and parents, including "lack of communication, uncertainty of pedagogic expectations, and parental hospitality" (p. 65). Teachers in this study reported that improving the involvement of parents in their children's education is one of the biggest challenges they face in helping students improve their literacy skills.

Another challenge that preschool teachers face is a wide range of student abilities in the classroom, which make the implementation of developmentally appropriate practices in literacy instruction a daunting task. Particularly challenging are those students who come from high risk populations, including children who live in poverty and children who demonstrate social-emotional difficulties, developmental delays, and special learning needs. In relation to children living in poverty, Pears, Heywood, Kim, and Fisher (2011) examined the prereading skills of students in foster care. Pears et al. found that students from foster care families have difficulty mastering alphabetic knowledge and developing strong oral language skills.

In relation to children with social-emotional and attention difficulties, Commodari (2012) examined how these difficulties relate to students' mastery of literacy skills. Commodari contended that attention difficulties, such as inadequate impulse control,

impulsive behavior, and distractivity from a variety of stimuli, are factors that negatively impact children's stages of cognitive development and their behavior. Commodari noted that attention difficulties often accompany learning disabilities. Commodari found that many components of attention difficulties are highly connected to language development and often delay student mastery of phonological awareness and oral language skills.

Concerning children with special learning needs, Foy and Mann (2012) examined the connection between speech problems and phonemic awareness skills. Foy and Mann found that students who experience difficulty in speech often demonstrate delays in learning phonological awareness skills and oral language skills. In a related study, Wong and Kasari (2012) investigated the interaction between students with autism and students with developmental delays during play. Wong and Kasari found that students with autism spent more time in solitary play than students with developmental delays. Wong and Kasari also observed greater evidence of symbolic play among the students with autism when compared to their peers in the classroom. Wong and Kasari recommended that teachers focus on providing instruction rather than promoting social interaction among students.

Another challenge that preschool teachers face in providing high quality literacy instruction to students is the demand from many parents and the general public for accountability, particularly in relation to reading. In a discussion about expanding access to quality preschool programs through sound public policy, Barnett (2013) found that states have developed rigorous standards and implemented high stakes accountability systems based on evaluations of these preschool programs. In a related study, Nitecki and

Chung (2012) examined the implementation of K-12 Common Core Standards across multiple states and how that implementation effects preschool literacy expectations. Nitecki and Chung examined the struggle that teachers face between teaching developmentally appropriate literacy instruction and meeting the needs of the K-12 Common Core English Language Arts and Literacy standards. They found that preschool teachers often struggle with how to use child-centered and play activities to support phonemic awareness and oral language skills. Nitecki and Chung recommended that "developmentally appropriate books, accessible materials, print-rich environment, and various literacy-based lessons" should be a critical component of all high quality preschool classrooms. (p. 54.) They concluded that the direct instruction model is inappropriate for improving the literacy skills of preschool students.

In other research related to accountability challenges, Santi, York, Foorman, and Francis (2009) examined data about the speed of completion on a kindergarten literacy assessment routinely administered in kindergarten classrooms for accountability purposes. Santi et al. argued that Americans who support the NCLB Act have placed pressure on preschool and kindergarten teachers to abandon developmentally appropriate practices in order to concentrate only on academic subjects such as reading and mathematics. Santi et al. recommended that teachers receive state assessment results promptly so that they can use these results to adjust their instruction to meet students' individual learning needs. Santi et al. recommended that teachers conduct early reading assessments in order to determine current levels of student performance.

Another challenge that preschool teachers face is to provide instruction to students who are not motivated to master literacy skills. Several studies support this challenge. Master and Walton (2013) explored how the instructional practice of minimal grouping increases young children's motivation and learning of group-relevant tasks. They found that when students feel comfortable in a peer group, their motivation for learning increases. Master and Walton also found that sterotypes about grouping cause students to feel isolated and as a result, these stereotypes negatively impact their academic motivation and success. Master and Walton suggested that minimal grouping increases young children's motivation to complete academic tasks. In another study about student motivation, McDermott, Rikoon, Waterman, and Fantuzzo (2012) examined the motivation of Head Start students. McDermott used the Preschool Learning Behavior Scale to rate their motivation to learn. McDermott found that the students scored low in competence, motivation, and learning strategies connected to attention and lack of persistence. Day and Burns (2011) compared the achievement motivation of preschool children from low socio-economic status families to students from middle socio-economic status families. Day and Burns observed and recorded instances of students' negative self-evaluative verbalizations during the completion of tasks. The tasks were coded and compared between the two groups. Day and Burns found that preschool students from these two groups do not differ on measures of motivation. Day and Burns also found that the students' verbalizations during learning are evidence of their achievement motivation toward learning.

Connections to Conceptual Framework

The findings of this study are supported by the conceptual framework for this study. The framework was based on Piaget's theory of cognitive development and Vygotsky's theory of psychological development in relation to language. Both of these theories are considered cognitive development theories that have contributed to the philosophy of learning known as constructivism, which is the foundation for developmentally appropriate practice. The key findings of this study were that preschool teachers used developmentally appropriate instruction to improve oral language, phonological awareness, and written expression. Preschool teachers supported play through learning centers, and also demonstrated limited teacher-child interaction in relation to quality of feedback and language modeling.

Piaget's (1926) research supports these findings. In his theory of cognitive development, Piaget explored the nature of knowledge, the relationship between the knower and reality, the nature of intelligence, and the methods of investigation such as observation and experimentation that researchers use to conduct studies about the development of cognition in children (Gredler, 2009). Piaget described specific stages of cognition for each age: (a) the sensorimotor period from birth to 1 year; (b) the preoperational period from 2-3 years to 7-8 years, (c) the concrete operational period from 7-8 years to 12-14 years, and (d) the formal operational period from 4 years on. In doing so, Piaget argued that learning is a developmental process. Piaget believed that all aspects of development, including physical, social-emotional, cognitive, and language, develop through hand-on sensory experiences. Piaget also believed that the learning

process includes the constructs of schemas, assimilation, accommodation, and equilibrium. Schemas represent knowledge. Assimilation is the process that modifies existing schema as a result of new information. Accommodation blends old and new knowledge to create a unified and higher level schema. Equilibrium is the balance between the process of accommodation and assimilation. Without these processes, Piaget believed that children do not learn. Therefore, the teacher's role is to create and organize classroom activities that are developmentally appropriate for young children by providing examples and questions that lead them to rethink their ideas and by giving them opportunities in learning centers to engage in make-believe or symbolic play in which the world of action is under their intellectual control. The teacher's role also includes interacting with the child to promote the processes of assimilation, accommodation, and equilibrium through modeling language skills.

Like Piaget, Vygotsky also explored cognitive development, but in relation to psychological development, particularly concerning the biological and cultural-historical roots of cognition. Vygotsky explored the role of cultural signs and symbols in the development of attention, abstraction, language, memory, numeric operations, and reasoning. He also examined the mental functions involved in thinking and speech as well as the role of imaginary play in these functions. Vygotsky observed the complex function of language and thought, noting that children express external language by thinking aloud through an egocentric monologue. As children grow, Vygotsky contended, external language turns internal and becomes thought.

In relation to the role of the teacher in the classroom Vygotsky emphasized collaboration between the teacher and the student and the behavior of the adult, which serves as a model for what the child should achieve in a particular phase of cognitive development. Therefore, Vygotsky developed the concept of the zone of proximal development, which he defined as the zone or place where a student is able to learn without help as compared to the place where a student cannot learn alone. The zone of proximal development occurs between this independence and mastering a more difficult task. Vygotsky recommended that teachers scaffold the assessment of a child's capabilities in order to determine the zone of proximal development. In later studies, based on Vygotsky's research, scaffolding was defined as the process the teacher uses to determine the instructional tasks that a child can complete without extensive guidance.

Vygotsky's research supports the findings of this study because the teacher's role is to interact with students and model the use of language. Teacher-child interaction within the social environment of the preschool classroom provides students with opportunities to develop more complicated mental functions. Children use words as tools to express thought and to demonstrate their understanding of words. To support this process, the teacher's role is to model language by using words in context to demonstrate the connection of words to specific concepts, knowledge, and skills. Children also use external speech while engaged in imaginative play. As children play, they try to make sense of the world. The role of the teacher is to model higher level thinking by asking students open-ended questions that encourage them to use more advanced vocabulary and expressive language skills.

Thus, the preschool teacher's role is to create and organize classroom activities that are developmentally appropriate for young children by providing examples and questions that lead them to rethink their ideas and by giving them opportunities through learning centers to engage in make-believe or symbolic play that supports their language development. The preschool teacher's role also includes interacting with children by modeling language skills and providing quality feedback in order to promote the complex cognitive processes of assimilation, accommodation, and equilibrium.

Limitations of the Study

The limitations to the trustworthiness of a study often arise from the research design of the study. One limitation was the small sample size of only two participants from each preschool program. This small sample size may have limited the transferability of this study to similar preschool programs found in other large public urban school districts. Merriam (2009) noted that in order for a qualitative study to be transferable, there must be an equivalency among conditions, populations, and sample size. A small sample size, Merriam noted, may also limit dependability of a study due to variability in human behavior.

Another limitation was the limited number of observations and interviews I was able to conduct as a single researcher. The limitation is due to the fact that as a single researcher, I was only able to conduct two observations of literacy instruction for each preschool program and only two teacher interviews for each preschool program. In addition, in order to meet the expectations of the Garapan School District and the Head Start preschool program, I was required to conduct three, 15-minute observation cycles

instead of four 20 minute observation cycles that state evaluators conduct for the SQRI. I should have conducted these observations more frequently and over a longer period in order to obtain richer data because one observation of each classroom only showed a snapshot of literacy instruction on that specific day.

Another limitation was that district administrators for the Garapan Public School District (pseudonym) and the Head Start program selected the sites, which limited the pool of potential participants to those preschool sites that met qualifications for state accreditation and were not on probation for adequate yearly progress, based on state assessment results. Thus, every preschool teacher in the district was not given an opportunity to participate in this study. This selection process impacted this study by limiting the number of possible participants who might have added richer data.

Recommendations

The recommendations for future research are grounded in the findings and limitations of this study as well as the literature reviewed in Chapter 2. The first recommendation is that this study should be replicated in other public school districts in other regions of the United States in order to determine if the same results are found. However, this case study should be replicated with a larger sample size, multiple observations of instructional lessons, and initial and follow-up interviews with preschool teachers. This recommendation to replicate this study with an improved research design would provide additional knowledge about how preschool teachers use developmentally appropriate instruction to improve the literacy skills of students in publically funded preschool programs.

The second recommendation is that researchers should conduct additional studies about professional development that preschool teachers need in order to implement developmentally appropriate practices to improve the literacy skills of students. Researchers could explore the effectiveness of current mentoring programs for preschool teachers to determine if mentoring provides the assistance and support that teachers need in order to improve their interaction skills with students. The findings of this study also indicated that preschool teachers need additional professional development in providing quality feedback to students and modeling language more effectively.

A third recommendation is that researchers should conduct additional research comparing and contrasting literacy instruction in other public preschool programs. Researchers could also explore literacy instruction in private preschool programs and in daycare centers that provide preschool programs. This research could be expanded by comparing the results of this study to the results of these additional studies.

Implications

This study will contribute to positive social change in a number of ways. The first contribution that this study will make to positive social change is to the improvement of instruction in public funded preschool programs in the United States. Findings from this study indicated that literacy instruction in preschool programs could be improved if educators provide high quality professional development for preschool teachers, particularly in relation to teacher-child interactions. Preschool teachers should know how to conduct extended conversations with students in order to help them improve their oral language skills. Preschool teachers need additional professional development in

strengthening their interactions with students, particularly in relation to feedback loops, frequent conversation, and asking open-ended questions. In relation to feedback loops, preschool teachers need additional training to learn how to engage students in sustained back-and-forth conversation and to help them understand ideas and think for themselves. Teacher persistence is also critical in molding these conversations with students and asking follow-up questions. In relation to frequent conversation, teachers need more training about how to sustain conversations with students. Teachers also need more training about how to ask probing questions that require more than one word answers from students. When preschool teachers know how to interact with children, they develop an understanding of how they think and solve problems (Hamre et al., 2012).

A second contribution that this study will make to positive social change is in relation to developing a deeper understanding about how to improve learning in reading, writing, speaking, and listening for preschool students. Preschool education is the foundation for the future academic success of students. This foundation for learning is especially important in relation to the basic skills of reading, writing, speaking, and listening. The findings of this study indicated that preschool teachers need to establish this foundation of learning by providing high quality educational experiences for all of their students, which can be accomplished if they use developmentally appropriate practices to improve students' cognitive and social growth, particularly in relation to the literacy skills of reading, writing, speaking, and listening. The findings of this study also indicated that educators' use of assessment instruments such as CLASS to evaluate the

quality of experiences that students receive in preschool classrooms are helpful in improving student learning (Sabol et al., 2013).

A third contribution that this study will make to positive social change is in relation to providing funding and political support for preschool programs in the United States. Federal and state funding for public preschool programs provides access to quality education for all students, especially students living in poverty. In the state where this study was conducted, 17% of the children live in poverty compared to the national average of 25% (National Center for Children in Poverty, 2013). Current statistics continue to show a high need for the continuation of public funding for preschool education. In addition, current research studies continue to focus on the importance of improving preschool education. Alghazo and Al-Hilawani (2010) believed that high quality preschool programs prepare students for public school education. Piasta and Wagner (2010) maintained that "students with poor knowledge of letter names and sounds are more likely to struggle with learning to read" (p. 8), a problem that could be reduced through high quality preschool education.

Conclusion

The American public continues to demand high quality preschool programs. However, many of these preschool programs depend on federal and/or funding in order to exist. This funding, however, is in jeopardy every year because many congressional representatives believe that the federally funded programs in particular, such as the Head Start and the Title I preschool programs, have failed to demonstrate improved student

achievement. In addition, many children are entering kindergarten without the literacy skills they need in order to learn to read because they have had no preschool education.

The challenge of providing high quality literacy instruction in the preschool classroom is daunting, particularly if parental support is lacking. Research studies have consistently demonstrated that phonological awareness and oral language skills are the primary skills that students need in order to learn to read with proficiency. The preschool teacher's role, therefore, is to provide developmentally appropriate literacy instruction for all students by using a wide range of research-based instructional strategies that address these skills. However, preschool teachers have sometimes emphasized the basic skills of letter recognition at the expense of the more complex skills of phonological awareness and oral language. In addition, play and teacher-child interaction are critical developmentally appropriate methods to help young children improve their literacy skills. Preschool teachers, therefore, need to encourage a high level of sustained and complex conversation among children by providing quality feedback and language modeling. Most of all, preschool teachers need to provide opportunities, support, and time for young children to play and to think creatively in order to internalize these complex literacy concepts and skills.

References

Adams, A., Simmons, R., Willis, C., & Porter, S. (2013). The impact of the development

of verbal recording on children's early writing skills. *The Biritish Psychological*

Society, 83, 76-97. doi:10.1111/j.2044-8279.2011.02056.x

Administration for Children and Families. (2013). Executive summary. Retrieved from

file:///C:/Users/Cherrie/Desktop/2013%20Budget%20ExecutiveSummary.pdf

Alghazo, E., & Al-Hilawani, Y. (2010). Knowledge, skills, and practices concerning

phonological awareness among early childhood education teachers. *Journal of*

Research in Childhood Education, 24, 172-185. doi:10.1080/02568541003635276

Assel, M., Landry, S., Swank, P., & Gunnewig, S. (2007). An evaluation of curriculum,

setting, and mentoring on the performance of children enrolled in pre-

kindergarten. *Reading and Writing, 20,* 463-494. doi:10.1007/s11145-006-9039-5

Ball, C., & Gettinger, M. (2009). Monitoring children's growth in early literacy skills:

Effects of feedback on performance and classroom environments. *Education and*

Treatment of Children, 32(2), 189-212. doi:10.1353/etc.0.0055

Barnett, S. (2013). Expanding access to quality pre-K in sound public policy. *National*

Institute for Early Education Reseach, 18. Retrieved from

http://www.nieer.org/sites/nieer/files/Getting%20the%20Facts%20Right%20on%

20Pre-K.pdf

Bierman, K., Nix, R., Heinrichs, B., Domitrovich, S., Gest, S., Welsh, J., & Gill, S.

(2013). Effects of Head Start REDI on children's outcomes 1 year later in

different kindergarten contexts. *Child Development, 85*(1), 140-159.
doi:10.1111/cdev.12117

Booren. L., Downer, J., & Vitiello, V. (2012). Observations of children's interactions
with teachers, peers, and talks across preschool classroom activity settings. *Early
Education and Development, 23*, 517-538. doi:10.1080/104092892010548767

Buckley, C., & Schoppe-Sullivan, S. (2010). Father involvement and coparenting
behavior: Parents' nontraditional beliefs and family earner status as moderators.
Personal Relationships, 17. 413-431. doi:10.1111/j.1475-6811.2010.01287.x

Burchinal, M., Howes, C., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O.
(2008). Predicting child outcomes at the end of kindergarten from the quality of
prekindergarten teaching, instruction, activities, and caregiver sensitivity. *Applied
Developmental Science, 12*(3), 140-153. doi:10.1080/10888690802199418

Burgess, K., Lundgren, K., Lloyd, J., & Pianta, R. (2001). *Preschool teachers' self-
reported beliefs and practices about literacy instruction*. (CIERA Report 2-012).
Retrieved from http://www.ciera.org/library/reports/inquiry-2/2-012/2-
012%20front%20matter.html

Cabell, S., Tortorelli, L., & Gerde, H. (2013). How do I write? *The Reading Teacher
66*(8), 650-659. doi:10.1002/TRTR.1173

Callaghan, G., & Madelaine, A. (2012). Levelling the playing field for kindergarten
entry: Research implications for preschool early literacy instruction. *Australasian
Journal of Early Childhood, 37*, 13-23.

Charmaz K. (2006). *Constructing grounded theory*. London, England:Sage.

Chien, N., Howes, C., Pianta, R., Burchinal, M., Ritchie, S., & Bryant, D. (2010). Children's classroom engagement and school readiness gains in prekindergarten. *Child Development, 81*(5), 1534-1549. doi: 10.009-3920/2010/8105-0016

Christie J., (1991). *Play and early literacy development*. Albany, NY: University of New York Press.

Clifford, R., Barbarin, O., Chang, F., Early, D., Bryant, D., Howes, C.,…Pianta, R. (2005). What is pre-kindergarten? Characteristics of public pre-kindergarten programs. *Applied Developmental Science, 9*(3), 126-143. doi:10.1207/s1532480xads09031

Commodari, E. (2012). Attention skills and risk of developing learning difficulties. *Current Psychology ,31*, 17-34. doi:10.1007/s12144-012-9128-3

Cooke, N., Kretlow, A., & Helf, S. (2010). Supplemental reading help for kindergarten students: How early should you start? *Preventing School Failure, 53*(3), 137-144. doi:10.1080/10459880903492924

Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs: Serving children from birth through age 8.* (3rd ed.). Washington, DC: NAEYC.

Creswell, J. (2007). *Qualitative inquiry & research design: Choosing among five approaches.* (2nd ed.). Los Angeles, CA: Sage Publications Inc.

Culatta, B., Hall, K., Kovarsky, D., & Theadore, G. (2007). Contextualized approach to language and literacy (Project CALL): Capitalizing on varied activities and

contexts to teach early literacy skills. *Communication Disorders Quarterly, 28*(4), 216-235. doi:10.1177/1525740107311813

Curby, T., Downer, J., & Booren, L. (2014). Teachers' supports and children's engagement: Testing for bidirectional associations. *Center for Advanced Studies of Teaching and Learning Research Brief*. Retrieved from: http://curry.virginia.edu/uploads/resourceLibrary/CASTL_Research_Brief-Curby_et_al._(2014).pdf

Curby, T., Grimm, K., & Pianta, R. (2010). Stability and change in early childhood classroom interactions during the first two hours of a day. *Early Childhood Research Quarterly, 25*, 373-384. doi:10.1016/j.ecresq.2010.02.004

Curby, T., Rimm-Kaufman, S., & Ponitz, C. (2009). Teacher-child interactions and children's achievement trajectories across kindergarten and first grade. *Journal of Educational Psychology, 101*(4), 912-925. doi:10.1037/a0016647

Day C., & Burns, B. (2011). Characterizing the achievement motivation orientation of children from low- and middle-income families. *Early Education and Development 22*(1), 105-127. doi:10.1080/10409280903544397

DeBaryshe, B., & Gorecki, D. (2007). An experimental validation of a preschool emergent literacy curriculum. *Early Education and Development, 18*(1), 93-110. doi:10.1080/10409280701274741

DeThorne, L., Petrill, S., Schatschneider, C., & Cutting, L. (2010). Conversational language use as a predictor of early reading development: Language history as a

moderating variable. *Journal of Speech, Language, and Hearing Research, 53*, 209-223. doi:10.1044/1092-4388(2009/08-0060)

Diamond, K., & Powell, D. (2011). An interative approach to the development of a professional developmental intervention for Head Start teachers. *Journal of Early Intervention, 33*(1), 75-93. doi:10.1177/1053815111400416

Downer, J., Kraft-Sayre, M., & Pianta, R. (2009). Ongoing, web-mediated professional development focused on teacher-child interactions: Early childhood educators' usage rates and self-reported satisfaction. *Early Education and Development, 20*(2), 321-345. doi:10.1080/10409280802595425

Epstain, A. (2007). *Essentials of active learning in preschool: Getting to know the HighScope Curriculum*. Ypsilanti, MI: HighScope Press.

Ewen, D. & Matthews, H. (2007). Title I and early childhood programs: A look at investments in the NCLB era. *Child Care and Early Education Series policy paper for the Center for Law and Social Policy,* 2, 1-27.

Frank Porter Graham Child Development Institute. (2001). *National Center for Early Learning Development research project*. Chapel Hill, NC: University of North Carolina.

Frank Porter Graham Child Development Institute. (2012). *Environmental Rating Scale ECERS-R*. Chapel Hill, NC: University of North Carolina.

Fischel, J., Bracken, S., Fuchs-Eisenberg, A., Spira, E., Katz, S. & Shaller, G. (2007). Evaluation of curricular approaches to enhance preschool early literacy skills. *Journal of Literacy Research. 39*(4), 471-501. doi:10.1080/10862960701675333

Foy, J. & Mann, J. (2012). Speech production dificites in early readers: Predictor of risk. Reading Writing 25. 799-830. doi:10.1007/s11145-011-9300-4

Fuentes, Y. (2010). The Head Start child development and early learning framework. (Contract no. HHSP233201000415G). Retrieved from *Administration for Children and Families* website: http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/eecd/Assessment/Child%20Outcomes/HS_Revised_Child_Outcomes_Framework(rev-Sept2011).pdf

Gates, B. & Gates, M. Foundation (2012). Gathering feedback for teachers: Combining high-quality observations with student surveys and achievement gains. MET Policy and Practice Brief. Retrieved from http://www.metproject.org/downloads/MET_Gathering_Feedback_Practioner_Brief.pdf

Gest, S., Holland-Coviello, R., Welsh, J., Eicher-Catt, D., & Gill S. (2006). Language development subcontexts in Head Start classrooms: Distinctive patterns of teacher talk during free play, mealtime, and book reading. *Early Education and Development, 17*(2), 293-315. doi:10.1207/s15566935eed1702_5

Glazer, K. (2007). Preschool initiative: Presentation to house appropriations committee by the governor's working group on early childhood initiatives. Retrieved from http://hac.virginia.gov/committee/files/2007/01-17-07/Preschool_Initiative.pdf

Goh, S., Yamauchi, L. & Ratliffe, K. (2012). Educators' perspectives on instructional conversation in preschool settings. *Early Childhood Education Journal, 40*, 305-314. doi:10.1007/s10643-012-0518-9.

Gonzalez, J., Goetz, E., Hall, R., Payne, T., Taylor, A., Kim, M., & McCormick, A.
(2011). An evaluation of Early Reading First (ERF) preschool enrichment on
language and literacy skills. *Read and Writing: An Interdisciplinary Journal, 24*.
253-284. doi10.1007/s11145-009-9212-8

Gredler, M. (2009). *Learning and instruction: Theory into practice*. Upper Saddle River,
NJ: Pearson.

Guo, Y., Justice, L., Kaderavek, J., & McGinty, A. (2012). The literacy environment of
preschool classrooms: Contributions to children's emergent literacy growth.
Journal of Research in Reading, 35(3). 308-327. doi:10.1111/j.1467-
9817.2010.01467.x

Hamre, B., Hatfield, B., Pianta, R., & Jamil F. (2013). Evidence for general and
dominion-specific elements of teacher-child interactions: Associations with
preschool children's development. *Child Development*. doi:10.1111/cdev.12184

Hamre, B., Pianta, R., Burchinal, M., Field, S., LoCasale-Crouch, J., Downer, J., Scott-
Little, C. (2012). A course on effective teacher-child intearctions: Effects on
teacher beliefs, knowledge and observed practice. *American Educational
Research Journal, 49*(1). 88-123. doi:10.3102/0002831211434596

Heckman, J. (2013). Virginia's foundation blocks for early learning: Comprehensive
standards for 4 year olds. Office of Humanities and early childhood. Virginia
Department of Education.

Hilado, A., Kallemeyn, L., Leow, C., Lundy, M. & Israel, M. (2011). Supporting child

  welfare and parent involvement programs. *Early Childhood Education Journal*

  39. 343-353. doi:10.1007/s10643-011-0471-z

Hindman, A. & Wasik, B. (2012). Unpacking an effective language and literacy coaching

  intervention in Head Start. *The Elementary School Journal 113*(1). 131-154. doi:

  0013-5984/2012/11301-0006

Hirsh-Pasek, K., & Golinkoff, M. (2011). The great balancing act: Optimizing core

  curriculum through playful pedagogy. In Zigler, E., Gilliam, W., & Barnett, W.

  (Eds..), *The pre-k debate: Current controversies and issues* (pp. 110-116).

  Baltimore, MD: Brookes.

Howes, C., Burchinal, M., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O.

  (2008). Ready to learn? Children's pre-academic achievement in pre-kindergarten

  programs. *Early Childhood Research Quarterly, 23,* 27-50.

  doi:10.1016/j.ecresq.2007.05.002

Ivernizzi, M., Juel, C., Swank, L., & Meier, J. (2005). *Phonological Awareness Literacy*

  Screener (PALS). K Technical Reference. 6-10.

Invernizzi, M., Justice, L., Landrum, T., & Booker, K. (2008). Early literacy screening in

  kindergarten: Widespread implementation in Virginia. *Journal of Literacy*

  Research, 36(4). 479-500.

Justice, L., Mashburn, A., Hamre, B., & Pianta, R. (2008). Quality of language and

  literacy instruction in prekindergarten programs service at-risk pupils. *Early*

  Childhood Research Quarterly, 32(1), 51-68. doi:10.1016/j.ecresq.2007.09.004

Justice, L., Mashburn, A., Pence, K., & Wiggins, A. (2008). Experimental evaluation of a preschool language curriculum: Influence on children's expressive language skills. *Journal of Speech, Language, and Hearing Research, 51,* 983-1001. doi:10.1044/1092-4388(2008/072

Kagan, S. & Kauerz, K. (2007). Reaching for the whole: Integration and alignment in early education classrooms. In Pianta, R., Cox, M., & Snow, K. (Eds.), *School Readiness & the Transition to Kindergarten in the Era of Accountability*. (pp. 11-30). Baltimore, MD: Brookes Publishing.

Kendeou, P., White, M., van den Broek, P. & Lynch, J. (2009). Predicting reading comprehension in early elementary school: The independent contributions of oral language and decoding skills. *Journal of Educational Psycholog,y 101*(4), 765-778. doi:10.1037/a0015956

Landry, S., Swank, P., Smith, K., Assel, M., & Gunnewig, S. (2006) Enhancing early literacy skills for preschool children: Bringing a professional development model to scale. *Journal of Learning Disabilities, 39*(4), 306-324. doi:10.1177/00222194060390040501

LaParo, K., Pianta, R. & Hamre, B. (2008). *The Classroom Assessment Scoring System: Manual Pre-K*. Baltimore, MD: Brookes Publishing.

LaParo, K., Pianta, R. & Stuhlman, M. (2004). The Classroom Assessment Scoring System: Findings from the prekindergarten years. *The Elementary School Journal, 104*(5), 409-426. doi: 0013.5984/2004/10405-0004$505.00

Lonigan, C., Allan, N., & Lerner, M. (2011). Assessment of preschool early literacy skills: Linking children's educational needs with empirically supported instructional activities. *Psychology in the Schools, 48*(5), 488-501. doi:10.1002/pits.20569.

Lonigan, C., Anthony, J., Phillips, B., Purpura, D., Wilson, S. & McQueen, J. (2009). The nature of preschool phonological processing abilities and their relations to vocabulary, general cognitive abilities, and print knowledge. *Journal of Educational Psychology, 101*(2), 345-358. doi:10.1037/a0013837

Magnuson, K., Rhym, C., & Waldfogel, J. (2007). The persistence of preschool effects: Do subsequent classroom experience matter? *Early Childhood Research Quarterly,* 22. 18-38. doi:10.1016/j.ecresq.2006.10.002

Mahmood, S. (2013). First-year preschool and kindergarten teachers: Challenges of working with parents. *School Community Journal, 23*(2). 55- 85. ISSN: 1059-308X

Marston, D., Pickart, M., Reschly, A., Heistad, D., Muyskens, P. & Tindal, G. (2007). Early literacy measures for improving student reading achievement: Translating research into practice. *Exceptionality, 15*(2), 97-117. doi:10.1080/09362830701294177

Mashburn, A., Pianta, R., Hamre, B., Downer, J., Barbarin, O., Bryant, D., . . . Early, D. (2008). Measures of classroom quality in pre-kindergarten and children's development of academic, language, and social skills. *Child Development, 79*(3), 140-153. doi:10.1111/j.1467-8624.2008.01154.x

Massey, S. (2013). From the reading rug to the play center: Enhancing vocabulary and

    comprehensive language skills by connecting storybook reading and guided play.

    Early Childhood Education Journal 41, 125-131. doi:10.1007/s10643-012-0524-y

Master, A. & Walton, G. (2013). Minimal groups increase young children's motivation

    and learning group-relevant tasks. *Child Development, 84*(2). 737-751.

    doi:10.1111/j.1467-8624.2012.01867.x

McCoach, D., O'Connell, A., Reis, S. & Levitt, H. (2006). Growing readers: A

    hierarchical linear model of children's reading growth during the first 2 years of

    school. *Journal of Educational Psychology 98*(1), 14-28. doi:10.1037/0022-

    0663.98.1.14

McDermott, P., Rikoon, S., & Fantuzzo, J. (2013). Tracing children's approaches to

    learning through Head Start, kindergarten, and first grade: different pathways to

    different outcomes. *Americal Psychological Association*. doi:10.1037/a0033547

McDermott, P., Rikoon, S., Waterman, C. & Fantuzzo, J. (2012). The preschool learning

    behavior scale:Dimensionality and external validity in Head Start. *Psychology*

    *Review 41(*1). 66-81 ISSN 0279-6015

McGee, L. & Ukrainetz, T. (2009). Using scaffolding to teach phonemic awareness in

    preschool and kindergarten. *The Reading Teacher, 62*(7), 599-603.

    doi:10.1598/RT.62.7.6

Merriam, S. (2009). *Qualitative research: A guide to design and implementation*. San

    Francisco, CA: Jossey-Bass.

Mielonen, A., & Paterson, W. (2009). Developing literacy through play. *Journal of Inquiry & Action in Education, 3*(1). 15-36.

Mohler, G., Ah Yun, K., Carter, A., & Kasak, D. (2009). The effect of curriculum, coaching, and professional development on prekindergarten children's literacy achievement. *Journal of Early Childhood Teacher Education, 30*. 49-68. doi:10.1080/10901020802668068

Molfese, M., Beswick, J., Jacobi-Vessels, J.Armstrong, N., Culver, B.,White, J., . . .Molfese, D. (2011). Evidence of alphabetic knowledge in writing: Connections to letter and word identification skills in preschool and kindergarten. *Read Writ, 24*. 133-150. doi:10.1007/s11145-010-9265-8

Molfese, V., Modglin, A., Beswick, J., Neamon, J., Berg, S., Berg, C. et al. (2006). Letter knowledge, phonological processing, and print knowledge: Skill development in nonreading preschool children. *Journal of Learning Disabilities, 39*(4), 296-305. doi:10.1177/00222194060390040401

National Association for the Education of Young Children (2009). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. (Position Statement. 1-31). Retrieved from http://www.naeyc.org/resources/position%20Statements

National Association for the Education of Young Children (2011). *About NAEYC*. Retrieved from http://www.naeyc.org/DAP

National Center for Children Living in Poverty. (2013). *Virginia: Demographics of young poor children*. Retrieved from http://www.nccp.org/VA_profile_9.httml

Neuman, S. & Roskos, K. (2005). Whatever happened to developmentally appropriate practice in early literacy?. *Young Children*. Retrieved from http://www.naeyc.org/files/yc/file/200507/02Neuman.pdf

Nitecki, E. & Chung, M., (2012). What is not covered by the standards: How to support emergent literacy in preschool classrooms. *The Language and Literacy Specturm, 23*. 46-56.

No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002).

O'Leary, P., Cockburn, M., Powell, D., & Diamond, K., (2010). Head Start teachers' views of phonological awareness and vocabulary knowledge instruction. *Early Childhood Education Journal, 38*(3), 187-195. doi:10.1007/s10643-010-0394-0

Pears, K., Heywood, C., Kim., & Fisher, P. (2011). Research brief: rereading deficits in children in foster care. *School Psychology Review, 40*(1). 140-148. ISSN 0279-6015

Piaget, J. (1926, 2001). Extracts from Piaget's theory (Warden, M. Trans.) (3rd Eds.) *The Language and Thought of the Child*. New York, NY: Harcourt, Brace & Co. Inc.

Piaget, J. (1962). (Gattegno, C., & Hodgson, F. Trans.) *Play, dreams and imitation in childhood*. New York, NY: Norton & Co. Inc.

Piaget, J. & Inhelder, B. (1969, 2000). Extracts from Piaget's theory (Weaver, H. Trans.) *The Psychology of the child.* 1966. New York, NY: Basic Books.

Pink, D. (2009). Drive: *The surprising truth about what motivates us*. New York, NY: Riverhead Books.

Panta, R. (2007). *MyTeachingPartner Pilot in Greater Richmond*. Richmond, VA: United Way of Greater Richmond.

Pianta, R., Barnett, S., Burchinal, M., & Thornburg, K. (2009). The effects of preschool education: What we know, how public policy is or is not aligned with the evidence base and what we need to know. *Psychological Science in the Public Interest, 10*(2), 49-88. doi:10.1177/1529100610381908

Pianta, R. & Hamre, B. (2009). Classroom processes and positive youth development: Conceptualizing, measuring, and improving the capacity of interactions between teachers and students. *New Directions for Youth Development, 121*, 33-46. doi:10.1002/yd.295

Pianta, B., LaParo, K., & Hamre, B. (2008) *Classroom Assessment Scoring System (CLASS): Manual PreK*, Baltimore, MD: Brooks Publishing.

Piasta, S., Purpura, R., & Wagner, R. (2010). Fostering alphabet knowledge development: A comparison of two instructional approach. *Read Writ, 23*, 607-626. doi:10.1007/s11145-009-9174-x.

Piasta, S. & Wagner, R. (2010). Developing early literacy skills: A meta-analysis of alphabet learning and instruction. *Reading Research Quarterly, 45*(1), 8-38. doi:10.1598/RRQ.45.1.2

Powell, D. & Diamond, K. (2013). Implementation of a fielty of a coaching-based professional development program for improving Head Start teachers' literacy and language instruction. *Journal of Early Intervention, 35*(2), 102-128. doi: 10.1177/1053815113516678

Rimm-Kaufman, S., LaParo, K., Downer, J. & Pianta, R. (2005). The contribution of classroom settings and quality of instruction to children's behavior in kindergarten classrooms. *The Elementary School Journal, 105*(4), 377-394. doi: 0013-5984/2005/10504-0003$05.00

Roach, A., McGrath, D., Wilson, C. & Talapatra, D. (2010). Aligning an early childhood assessment to state kindergarten content standards: Application of a nationally recognized alignment framework. *Educational Measurement: Issues and Practice, 29*(1), 25-37. doi:10.1111/j.1745-3992.2009.00167.x

Rotz, R., Bearse, A., Rest, G. & Sarte, K. (2007). Preschool Initiative (VPI): Current implementation and potential changes. *Report of the Joint Legislative Audit and Review Commission to the Governor and the General Assembly of Virginia,* Richmond, VA: Virginia Department of Education.

Rushton, S., Juola-Rushton, A. & Larkin, E. (2010). Neuroscience, play and early childhood eduation: implications and assessment. *Early Childhood Education Journal, 37*. 351-361. doi:10.1007/s10643-009-0359-3

Sabol, T., Hong, S., Pianta, R., & Burchinal, M. (2013). Can rating pre-k programs predict children's learing? *Science, 341*. 845-846. doi:10.1126/science.1233517

Sakai, L., Whitebook, M., Wishard, A., & Howes, C. (2003). Evaluating the Early Childhood Environment Rating Scale (ECERS): Assessing differences between the first and revised edition. *Early Childhood Research Quarterly,* 18. 427-445. doi:10.1016/j.ecresq.2003.09.004

Santi, K., York, M., Forman, B. & Francis, D. (2009). The timing of early reading

assessment in kindergarten. *Learning Disability Quarterly, 32*, 217-227. ISSN:

07319487

Schechter, C., & Bye, B. (2007). Preliminary evidence for the impact of mixed-income

preschoolers on low-income children's language growth. *Early Childhood*

Research Quarterly, 22(1), 137-146. doi:10.1016/j.ecresq.2006.11.005

Smart Beginnings (2010). The Virginia Star Quality Initiative: A quality rating and

improvement system. Retrieved from http://www.smartbeginnings.org/home/star-

quality-initiative/about-star-quality.aspx

Steckel, B. (2009). Fulfilling the promise of literacy coaches in urban schools: What does

it take to make an impact? *The Reading Teacher, 63*(1), 14-23.

doi:10.1598/RT.63.1.2

Sutton-Smith, B. (1997). *The ambiguity of play*. Cambridge, MA: Harvard University

Press.

Swick, K. (2009). Promoting school and life success through early childhood family

literacy. *Early Childhood Education Journal 36*, 403-406. doi:10.1007/s10643-

009-0305-4

Tomlinson, H. & Hyson, M. (2009). Developmentally appropriate practice in the

preschool years – ages 3-5. In Copple & Bredekamp (Eds.), *Developmentally*

appropriate practice in early childhood programs: Serving children from birth

through age 8. (3rd ed.) (pp. 111-186). Washington, DC: National Association for

the Education of Young Children.

U.S. Census Bureau. (2010). *State and county quickfacts*. Retrieved from

> http://quickfacts.census.gov/pfd/states/51/5157000.html.

U.S. Department of Education. (2004). Serving preschool children under Title I: Non-

> regulatory guidance. Retrieved from

> http://www2.ed.gov/policy/elsec/guid/preschoolguidance2012.pdf

Virginia Department of Education (2013). School, school division, and state report card.

> Retrieved from https://p1pe.doe.virginia.gov/reportcard/

Vygotsky, L. (1986). *Thought and Language*. Cambridge, MA: Massachusetts Institute of

> Technology.

Walpole, S., Justice, L. & Invernizzi, M. (2004). Closing the gap between research and

> practice: Case study of school-wide literacy reform. *Reading and Writing*
> *Quarterly, 20*, 261-283. doi:10.1080/10573560490429078

Wasik, B., Bond, M., & Hinderman, A. (2006). The effects of language and literacy

> intervention on Head Start children and teachers. *Journal of Educational*
> *Psychology, 98*(1), 63-74. doi:10.1037/0022-0663.98.1.63

Welsh, J., Nix, R., Blair, C., Bierman, K. & Nelson, K. (2010). The development of

> cognitive skills and gains in academic school readiness for children from low-
> income families. *Journal of Educational Psychology, 102*(1), 34-53.
> doi:10.1037/a0016738

Wong, C., Cook, D., Barnett, W., & Jung, K. (2008). An effectiveness-based evaluation

> of five state pre-kindergarten programs. *Journal of Policy Analysis and*
> *Management, 27*(1), 122-154. doi:10.1002/pam.20310

Wong, C. & Kasari, C. (2012). Play and joint attention of children with Autism in the preschool special education classroom. *Journal of Autism Development Disorder 42*. 2152-2161. doi:10.1007/s10803-012-1467-2

Yelland, N. (2011). Reconceptualising play and learning in the lives of young children. *Australasian Journal of Early Childhood 36*(2). 4-12.

Yin, R. (2009). *Case study research: Design and methods* (4th Eds). Los Angeles, CA: Sage Publications.

Zigler, E., Gilliam, W. & Barnett, W. (2011). *The pre-k debates: Current controversies and issues*. Baltimore, MD: Brookes Publishing.

Appendix A: Letters of Cooperation from Community Research Partners

Dear Cherrie Russo,

Based on my review of your research proposal, I give permission for you to conduct the study titled *Literacy Instruction in Three Preschool Programs: A Multiple Case Study*. As part of this study, I authorize you to collect data for your study by doing the following: (a) sending a letter of invitation to all preschool teachers at the selected preschool program sites; (b) asking potential participants to sign a letter of consent indicating their agreement to participate in this study; (c) conducting individual interviews with purposefully selected preschool teachers; (d) conducting observations of literacy instruction in these preschool teachers' classrooms, according to predetermined criteria; (e) collecting documents related to the preschool programs selected for this study; (f) asking participants to review the tentative findings of this study for their credibility; and (c) disseminating a brief summary of the findings of this study to all participants and the principals of these schools.

We understand that preschool teachers must meet the following inclusion criteria in order to participate in this study: (a) each preschool teacher must be employed in a full day preschool program, (b) each preschool teacher must hold, at minimum, an associate's degree in early childhood education, (c) each preschool teacher must have one year of experience in providing literacy instruction to preschool students, and (d) each preschool teacher must currently provide literacy instruction for students for at least one hour of the school day

We understand that our organization's responsibilities include the following: (a) to provide assistance to the researcher in the selection of the preschool programs for this study; (b) to provide assistance to the researcher in the purposeful selection of the participants for this study; and (c) to provide assistance in locating a room at the research site that ensures privacy for the interviews.

We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University Institutional Review Board (IRB).

Sincerely,

Senior Coordinator, Research & Evaluation

Department of Strategic Evaluation, Assessment & Support

Dear Cherrie Russo,

Based on my review of your research proposal, I give permission for you to conduct the study titled. *Literacy Instruction in Three Preschool Programs: A Multiple Case Study*. As part of this study, I authorize you to collect data for your study by doing the following: (a) sending a letter of invitation to all preschool teachers at the selected preschool program sites; (b) asking potential participants to sign a letter of consent indicating their agreement to participate in this study; (c) conducting individual interviews with purposefully selected preschool teachers; (d) conducting observations of literacy instruction in these preschool teachers' classrooms, according to predetermined criteria; (e) collecting documents related to the preschool programs selected for this study; (f) asking participants to review the tentative findings of this study for their credibility; and (c) disseminating a brief summary of the findings of this study to all participants and the principals of these schools.

We understand that preschool teachers must meet the following inclusion criteria in order to participate in this study: (a) each preschool teacher must be employed in a full day preschool program, (b) each preschool teacher must hold, at minimum, an associate's degree in early childhood education, (c) each preschool teacher must have one year of experience in providing literacy instruction to preschool students, and (d) each preschool teacher must currently provide literacy instruction for students for at least one hour of the school day.

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We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University Institutional Review Board (IRB).

Sincerely,

Head Start Director
Office of Human Affairs Head Start/Early Head Start

 Dear Cherrie Russo,

Based on my review of your research proposal, I give permission for you to conduct the study titled Exploring the Impact of Developmentally Appropriate Instructional Practices on the *Literacy Skills of Preschool Students: A Multiple Case* Study in the Norfolk Public Schools. As part of this study, I authorize you to collect data for your study by doing the following: (a) sending a letter of invitation to all preschool teachers at the selected preschool program sites; (b) asking potential participants to sign a letter of consent indicating their agreement to participate in this study; (c) conducting individual interviews with purposefully selected preschool teachers; (d) conducting observations of literacy instruction in these preschool teachers' classrooms, according to predetermined criteria; (e) collecting documents related to the preschool programs selected for this study; (f) asking participants to review the tentative findings of this study for their credibility; and (c) disseminating a brief summary of the findings of this study to all participants and the principals of these schools.

We understand that preschool teachers must meet the following inclusion criteria in order to participate in this study: (a) each preschool teacher must be employed in a full day preschool program, (b) each preschool teacher must hold, at minimum, an associate's degree in early childhood education, (c) each preschool teacher must have one year of experience in providing literacy instruction to preschool students, and (d) each preschool teacher must currently provide literacy instruction for students for at least one hour of the school day.

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We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University Institutional Review Board (IRB).

Sincerely,

Principal

Appendix B: Letter of Invitation

Dear Public School Preschool Teacher,

I have obtained approval from the Senior Coordinator of Research and Evaluation for the Public Schools, to collect data for my research study titled *Literacy Instruction in Three Preschool Programs: A Multiple Case Study*. I am currently a doctoral candidate at Walden University, a North Central Association accredited institution of higher learning. I am also a former elementary school teacher in this district.

I am inviting you to participate in this study because you are a preschool teacher currently employed at a school that has been selected to participate in this study. You understand that preschool teachers must meet the following inclusion criteria in order to participate in this study: (a) each preschool teacher must be employed in a full day preschool program, (b) each preschool teacher must hold, at minimum, an associate's degree in early childhood education, (c) each preschool teacher must have one year of experience in providing literacy instruction to preschool students, and (d) each preschool teacher must currently provide literacy instruction for students for at least one hour of the school day.

You may benefit from participating in this study by developing a deeper understanding of how preschool teachers use developmentally appropriate instruction to improve the literacy skills of students.

If you are interested in participating in this study, please review and sign the attached letter of consent, which explains the data collection procedures, and return to me in the enclosed self-addressed stamped envelope within a few days.

I would be pleased to share the results of this study with you if you are interested. Sincerely,

Cherrie Russo

Dear Head Start Preschool Teacher,

I have obtained approval from Nancy Null, Director, to collect data for my research study titled *Literacy Instruction in Three Preschool Programs: A Multiple Case Study*. I am currently a doctoral candidate at Walden University, a North Central Association accredited institution of higher learning. I am also a former elementary school teacher in this district.

I am inviting you to participate in this study because you are a preschool teacher currently employed at a school that has been selected to participate in this study. You understand that preschool teachers must meet the following inclusion criteria in order to participate in this study: (a) each preschool teacher must be employed in a full day preschool program, (b) each preschool teacher must hold, at minimum, an associate's degree in early childhood education, (c) each preschool teacher must have one year of experience in providing literacy instruction to preschool students, and (d) each preschool teacher must currently provide literacy instruction for students for at least one hour of the school day.

You may benefit from participating in this study by developing a deeper understanding of how preschool teachers use developmentally appropriate instruction to improve the literacy skills of students.

If you are interested in participating in this study, please review and sign the attached letter of consent, which explains the data collection procedures, and return it to me in the enclosed self-addressed stamped envelope within a few days.

I would be pleased to share the results of this study with you if you are interested.

Sincerely,

Cherrie Russo

Appendix C: Informed Consent Form

You are invited to take part in a research study titled *Literacy Instruction in Three Preschool Programs: A Multiple Case Study.* You were invited to participate in this study because you are a preschool teacher in this school district. You are consenting to participate in this study because you are a preschool teacher currently employed at a school that has been selected to participate in this study.

Please understand that you must meet the following inclusion criteria in order to participate in this study: (a) each preschool teacher must be employed in a full day preschool program, (b) each preschool teacher must hold, at minimum, an associate's degree in early childhood education, (c) each preschool teacher must have one year of experience in providing literacy instruction to preschool students, and (d) each preschool teacher must currently provide literacy instruction for students for at least one hour of the school day.

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 Cherrie Russo, who is a doctoral student at Walden University, a North Central Association accredited institution of higher learning.

Background Information:

The purpose of this study is to describe how preschool teachers use developmentally appropriate instructional practices to improve the literacy skills of preschool students in a public school district in the state of Virginia.

Procedures:

If you agree to be in this study, you will be asked to do the following:

- Participate in a 30 to 45 minute individual interview conducted in an office conference room at the school either before or after school.

- Participate in an observation of one instructional lesson in literacy in your classroom that will be one hour long.

- Review the tentative findings of this study for their plausibility, which could take up to 30 minutes.

Voluntary Nature of the Study:

Your participation in this study is voluntary. This means that everyone will respect your decision about whether or not you want to participate in this study. No one in this school district will treat you differently if you decide not to participate in this study. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study, you may stop at any time. You may skip any questions that you feel are too personal.

Risks and Benefits of Being in the Study:

The benefit of participating in this study is that you may gain a deeper understanding of developmentally appropriate instructional practices that preschool teachers use to improve the literacy skills of preschool students. The risk of participating in this study is minimal, but you may find some of the interview questions challenging or you may feel some discomfort about the observation of literacy instruction in your

classroom. No one in this school will treat you differently if you decide not to participate in this study.

Compensation:

No compensation will be provided for your participation in this study.

Confidentiality:

Any information you provide will be kept <u>confidential</u>. The researcher will not use your information for any purposes outside of this research study. In addition, the researcher will not include your name or anything else that could identify you in any reports of this study.

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via Insert researcher's phone number and email address. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is IRB will enter approval number here and it expires on IRB will enter expiration date.

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I am agreeing to the terms described above.

Printed Name of Participant

_____

Date of consent

_____

Participant's Signature

_____

Appendix D: Interview Questions

1. How do you define literacy skills?

2. How do you provide literacy instruction in your preschool classroom?

3. How do you use play to teach literacy skills?

4. What should preschool children know and be able to do in order to achieve

    proficiency in literacy skills?

5. What challenges do you face when preparing children for literacy instruction in

    your classroom?

6. How would you describe a developmentally appropriate classroom?

7. Describe the strategies you use to develop oral language skills with students.

8. How do you use teacher-child interaction to teach literacy skills?

9. What else would you like to share concerning your perceptions about

    developmentally appropriate practices in relation to literacy instruction in the

    preschool classroom?

Appendix E: Alignment of Data Sources with Research Questions

Research Question	Interview Questions	Observation Criteria	Document Review
Central Research Question: How do preschool teachers use developmentally appropriate practice to improve the literacy skills of preschool students?	How would you describe your approach to providing literacy instruction in the preschool classroom? How do you define literacy skills? What challenges do you face when preparing children for literacy instruction in kindergarten? Describe the strategies you use to develop oral language skills with students.	*Language modeling*: frequent conversation, open-ended questions, repetitive and extension language, self and parallel talk, and advanced language *Quality of feedback*: scaffolding, feedback loops, prompting thought processes, providing information, and encouragement of affirmation.	Examination of the standard learning objectives. Examination of the curricula used in the programs. Examination of the assessment tools used to test literacy skills.
Related Research Question 1:	How would you describe your approach to providing literacy	*Language modeling*: frequent conversation, open-ended questions,	

How do preschool teachers provide literacy instruction for preschool students?	instruction in the preschool classroom?	repetitive and extension language, self and parallel talk, and advanced language *Quality of feedback*: scaffolding, feedback loops, prompting thought processes, providing information, and encouragement of affirmation.	
Related Research Question 2: What perceptions do preschool teachers have about the effectiveness of the instructional practices they use to improve literacy skills for preschool students?	What should preschool children know and be able to do in order to achieve proficiency in literacy skills? What else would you like to share concerning your perceptions about developmentally appropriate practices in relation to literacy instruction in the preschool classroom?		

Related Research Question 3: How do preschool teachers use developmentally appropriate instruction through play to improve literacy skills for preschool students?	How would you describe a developmentally appropriate classroom? How do you use play to teach literacy skills?	*Language modeling*: frequent conversation, open-ended questions, repetitive and extension language, self and parallel talk, and advanced language *Quality of feedback*: scaffolding, feedback loops, prompting thought processes, providing information, and encouragement of affirmation.	
Related Research Question 4: How does teacher-child interaction develop oral language skills to enhance literacy for preschool students?	Describe the strategies you use to develop oral language skills with students. How do you use teacher-child interaction to teach literacy skills?	*Language modeling*: frequent conversation, open-ended questions, repetitive and extension language, self and parallel talk, and advanced language *Quality of feedback*: scaffolding, feedback	

		loops, prompting thought processes, providing information, and encouragement of affirmation.	
Related Research Question 5: What do documents about the three different preschool programs reveal about literacy instruction for preschool students?			Examination of the standard learning objectives. Examination of the curricula used in the programs. Examination of the assessment tools used to test literacy skills.

Appendix F: Permission to Use Observation Instrument

Subject :   Re: Question about CLASS

Date :   Thu, Jul 21, 2011 08:00 AM CDT

From :   "Pianta, Robert (rcp4p)" <rcp4p@eservices.virginia.edu>

To :   Cherrie Lovejoy <cherrie.lovejoy@Waldenu.edu>

Cherrie

Glad to hear you have been able to make progress.   As I think you know, the

CLASS version you are using is published by Brookes, so you can get a copy from them.

   I do not have an electronic copy of the final manual. You certainly have my permission

to use it.

bob

Robert C. Pianta, Ph.D.

Novartis US Foundation Professor of Education

Dean, Curry School of Education

Director, Center for Advanced Study of Teaching and Learning

PO Box 400260

University of Virginia

Charlottesville, VA 22904-4260   TEL: 434.243.5481

From: Cherrie Lovejoy <cherrie.lovejoy@Waldenu.edu>

Date: Wed, 20 Jul 2011 20:21:30 -0400

To: Robert Pianta <rcp4p@eservices.virginia.edu>

Subject: Question about CLASS

I am working finishing up the Proposal to my dissertation so I can submit everything to my committee and the IRB application. In order to go through the IRB process, I need to submit the observation instrument that I will be using. Is there a way that I could get the CLASS observation instrument to attach and submit? At this point, I doubt that I will be able to conduct the study until October or November. And I plan to get training before I use the instrument, but I am required to submit the instrument to IRB for review and secure permission to use it. I need to have both in the Appendices. I hope that you can help me.

Cherrie Russo

Walden Student

PhD K-12 Educational Leadership

Dear Cherrie,

Thank you for providing the requested details. Brookes Publishing Co. would be happy to allow you to use this material.

As you are using a small amount of our copyrighted material for a limited, educational purpose, a formal permission agreement from Brookes is not necessary and the permission fee has been waived. Please consider this email our permission for you to use, as part of your dissertation project, CLASS Forms, Pre-K–3 (2008), by R.C. Pianta, K.M. La Paro, and B.K. Hamre. It is understood that your use of the aforementioned material will be limited to the Walden University dissertation project, "Literacy Instruction in Three Preschool Programs: A Multiple Case Study," beginning February 2013 and ending, at the latest, July 2013.

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Regards,

Rossella Procopio

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E-mail: rprocopio@brookespublishing.com

www.brookespublishing.com

www.healthpropress.com

Appendix G: Classroom Assessment Scoring System Criteria Training Certificate

Pre-K CLASS Observer Reliability Certificate

Cherrie Russo

has successfully completed Teachstone's two-day (16-hour)
Pre-K Observation training and the Pre-K CLASS Reliability Test and
may now conduct classroom observations as a Certified Pre-K CLASS Observer.
Certified CLASS Observers have demonstrated proficiency in observing and
coding classroom interactions accurately using the CLASS measure.

Training Location and Date: Charlottesville - March 2013
Date: March 22nd, 2013

Certificate is valid for one year from date of issue.

Teachstone
Bringing connections. Enhancing learning.

teachstone.com | tel 434.293.3909 | toll free 866.998.8352 | fax 434.293.4338 | Charlottesville, VA

Curriculum Vitae

Cherrie D. Lovejoy

Education

Ph.D., Educational Leadership, Walden University, Minneapolis, MN 2014
M.A., Early Childhood, Marshall University, Huntington, WV 2004
B.A., Elementary Education, Marshall University, Huntington, WV 1998

Professional Positions

Early Childhood Instructor, School of Education, Northern Marianas College, Saipan, MP 2013-current
Adjunct Instructor, Post University, Waterbury, CT 06701   2012-2013
Third grade teacher, Norfolk Public Schools, Norfolk, VA 23513   2009-2011
Second grade teacher, Caroline County Schools, Bowling Green, VA 22427   2008-2009
Virginia Preschool Initiative teacher, Caroline County Schools   2004-2008
Head Start teacher, Hopewell City Schools, Hopewell, VA 23860   2001-2004

Courses Taught

Northern Marianas College   2013-current
      ED 205 Child Development
      ED 246 Administration in Early Childhood
      ED 343 Guiding and Nurturing Young Children
      ED 345 Education of Parenthood
      ED 406 Teaching Linguistically Diverse Students
      ED 435 Diagnostic and Prescriptive Reading
      ED 450 Assessment and Evaluation
      ED 451 Teaching Math and Science in Early Childhood
      ED 492 Student Teaching

Post University   2012-2013
      CH 111 Foundations of Education

Services

Services to Northern Marianas College
Vice President, Faculty Senate   2013-current
Member, Academic Council   2013-current
Member, ACCJC Accreditation committee   2013-2014
Member, WASC Accreditation committee   2014

Volunteer Services to Northern Marianas Island Head Start Program
Presenter, "Positive Parenting"   2014-current

Volunteer Services to Northern Marianas community
Member, Beginning Learning Guidelines committee   2013-2014

Professional Presentations

Presenter, Head Start Training Day, Portsmouth, VA   2012
       Teacher-Child Interactions
Presenter, VAECE Conference, Hampton, VA   2012
       Preschool to kindergarten transition: What can you do?
       Tantrums … Not just for toddlers anymore
       Teaching numeracy and literacy together . . . Is it possible?
Presenter, VAECE Conference, Richmond, VA   2011
       PreK-K transition practices
       I wish I knew then: Lessons learned about numeracy
       How does PreK literacy activities effect reading readiness?
Presenter, VAECE Conference, Richmond, VA   2010
       Math activities to match the VA Foundation Blocks
Presenter, VAECE Conference, Richmond, VA   2009
       Learning centers: Kindergarten math SOLs
Presenter, From Vision to Practice, School Improvement Academy, Roanoke, VA 2005

Professional Association Membership

Association for Supervision and Curriculum Development
Virginia Association for Supervision and Curriculum Development
National Association for the Education of Young Children
Virginia Early Childhood Education Association
Southern Early Childhood Association
Head Start Association
National Education Association
Kappa Delta Pi