# THE INFLUENCE OF TEACHERS' PHILOSOPHY AND PRACTICE ON PRESCHOOLERS'

# PRINT DEVELOPMENT

By

# SHANNON E. WHITE

Bachelor of Science in Early Childhood Education

Oklahoma State University

Stillwater, OK

2004

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE May, 2006

# THE INFLUENCE OF TEACHERS' PHILOSOPHY AND PRACTICE ON PRESCHOOLERS'

# PRINT DEVELOPMENT

Thesis Approved:

Deborah Norris

Thesis Advisor Amy Halliburton

Barbara Sorrels

A. Gordon Emslie

Dean of the Graduate College

# TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Problem Statement	2
Purpose	3
Hypothesis	4
Definitions	5
II. THEORETICAL FRAMEWORK/LITERATURE REVIEW	7
Emergent Literacy	8
Children's Literacy Skills	11
Oral Language Skills	12
Decontextualized Language Skills	13
Phonological Awareness, Letter Knowledge, Vocabulary	13
Physical Environment	15
General Environment	15
Literacy-Rich Environment	20
Literacy in Context	
Social Environment	
Importance of More Competent Others (ZPD)	
Importance of Peers	
Importance of Teachers	40
Active Learning Program	45
Literacy Activities	46
Instruction	51
Teachers' Stated Philosophy	57
Literacy Interactions and Environments	57
III. METHODOLOGY	60
Samula	60
Drocaduras	00 61
Instruments	01 よう
Tanchars' Stated Philosophy	
Teachers' DALD	02 ¢ A
reachers DALP	04

Children's Print Concepts
IV. RESULTS
Findings70
Teachers' Stated Philosophy
Teachers' DALP
Children's Print Concepts
Correlations between Variables
Hypotheses
V. DISCUSSION
Conclusion
Teachers' Stated Philosophy80
Teachers' DALP
Children's Print Concepts
Correlations between Variables
Hypotheses
Teachers' Stated Philosophy x DALP
DALP x Children's Print Concepts
Implications of Results
Limitations of Study
REFERENCES
TABLES
APPENDICIES

# LIST OF TABLES

Table	Page
1. IAS: Criteria for Measuring Teachers' Stated Philosophy	103
2. Pre-K Survey of Beliefs and Practices: Criteria for Measuring Teachers' Stated Philosophy	105
3. ELLCO: Criteria for Measuring the Physical Environment	106
4. ELLCO: Criteria for Measuring the Active Learning Program	108
5. LCQI-Accessibility of Print Materials: Criteria for Measuring the Active Learning Program	109
6. LCQI-Nature of Experience: Criteria for Measuring the Active Learning Program	110
7. IAS: Descriptives for Teachers' Stated Philosophy	111
8. Pre-K Survey of Beliefs and Practices: Descriptives forTeachers' Stated Philosophy	113
9. ELLCO: Descriptives for Physical Environment	114
10. LCQI: Descriptives for Physical Environment	117
11. LCQI-Children's Freedom to Interact with Others in Each of the 5 Interest Centers: Descriptives for Social Environment	118
12. ECERS: Descriptives for Social Environment	119
13. ELLCO; Descriptives for Active Learning Program	120
14. LCQI-Accessibility of Print Materials: Descriptives for Active Learning Program	122
15. LCQI-Nature of Experience: Descriptives for Active Learning Program	123

16. Descriptives for Children's Print Concepts	
17. Intercorrelations for Predictor Variables	
18. Correlations between Predictor Variables and Children's Print Concepts	128
19. Regression Analysis Summary for Teachers' Stated Philosophy Predicting Individual Components of Developmentally Appropriate Literacy Practices	129

# LIST OF FIGURES

Figure	Page
1. Mediating Model	4
2. Moderating Model	4

#### CHAPTER I

#### Introduction

Literacy development in young children has become a hot topic among parents, teachers, community members, politicians, and even the President of the United States of America. Literally, everybody seems to be concerned with this topic right now, and much debate lies within the topic.

It seems as if one of the greatest problems and concerns with the topic of literacy development in young children is children's ability to read. There are valid concerns about the idea that some children are not learning how to read or how to read fluently enough at a young enough age. One of the attempts at solving this problem has been The No Child Left Behind Act (NCLB, 2001). The NCLB act was instated by President Bush with children's literacy development, specifically reading development, in mind. This act states that all children, regardless of special needs, will be reading on third grade level by the end of third grade. However, there have been several problems with this act that are actually leading to more children being "Left Behind" (Guisbond & Neill, 2004)

The instatement of this act has led to a great change in the educational system of America. Teachers are now becoming exceedingly concerned with trying to find ways to get their students to make higher scores on the tests that assess the children's development in areas such as reading (Walsh, 2004). Teachers are required to meet several new mandates, and if they do not meet these mandates, they are threatened with the loss of their jobs (Guisbond & Neill, 2004; Walsh, 2004). The NCLB is creating a

"lot of hoops" that teachers are forced to jump through and has been referred to as "a stick with a little carrot dangling at the end" (Walsh, 2004, p. 22). Teachers are having to prove that they are qualified enough to teach their students, even though some of them have been teaching for years and years (Walsh). This has left teachers feeling violated, attacked, belittled, confused, and helpless (Walsh). It is obvious that something needs to be done. All children can not be expected to perform and read according to these standards, and the tests that measure the children's ability are flawed (Guisbon & Neill). These tests have errors in the design of the questions, and they also do not necessarily indicate real progress in the children (Guisbond & Neill). These mandates and tests seem to be leaving more children behind instead of increasing their proficiency in reading and other subjects (Guisbond & Neill).

Therefore, there is a desperate need to see what kinds of factors in the classroom really influence children's literacy development. What really makes a difference? Is it the type of curriculum that is bought? Is it the way the classroom is set up? It is the materials provided to the children? It is the interactions teachers and peers have with children? What is really influencing literacy development in these young children?

#### Problem Statement

It is well known that literacy-rich classroom environments, language-rich interactions with more knowledgeable peers and teachers, purposeful literature activities, as well as meaningful theme-based play influence preschool children's literacy development (Bredekamp & Copple, 1997). In other words, teachers that practice Developmentally Appropriate Literacy Practices (DALP), as measured by the quality of

1) the physical environment, 2) the social environment and 3) the active learning program, facilitate greater gains in their preschool students' literacy development. However, not much is known about the factors that influence whether or not a teacher carries out DALP in his/her classroom. We do not know much about how teachers' stated philosophy concerning how children learn (Child Development) and how children should be taught (Early Childhood Education), influences teachers' actual practice of DALP in their classrooms.

It is important to know if teachers' stated philosophy concerning Child Development and Early Childhood Education and teachers' actual practice of DALP are related because so many teachers are hired based upon their stated philosophy and not their actual practice. If stated philosophy is not related to practice, then teachers should not be hired based upon it, but rather based upon their actual practices that have been observed by the employer. And, it is important to get a true reading of teachers' ability to carry out DALP in their classroom because of what is known about the importance of DALP and children's literacy development.

#### Purpose

The purpose of this study is to examine how the Teachers' Stated Philosophy (beliefs about how children learn and should be taught) relates to the Children's Print Concepts, and how the teachers' DALP (actual observed literacy practice) is associated with this relationship. After the relation between Teachers' Stated Philosophy and Children's Print Concepts is determined, DALP will be examined to determine whether it is a mediating or moderating factor in this relationship. It will answer the questions: 1)

Does Teachers' Stated Philosophy directly or indirectly influence Children's Print Concepts? And 2) Does teachers' DALP interact with Teachers' Stated Philosophy and Children's Print Concepts as a moderator or a mediator?





Figure 2. Moderating Model



#### **Hypothesis**

There is not a large body of literature that discusses the relation between Teachers' Stated Philosophy and their actual observed practices. Nonetheless when Teachers' Stated Philosophy is discussed, it is shown to influence teachers' classroom practices (Smith & Dickinson, 1994; Stauffer, 1970). However, it can be hypothesized that even though Teachers' Stated Philosophy will influence teachers' classroom practices, 1) Teachers' Stated Philosophy will influence Children's Print Concepts indirectly. And, 2) Teachers' DALP will interact with Teachers' Stated Philosophy and Children's Print Concepts as a moderator, not a mediator.

#### Definitions

*Developmental play* – "Play is an important vehicle for children's social, emotional, and cognitive development" (Bredekamp& Copple, 1997, p. 14). It allows the children to be in control of their learning by making their own decisions about where, when, how, and with whom they play. It is part of the active learning program in the classroom.

*Phonological Awareness* – The ability to identify and manipulate sound segments. For example, rimes, onsets, syllables, and rhymes.

*Phonemic Awareness* – The understanding of individual sounds in spoken words and the knowledge that words are made up of speech sounds called phonemes (Armbruster, Lehr, & Osborn, 2001).

*Print Concept Development* – It is measured by phonological awareness, letter knowledge, vocabulary, understanding meaningfulness of print, print use, and print scores (Johnston, 2004).

*Teachers' Practice (Developmentally Appropriate Literacy Practice or DALP)* – It is the way teachers are teaching and facilitating learning in the classroom. It is comprised of three parts: The Physical Environment, The Social Environment, and The Active Learning Program. It includes, but is not limited to, classroom arrangement, literacy materials, teacher/peer interactions, literacy activities, and meaningful play. It also includes Furnishings, Language, and Social Development as rated by Early Childhood Environment Rating Scale (ECERS) and the observed curriculum (Marms, Clifford, & Cryer, 1998; Smith & Dickinson, 1994, p. 364).

*Teachers' Stated Philosophy* – It is the teachers' *stated or written response* in regards to their "attitude towards children (how they develop, how they learn, and what is appropriate), and towards teaching (orientation to control, to children's play, and to curriculum planning and development)" (Smith & Dickinson, 1994, p. 348). It includes statements about how children develop (Child Development) and how children learn (Early Childhood Education).

#### CHAPTER II

#### Theoretical Framework

Vygotsky's theory of social development provides an explanatory model for looking at the questions, "how does teacher philosophy influence teacher practice?" and, "how is literacy development in preschool children influenced by teacher philosophy, with and without teacher practice as a moderator?", especially when practice includes the classroom environment, peer/teacher interactions, and activities, and in looking at the hypotheses.

The hypotheses of this study hinge on the premise that the physical and social environments of the children will be more of a determinant for their literacy development than the beliefs and philosophy of the teacher. Vygotsky's Social Development Theory applies for four reasons. First, Vygotsky placed an importance on social interactions as a necessity for development in children (Lauritzen, 1992). This study will look at two types of social interaction: peer and teacher. Second, Vygotsky believed that social interactions facilitated teaching within the child's Zone of Proximal Development (ZPD), which is where the child experiences optimal learning (Laruitzen). Again, the preschoolers are going to be observed interacting in environments where they have access to literacy-rich materials and opportunities to interact with peers and teachers. Third, Vygotsky believed that language is learned best when it is used as a tool that is meaningful and useful (Laruitzen). This can be through meaningful interactions with peers, as well as, teachers and through interactions with their classroom environment and

materials through play. This theory helps to emphasize the importance of the peer and teacher interaction constructs, the literacy-rich environmentconstructs, and developmental play constructs that are included in this study. Finally, Vygotsky emphasized the importance of play in the development of children. He believed that play is an avenue for children to problem solve, to think, and to reason, which leads to growth. Play is also an important part of this study because all of the preschoolers will be observed while playing in their classroom. This theory builds a strong case for play in the daily activities of preschool children when developing literacy skills

All of these aspects of Vygotsky's social learning theory emphasize the variables in this study as being an important part of children's literacy development. This theory emphasizes the importance of developmental play and meaningful activities with literacy materials within the confines of the social and physical environment. Therefore, this theory best supports the hypotheses that the teachers' practice involving classroom materials, teacher/peer interactions, and meaningful activities/play will positively influence the children's literacy development.

#### Literature Review

#### Emergent Literacy

The term "emergent literacy" originally came from Durkin in 1966, but was attributed to Clay in 1966, and later to Teale and Sulzby (1986) who wrote the book *Emergent Literacy: Writing and Reading,* where they explained the concept of emergent literacy in greater detail (Whitehurst & Lonigan, 1998). Many researchers today use the definitions and ideas behind emergent literacy that come from these well known sources.

Emergent literacy is thought of as the process children go through while they are becoming literate (Teale & Sulzby, 1986). The areas of literacy this tends to include are reading, writing, and spoken language. It also includes emergent literacy skills, which are the skills, knowledge, and attitudes that children acquire about literacy during this process (Teale & Sulzby).

The process of emergent literacy is an ongoing process that begins at birth and develops along a continuum throughout the life of the child (Lauritzen, 1992; Whitehurst & Lonigan, 1998). Therefore, the idea of reading readiness, where children are required to possess a certain set of literacy skills before they are considered ready to begin reading, is not compatible with the emergent literacy philosophy (Whitehurst & Lonigan). Children are born ready to begin the process of becoming literate. This fact helps to reinforce the idea that the literacy behaviors young children exhibit in the preschool years are just as important as the ones they will exhibit in later years, and they need just as much attention paid to them. These skills are not prereading skills, but they are important reading skills that are emerging along the continuum of reading and writing development in these young children's lives, and they are not to be overlooked or down-played (Whitehurst & Lonigan).

Each of the areas of emergent literacy, such as reading, writing, and spoken language, develop in tandem with one another along this continuum, and as one develops it influences the development of the others (Bennett, Weigel, & Martin, 2002; Ryokai, Vaucelle, & Cassell, 2003; Whitehurst & Lonigan, 1998). Therefore, it is not necessary to wait on one area to develop in order to begin facilitating the development of another. For example, it is not necessary that children know how to read before learning how to

write, or visa versa. Because these two areas develop simultaneously and interdependently, a child can learn to read and write at the same time, and the development of one area will actually help in the development of the other. This also means that one area is not necessarily more important than another; they all work together to form a literate child.

Emergent literacy is a process that develops naturally and gradually (Ryokai et al., 2003; Watkins & Bunce, 1996; Whitehurst & Lonigan, 1998). Reading and writing skills develop just as naturally as spoken language skills develop as a result of a child's interactions in an environment where print is a necessary part of daily life. Emergent literacy depends upon naturally embedding literacy in a child's environment. It develops by giving children the opportunity to have "everyday interactions in informal settings" (Ryokai et al., p. 195). Emergent literacy skills do not need to be taught in a formal school setting, but they are learned through meaningful interactions with print materials in a real-life context.

Emergent literacy is a social process. It involves children's interactions with literacy materials and the people around them (Ryokai et al., 2003). It occurs "in collaboration and interaction with others," such as teachers, peers, and family members (Ryokai et al., p. 196). It is a social process that depends upon children having opportunities to use literacy materials meaningfully and to observe others using these materials in a meaningful way.

Emergent literacy also contributes to the success of children's reading and writing, and may even be a predictor of their future success in this area (Whitehurst & Lonigan, 1998). Research has shown that children who have more refined emergent

literacy skills have an easier time learning to read (Whitehurst & Lonigan). Therefore, it can be predicted that children with higher levels of emergent literacy skills in the preschool years will have higher levels of reading success in the later elementary school years.

In summary, emergent literacy is the process of listening, speaking, reading and writing that develops naturally from birth. The areas of reading and writing develop simultaneously and interdependently as a result of children's social and meaningful interactions with print materials in a literacy rich environment. Emergent literacy is valid and important in the preschool years. It deserves just as much attention, during this early stage in children's lives, as it does in their later years because it is just as much a part of the developmental continuum of reading and writing.

#### Children's Literacy Skills

Several researchers agree that emergent literacy skills are necessary for children to develop because they help children as they learn to read and write. Researchers also agree that these skills are developed in the early years of life and can be found in preschool children (Whitehurst & Lonigan, 1998). Some of these literacy skills involve oral language skills, decontextualized language skills, phonemic awareness, letter knowledge, and vocabulary. There is also some research that points to how print motivation plays a part in literacy development. All of these literacy skills are important to look at because they can lead to further literacy development. These literacy skills are also important because they can be measured in preschool children and they can be used

to predict the reading achievement of these children when they are older (Whitehurst & Lonigan).

#### Oral Language Skills

One emergent literacy skill is children's oral language. Children's oral language skills begin to develop at an early age and they are an important influence on children's literacy development (Rush, 1999). There are several ways that young children begin to develop oral language skills in their preschool classrooms. Some of these ways are by having opportunities to tell stories in the library, pretend out- loud in the dramatic play center, and develop a growing vocabulary by interacting with adults and children during play times and meal times. All of these opportunities that children have to develop their early oral language skills are very important to their literacy development because oral language develops along-side written language (Raben & Coates, 2004). A study by Raben and Coates also showed that development in the area of oral language influences the development of written language and this is a bidirectional relationship. In other words, oral language helps written language develop, and written language helps oral language develop. Research by Schrader (1990) suggested that oral language, symbolic play, and cognition develop in conjunction with one another, especially in the early years of a child's life. Schrader's study also showed that symbolic play leads to written language development. Therefore it is believed that the process of literacy development goes from "oral language, through symbolic play, to written language" (Schrader, p. 81). So, as a child is given the opportunity to play with others, they are given an avenue for their oral language skills to develop, and as these skills develop, their written language

skills will also be positively influenced. Oral language skills must not be overlooked in their importance to contribute to children's literacy development.

#### Decontextualized Language Skills

Another type of emergent literacy skill is decontextualized language. Decontextualized language refers to "language that conveys information distinct from context" (Smith & Dickinson, 1994, p. 347). In other words, these skills refer to the ability children have to tell stories that are make-believe; that take place in another setting, at another time, unrelated to the present. These skills develop mental processes that help children to think more abstractly and to therefore become more literate (Lauritzen, 1992, Smith & Dickinson). A study by Smith and Dickinson even revealed that these skills are directly related to the development of emergent literacy, such as reading and writing, in young children.

#### Phonological Awareness, Letter Knowledge, Vocabulary

According to Rush (1999), there are certain literacy skills that are important for children to develop throughout their journey of becoming literate. The most important three skills were: phonological awareness, letter knowledge, and vocabulary (Rush, 1999). These skills have been shown to be important predictors of future literacy development and achievement in young children.

Phonological awareness is the "knowledge of and ability to manipulate the sound system of language" (Watkins & Bunce, 1996, p. 192). It involves being able to take words and manipulate the different segments of sound, such as rimes, onsets, syllables, and rhymes (Johnston, 2004; Whitehurst & Lonigan, 1998). Research has shown that children who have greater phonological awareness learn to read more quickly and

become more successful readers. Whitehurst and Lonigan (1998) stated that children must possess certain phonological awareness skills such as being able to discriminate language parts and uses in order for them to be able to read successfully. Studies have also shown that measures of phonological awareness skills are predictors of children's future success in reading and writing and that measures can be obtained in children as young as two years old (Burgess, 2002). Some researchers even believed that phonological awareness is an "important prerequisite to becoming a good reader" (Gustafsson & Mellgren, 2002, p. 604).

However, as stated before, the idea that emergent literacy prerequisites are required in order to begin the process of teaching children to read and write is not consistent with the emergent literacy philosophy because of the developmental continuum of reading and writing. Nonetheless, this does not negate the importance of phonological awareness as it is integrated and developed alongside of reading and writing. Phonological awareness is important in children's literacy development because it helps children become better readers, it can be a predictor of children's later literacy development, and children that are lacking in phonological awareness will most likely have difficultly reading in the future.

Letter knowledge is another very important skill that children need to develop as they are becoming more literate. However, research has shown that it is not so much the knowledge of the letters in the alphabet that leads to greater reading development (Adams, 1990). Whitehurst and Lonigan (1998) stated that "teaching letter names may increase surface letter knowledge, [but] it may not affect other underlying literacy-related processes, such as print familiarity" (p. 851). Instead of letter knowledge directly

affecting reading development, letter knowledge is directly correlated with greater underlying phonemic awareness (Adams, 1990). Phonemic awareness is the ability to recognize individual sounds in spoken words and to understand that words are made up of speech sounds called phonemes (Armbruster et al., 2001). A greater understanding of phonemic awareness leads to greater reading and writing development (Adams, 1990). Therefore, letter knowledge affects literacy development indirectly by aiding the development of phonemic awareness, which will in turn positively affect literacy development.

Vocabulary is another important literacy skill that directly influences literacy development, such as reading and writing, in young children (Whitehurst & Lonigan, 1998). Vocabulary allows children to attach meaning to the words that they are reading, and therefore improves their comprehension and reading ability.

#### **Physical Environment**

#### General Environment

Children develop emergent literacy skills within the overall environment that the teacher establishes in the classroom. A quality physical environment is essential in facilitating emergent literacy skills in young children (Morrow, 1982a). However, several studies have shown that the physical environment of preschool classrooms lack richness in the area of literacy and play. A study by Dunn, Beach, and Kontos (1994) where they observed several preschool classrooms to see how literacy rich they were, they found that 30% of the classrooms "didn't have any literacy-related play areas" (p. 29). This means those classrooms did not have a library center, a writing center, or even

literacy items in the dramatic play centers. The classrooms were void of literacy richness. This study seems to reveal that the overall physical environment of some preschool classrooms is being neglected. There can be several reasons for this, but one is that teachers are putting instructional planning ahead of planning for the physical environment (Morrow, 1990). However, researchers have agreed that "it is essential that teachers not overlook the physical setting of the classroom in their preoccupation with" the instructional planning (Morrow, 1982a, p. 135). It is upsetting that this aspect of the physical environment is being neglected in preschool classrooms because of the devastating implications this has for young children in all areas of development, including literacy development.

*Behavior.* A number of studies demonstrate that the arrangement of the overall physical environment of the preschool classroom has a tremendous *e*ffect on young children's behavior socially and physically (Morrow, 1982a, 1982b, 1990). The physical environment will help children determine where to play, what materials to play with, whether or not to play with other children, and who to play with (Morrow, 1982a, 1982b, 1990). The physical 1990). This also applies to the behaviors that children have concerning literacy. The preschool classroom environment has been shown to influence children's literacy behavior. How the classroom is arranged can change whether or not children engage with literacy materials, how they behave with literacy materials, how they engage in literacy activities, and who they choose to interact with as they use the literacy materials. This demonstrates the fact that design changes can have a powerful impact on the behavior of preschool children in the classroom (Morrow, 1990).

The library corner is a part of the children's overall preschool environment, and in several studies, where the library corner was altered to be more attractive and inviting, children's literacy behaviors were, in fact, changed. In these studies, library corners were changed by 1) putting them in quiet areas of the room, 2) adding soft, comfortable furniture, pillows, and blankets, 3) making them visually attractive, 4) making them easily accessible, 5) adding literature props, 6) adding bulletin boards, 7) adding attractive, age-appropriate books for the children to read, 8) and by displaying these books attractively with the covers showing (Morrow, 1982b).

These design changes led to several changes in the children's literacy behavior. One of the ways that the children's literacy behavior was changed was in the number of children that started engaging in literacy activities. The study by Morrow (1982b) revealed that there was a significant increase in the number of preschool children who chose to use literature during center-time, when changes were made to the librarycorner. In other words, the number of children choosing to engage in literacy activities rose as a result of the changes made to the library corner.

The changes in the library corner also influenced the children's willingness to engage in literacy activities. Morrow's (1982b) study found that the characteristics of the library corner predicted the voluntary use of literature by preschool children (Morrow, 1982b, p. 344). More specifically, she found that "a visible, accessible, attractive library corner" will increase "children's voluntary use of literacy materials" in the classroom (Morrow, 1982b, p. 539). So, children who came from classrooms where the library corners were modified engaged more voluntarily in the use of literacy materials.

Another area where the children's literacy behaviors changed was in the area of frequency of literacy involvement, which makes sense because their willingness has been increased. In the research by Morrow (1982b), she found that there were "significant positive correlations between frequency of children's use of literature, and specific favorable physical characteristics of library corners" (p. 343). In other words, children who came from classrooms where libraries were made to be more comfortable and attractive, engaged in literacy behaviors more frequently throughout the day.

One last area where the library corner changes had an impact on children's literacy behaviors was in the type of behaviors they exhibited (Morrow, 1990, p. 539). Changes to the library corner, as well as to the classroom as a whole, influence how creative children are with the materials provided. A study by Morrow (1982a) revealed that children who were given the opportunity to play with literacy rich materials were more creative in their role-playing and making of books, charts, posters, menus, etc. (Morrow, 1990, p. 538).

On the whole, changing the physical design of the library corner by making it an attractive, comfortable, "well stocked library of well-written books" provides more literacy opportunities for preschool children (Lamme, Fu, Johnson, & Savage, 2002, p. 77). And, these changes and opportunities led to changes in the number of children, the willingness of children, the frequency of children, and the creativity of children engaged in literacy activities in the classroom. This goes to show that "well-designed classrooms" are a crucial factor in enabling teachers "to facilitate literacy behaviors" in preschool children (Morrow, 1990, p. 549).

*Literacy development.* Changes made to the children's overall preschool environment not only influenced their literacy behaviors, but they also influenced the development of their emergent literacy skills, and as was discussed earlier, increased development of emergent literacy skills directly correlates with increased growth in literacy development (Whitehurst & Lonigan, 1998). A study by Dunn et al. (1994) found that "children's language development was positively related to the quality of the environment" (p. 31).

In the study by Dunn et al. (1994), two subscales of the ECERS were used to examine the overall quality of the preschool classroom environment: the "developmentally appropriate activities factor" and the "language/reasoning subscale" (p. 30). They found that when these two qualities of the environment were higher, children had "more advanced language development" (Dunn et al., p. 31). They also found that classrooms with higher quality environments had higher quality literacy environment and more literacy-related activities available to the children (Dunn et al.).

This same study by Dunn et al., (1994) also revealed that classrooms with higher quality literacy environments had children with increased literacy development. They even stated that the literacy quality of the preschool environment combined with the overall quality of the environment was "able to predict children's language development" (Dunn et al., p. 33).

However, even though the literacy environment increased children's literacy development, classrooms with more literacy activities did not seem to increase children's literacy development (Dunn et al., 1994). This may be because classrooms with more literacy activities do not necessarily have higher quality literacy and overall

environments, and it seems as if the environment is what makes the difference in literacy development, not just the availability of the activities (Dunn et al.).

#### Literacy-Rich Environment

An important requirement of the overall physical environment is that it is, more specifically, a literacy-rich environment. A literacy-rich preschool environment should have literacy materials such as "written notes, letters, books, labels, newspapers, magazines, and other reading materials" along with "crayons, pencils and paper, chalkboards, and other writing materials" present in the classroom (Lauritzen, 1992, p. 535). It should include materials and opportunities for spoken language development, as well. A literacy-rich environment should also include the children's names, children's written work, and other environmental print in various areas of the classroom. Literacy-rich environments have these materials embedded in various areas of their classroom such as the library corner, writing center, and dramatic play area, and all of these literacy materials are used meaningfully in context by the teacher and children.

In a study by Morrow (1982a), 13 kindergarten classrooms were observed for evidence of literacy-rich environments and only five of them had library corners, and even those five library corners were described as being "barren and uninviting" (p. 134). Rowell (1998) also found that most library corners were unattractive and had books that were in terrible condition. This is upsetting because the research also shows that when children have library corners like these, which are in poor condition, they avoid the library area and the materials in them. Morrow found that in these classrooms only about two children used the library corner in a given day (Morrow, 1982b, p. 343). Another study by Rowell revealed that tattered and dirty books were "were seldom selected" by

the children to read, but children frequently chose to read the books that had "shiny colorful covers" (Rowell, p. 205).

Not only are classrooms missing attractive library corners, but they are also missing other literacy areas and the literacy materials to go in these areas. Very few classrooms have writing centers, print enriched centers, or even "children's literacy related products on display" (Rowell, 1998, p. 208). Most classrooms do not have literacy materials and resources available to the children as a common part of their day (Raben & Coates, 2004). And, once again, if classrooms do happen to have some of these areas, they are not in good condition (Rowell). However, literacy materials are an important part of a literacy-rich environment. When literacy materials are meaningfully introduced and made available to young children, they enrich the entire literacy environment of the preschool classroom (Raban & Coates).

The results of these studies reveal that most preschool classrooms are not literacyrich. They "do not have well-designed library corners," other literacy areas, literacy materials available for the children, or print displayed in the classroom (Morrow, 1982b, p. 343). And, in the rare cases where classrooms do have literacy areas or literacy materials, they are usually in terrible condition, and the children do not choose to use these areas or materials anyway.

These findings are greatly disturbing because these neglected literacy areas are shown to deter children, and this could lead to a lack of their general desire to interact with literacy materials, which could lead to a lack of literacy skills and development. Literacy-rich environments have been shown to influence children's literacy development

in several ways, and if these environments are missing or if they are poor in quality, children are not being given the opportunity to further develop their literacy skills.

*Interest.* Literacy rich environments have been shown to help children develop more interest and enjoyment in literacy related activities. Children have a natural desire to write and interact with literacy materials (Gustafsson & Mellgren, 2002). Furthermore, when teachers build upon that natural desire and provide children with numerous interactions with literature and literacy materials in a literacy-rich environment, children develop and even greater "interest and enthusiasm for books" (Morrow, 1982b, p. 339). These children also have a greater desire to learn to read (Morrow, 1982b). Furthermore, Gustafsson and Mellgren found that when teachers build upon children's natural desire to write and interact with literacy materials by providing them with a literacy-rich environment, they will enjoy literacy more.

*Voluntary participation*. Literacy-rich preschool environments have also been shown to cause an increase in children's voluntary use of literacy materials and in their voluntary involvement in literacy activities (Morrow, 1990). When classrooms have literacy materials and when children have easy access to them, children spend more time in voluntary reading. Classrooms that have literacy-rich dramatic play centers can especially have an impact on children's literacy behaviors. Children in classrooms with literacy-rich dramatic play centers have been shown to freely engage in literacy activities of their choice while they play (Neuman, 1991). A study by Morrow (1990) revealed that when changes were made to the dramatic play areas by adding literacy materials, thematic play, and teacher guidance, "the level of voluntary literacy behaviors during play" increased (pp. 548-549). Not only did children choose to voluntarily engage in

literacy behaviors during their play time, but they also chose to engage in more literacy activities that the children in classrooms without literacy-rich play areas (Morrow, 1990).

*Print exploration.* Literacy-rich environments have also been shown to increase children's opportunities to explore print. In literacy-enriched play centers, such as the dramatic play center, "children can spontaneously explore both the purposes and the forms of written language" (Rybczynski & Troy, 1995, p. 2). Research has also shown that when children are given these opportunities to naturally explore print, they act upon them. Rybczynski and Troy stated it best by saying that "literacy-enriched play centers appear to be a powerful method for encouraging young learners to explore literacy and its role in our culture" (p. 5). Again, the importance of having a theme and a literacy-rich dramatic play area seems to show itself in the literature. When children have the resources of a literacy-rich classroom and when they can freely play in these literacy-rich areas with other children, they tend to explore literacy more.

*Rich play and social interactions*. Literacy-rich environments also influence the children's play and social interactions in the classroom. Rybczynski and Troy (1995) stated that in literacy-rich play areas, the children's "play tended to be more sustained and social" (p. 2). While children are interacting in literacy-rich environments with the literacy materials, they seem to be more engaged and interested, with longer attention spans. They also interact more with the children around them. Print-enriched play environments provide opportunities for children to interact with one another as they interact with the literacy and play materials (Neuman, 1991). Children that have meaningful literacy resources in a meaningful play center are more actively involved in literacy activities and in literacy-rich play with their peers.

*Literacy development*. As demonstrated above, literacy-rich play environments greatly influence children's literacy behaviors. Research has also shown that the changes in children's literacy behaviors that resulted from the literacy-rich play environments influenced the children's literacy development. Children with increased literacy behaviors, as a result of the literacy-rich environment, scored higher on certain literacy tests. In a study by Whitehurst and Lonigan (1998), these children were able to read more environmental print than the children that were in preschool environments that were not literacy-rich. Another study by Vukelich (1994) demonstrated that literacy-rich environments "increased children's engagement in literate behaviors" and when Clay's print test was used, it showed that the literacy-rich environment "positively affected children's literacy learning" (p. 156). Therefore, an increase in children's literacy behaviors led to an increase in children's literacy development.

A direct connection can also be made between the literacy-richness of the preschool environment and the children's literacy development. The literature shows that there is a definite relationship between literacy-rich preschool environments and the increased literacy development of the children in these classrooms. One reason for this is that literacy-rich preschool environments provide children with opportunities to have daily exposure to print, literature, literacy materials, and literacy activities (Watkins & Bunce, 1996). And, when young children are exposed to the meaningful print in their classrooms on a daily basis, they benefit from these experiences (Rowell, 1998).

When young children have exposure to print, it has been shown to enhance early literacy development (Rybczynski & Troy, 1995). Children that were allowed to learn by playing with their peers in literacy-rich play centers with environmental print "learned to

read significantly more words in their context" than children in the play environments that were not literacy-rich (Vukelich, 1994, p. 164). Lamme et al. (2002) found that classrooms that used environmental print and literacy materials increased children's literacy development, specifically in the areas of "phonemic awareness and their spelling and writing development" (p. 76). Dunn et al., (1994) found that when preschool children were given opportunities to interact with literacy materials that were included in literacyrich play settings, such as the dramatic play area or block area, they not only promoted children's literacy use, but they also increased children's language and literacy development.

Adding print and literacy materials to the dramatic play center also seemed to have a noticeable impact on children's literacy development (Morrow, 1990). In a study by Nixon and Topping (2001), they found that enriching the dramatic play areas in preschool classrooms with print and literacy materials impacted the children's literacy development. They could see "evidence in the children's work" while they were playing in these literacy-rich areas "which indicated the impact" of these literacy-rich areas on the children's literacy development (p. 49). Rybczyski and Troy (1995) suggest that literacy-rich play centers increase children's literacy development because they turn children's natural desire to engage in developmental play into a means of discovering the world around them. When print and literacy materials from the world around them are brought into their preschool world, literacy is made meaningful to the children and this leads to an increased desire in the children to explore literacy, which leads to increased literacy behaviors, which finally leads to increased literacy development.

When young children actively participated in literacy-rich environments there were also "real, long-term achievement benefits" in the area of literacy development for them (McGill-Franzen, Lanford, & Adams, 2002, p. 462). The benefits of literacy-rich environments compound and create a solid foundation that the children can build upon as they continue developing their literacy skills for years to come. Research has shown that "classrooms rich in literacy-based activities and interactions are needed to facilitate" future reading proficiency in young children (Watkins & Bunce, 1996, p. 199).

#### *Literacy in Context*

Children construct their own knowledge about writing, reading, and print. In order for children to construct their own knowledge about print and literacy, they need to be exposed to an environment where literacy is embedded into its context in a purposeful, meaningful, and important way for the children. Children's ideas and understandings of literacy "will be defined by their experience and understanding of the purposes and functions of literacy in the world that surrounds them" (Raban & Coates, 2004, p. 16). Children must be able to take their understanding of the world around them and use it to participate in literacy activities, so that they can construct their own knowledge and make sense of it (Ryokai et al., 2003).

Furthermore, literacy acquisition "is not about children learning separate letters and a written language rule system" (Gustafsson & Mellgren, 2002, p. 623). Children are able to construct their own knowledge about writing and reading best in environments and conditions where writing and reading are in context and where they are purposeful, meaningful, and important to the children (Nixon & Topping, 2001). When teachers provide children with a literacy-rich environment where the materials are naturally

embedded in the environment and they are in context, it will still provide opportunities for children to learn the mechanics of language, but it will be done in a natural way (Gustafsson & Mellgren).

*Environmental print in context.* Dunn et al., (1994) found that children's language development was significantly improved when teachers chose to enhance the literacy quality of their classrooms by including environmental print that was functional for the children. A study by Vukelich (1994), for example, helped teachers enrich the play environments of their classrooms by bringing in natural print and literacy materials from the children's outside world and putting them in their dramatic play centers or other play areas of the classroom. The teachers made sure that after the print was brought into the classroom, it was embedded into a meaningful play context. Words that would typically be used in a post office were embedded into a post office theme in the dramatic play center, and words that would be used in a restaurant were embedded in a restaurant theme. Print was only posted and used if it made sense in the context where it was placed. The results of this study demonstrated that naturally embedding environmental print from the child's outside world into the classroom and allowing children to interact with it meaningfully, develops "children's ability to read words" (Vukelich, p. 165).

Children's ability to correctly use and understand written language depends on the context of the print (Bloome, 1986). The context of the print is extremely important for young children. If print is not put in a meaningful context, then it becomes difficult for children to read and understand it. Children learn literacy skills best by observing and participating in meaningful literacy activities that are presented to them in the context of daily life. As children watch and take part in "every day family activities, children learn

about reading recipes, signs, and covers of books and magazines and writing grocery lists, checks, and notes because reading and writing are woven into the fabric of their interactions with the adults in their environment" (Vukelich, 1994, p. 155).

It is possible and even preferable for children to learn important literacy skills by using this method of naturally embedding print in the child's environment. Studies have shown that children can learn literacy skills such as letter sounds when their names are posted and used in meaningful ways. When children are involved in using name cards in a meaningful way, they will begin to connect the beginning letters that they see with the beginning sounds that they hear, and eventually make the letter-sound connection (Lamme et al., 2002). In fact, a study by Vukelich (1994), demonstrated that "when the words were not embedded in their supporting environmental context" children who were assessed to see their ability to read words in-context verses out-of-context, could only read three out of the 10 possible (p. 162). In a study by Vukelich, she found that when children were provided a print-rich dramatic play environment, more children were able to read print in-context, than out-of-context. However, just the fact that the environments were made print-rich, contributed to a difference in the amount of print the children could read, regardless of the in-context/out-of-context variables (Vukelich).

Studies definitely revealed that when children are exposed to print that is naturally embedded in their environment, it helps them read print in-context, but it also shows that it helps children to read print that is out-of-context as they get older. Children move along a natural progression of learning to recognize and read words as they are in context and then learning to use their knowledge about letter sounds and words to recognize and read words out-of-context. Experiences with environmental print that is in-context helps

children develop word-recognition skills that have been shown to help children read words in-, as well as, out-of-context, as they move along this continuum (Vukelich, 1994).

Purposeful, meaningful, important. Not only must print be in context, but it also needs to serve a real purpose or function for the children. According to Vukelich (1994), "children first learn to read words in context through many purposeful experiences with print" (p. 154). Children should learn how to write by using writing as a purposeful tool to communicate a specific message to others (Gustafsson & Mellgren, 2002). Part of the process of children learning that print is purposeful is learning that it serves as a method of communication. Many researchers agree that children need more than just environmental print, but they need a combination of being exposed to print in their environment and being involved in using that print with others in functional ways (Vukelich). Then, this will allow for children come to the point where they can make connections between print and its purpose (Vukelich). Teachers have put up environmental print and labeled objects in their rooms for quite some time, but they still fail to create purposeful and meaningful experiences with these labels (Vukelich). Children need to come to a point where they understand the function or purpose of print being that it is used to communicate a message to others.

Next, children need to understand the meaning of print; that it is more than just words and letters. Whitehurst and Lonigan (1998) state that reading is motivated by the child's ability to perceive meaning in the activity. One way of giving print a purpose and meaning, as well as putting it into context, is to use themes. Morrow (1990) stated that classrooms where play settings and themes with literacy activities that were based upon
those themes, had children that used literacy according to those themes, and the literacy had meaning and function. Morrow (1990) also stated that the classrooms that did not have play settings with themes where the literacy materials could be made meaningful and functional, had children that were "more experimental, exploratory, random, and less focused" in their play and use of literacy materials (p. 552). Children need to see that print is more that just groupings of letters, but that it has a meaning and a message to convey.

As stated above, print must have a purpose and meaning for children, but most importantly print must be made important to them. Children must not only have exposure to print and be active participants in literacy activities, but they must also be able to see how print is important to them in their lives (Gustafsson & Mellgren, 2002). In order for children to have the desire to write, they have to have a desire to "communicate a message" that is related to their context (Gustafsson & Mellgren, p. 623). They have an important message to communicate and they must feel that it is important for them to use print to communicate that message.

When print is not put into context or made important and meaningful to them, children will try to put it into context themselves in order to make sense of it in their own ways. Corsaro and Nelson (2003) observed that children will often resist the systematic literacy activities that teachers contrive, and they will create their own experiences that are meaningful for them. By doing this the children gain control over their literacy experiences and have greater literacy growth and development because they are putting literacy into context. This just goes to show that if literacy activities and materials are not put in context, children will find ways of putting it in context so that they can make

sense of it, weather it is according to the teachers' plans or not. Therefore, context, purpose, meaningfulness, and importance of print are key to children's success in literacy development.

## Social Environment

The social environment is the environment where children can freely interact with others, and it is comprised of several different components. The components of the social environment can include "peers, family members, teachers, home, and school, as well as television and movies" (Yaden & Tardibuono, 2004, p. 31). Each of these components is a channel that leads to the development of children's literacy skills, and they exert influences upon children's literacy development (Yaden & Tardibuono).

When thinking about social interactions within the social environment, teachers must remember that the nature of reading and writing is inherently social (Bloome, 1986). Learning to read and write is, and always has been, a social process that involves other people (Corsaro & Nelson, 2003). Bloome emphasized the importance of thinking about the process of literacy acquisition as being an active process thatinvolves interactions with others (Corsaro & Nelson). More specifically, literacy acquisition must be remembered as being a complex process that takes place within "complex human relationships" and it can no longer be thought of as a "solitary act in which a mainly passive reader responds to cues in text to find meaning" (Bloome, p. 71). Children must be able to construct meaning about literacy through their active participation and social interactions with others and literacy materials (Bloome).

## Importance of More Competent Others (ZPD)

Research has demonstrated that when preschool children are allowed to engage in social interactions throughout their day, it has an impact on the development of their language and literacy skills (Smith & Dickinson, 1994). These changes in literacy development seem to be predominately noticeable when children have the opportunity to not only interact with others, but to interact with more competent others. More competent others are other people in the child's social environment that are further along in their development of literacy and language skills than the child is.

There is much debate and discussion amongst researchers about exactly who can be considered to be a more competent other. Some think that more competent peers, as well as adults, make meaningful contributions to children's language and literacy development. Neuman (1991) and Watkins and Bunce (1996) stated that children's learning can be enhanced by allowing them to have quality interactions and experiences with peers, in addition to adults. However, some researchers believe that only adults or much older children qualify as a more competent other. They believe that it is only through adult-child interactions that children can enter their ZPD, and extend beyond it because only the adult has the capability of determining the child's ZPD and the level of assistance the child needs in order to move him or her beyond it. For example, Schrader (1990) stated that the adult-child interaction is particularly "crucial in that it provides necessary assistance as the child stretches beyond his or her level of development" (p. 82).

Researchers agree that there is more to children's literacy development than the physical environment and materials they are exposed to, but that children also need

interactions with more competent others. Research has shown that a combination of a quality physical environment and social interactions with more competent others contributes to children's increased literacy development (Lauritzen, 1992). Morrow (1990) stated "that although appropriate environmental design can increase children's voluntary use of literature, it must be supported by adult guidance to be totally effective" (p. 552). This is congruent with Vygotsky's theory about the importance of scaffolding within a child's zone of proximal development (ZPD) (Lauritzen). The only way a child can grow in their ZPD is to have a more competent other that is engaging in the social process with them and that is stretching the child slightly beyond what they are currently capable of achieving or understanding on their own. Children need interactions with a literacy rich environment and more competent others in order to truly enter their ZPD and in order to grow the most in their literacy development. Children's literacy development is most greatly influenced when they have exposure to the combination of a wonderful literacy-rich environment and quality social interactions with more competent others.

Social interactions with more competent others affect children's literacy development in many ways. One of these ways is that it affects children's knowledge about print (Vukelich, 1994). Research shows that children gain an understanding of print by having repeated exposure to it in various arenas and by also having opportunities to interact with more knowledgeable partners (Vukelich). Social interactions with print also influence children's ability to read environmental print. In a study where children were given the opportunity to play in an environment where they were exposed to print and where they had "functional experiences with a more knowledgeable other around this print," their ability to read environmental print increased (Vukelich, p. 153). Children's

present, as well as future, reading and writing skills are also impacted by quality social interactions. Raban and Coates (2004) found that children's reading achievement in the later years is positively impacted when teachers give the children more experiences with literacy materials in a literacy-rich environment and when they give children the chance to have interactions with more competent others with the materials in this environment. *Importance of Peers* 

Peers are an important resource for young children, and when children are not given the opportunity to interact with peers on a daily basis in literacy activities, it is a detriment to the children. Nixon and Topping (2001) stated that before school starts, literacy skills such as reading and writing are "social and functional" for young children, then when children enter school these skills tend to become "socially isolated and largely purposeless" (p. 43). This is due to a lack of opportunity for these children to engage in meaningful literacy activities with their peers. This is tragic because of what is known about the importance of peers and purpose in the development of children's literacy skills. Peers serve a very important purpose in children's acquisition of literacy skills. According to Piaget's theory, cognitive conflict leads to cognitive growth, which leads to literacy development (Neuman, 1991). Peers are one of the most important and available ways for children to experience this cognitive conflict throughout the day.

*Coaches.* As stated before, some researchers do not believe that peers can really lead children in their ZPD to further literacy development. However, research has shown that peers do have the ability to coach children in their language and literacy development. According to Rybczynski and Troy (1995), "children have a lot to teach each other" (p. 4). In a study by Neuman (1991) where children were observed playing

together in their classroom, the peers helped the children name literacy objects, they negotiated meanings of literacy related things, and they facilitated each other's growth in literacy tasks. Neuman also found that during play, the children often switched roles of tutor to tutee, even in the same dyad. The children reversed roles according to the situation and level of expertise; the peer that was previously more competent in the last play scenario suddenly became the peer that is a novice in the new play scenario (Neuman). The results of Neuman's study suggest children in a literacy-rich environment with opportunities to interact with peers "can and do provide substantive input to one another's literacy learning" (p. 245).

Research has also found that in order for the peer coaching to be most effective, it is important that the children have social interactions that are naturally occurring with familiar peers (Rybczynski & Troy, 1995). It has been documented that peer tutoring is more effective when it occurs naturally and when the peers are friends and not just children who have been artificially placed in peer tutoring situations. For example, a study by Pellegrini, Melhuish, Jones, Trojanowska, and Gilden (2002) showed that when two groups were compared, one with peer friends and one with peer familiars (less familiar peers than friends ) "friends outperformed familiar peers initially, but between-group differences decreased across time while children's performance in the familiar group increased across time" (p. 375). The differences in the literacy development of the children in the two groups eventually decreased because the less familiar peers eventually became friends, and the influence and learning became greater due to the fact that the less familiar peers were now friends.

Another study by Pellegrini et al. (2002) found that when children were placed with other children that were more familiar to them in a more comfortable and familiar environment, these children had more oral language interactions than the children who were placed with unfamiliar peers. Pellegrini et al. stated that "closeness in peer relationships maximized children's expression of literate language" (p. 387). Children talk more with peers that are their friends, and less to those that are less familiar. This shows that children's literacy behaviors and development are more greatly influenced by allowing children to play with familiar peers.

*Language use*. Children's language use is also influenced by peers, simply because peers allow children to have more conversations throughout the day. Peers provide an avenue through which children can talk all day long, if they so choose. Children can have conversations with one another while they are engaging in meaningful experiences throughout their day (Laruitzen, 1992). They can also talk with each other about important events in their lives (Lauritzen). Children also engage in meaningful, quality conversations during mealtimes and snacktimes. Children have a lot to talk about, and peers are always around to listen, which allows for children to have more opportunities to actually talk. Peers can help children use language in a variety of ways throughout the day, and they often provide many opportunities for language by developing conversations that adults may not be able to provide because of a lack of time or a limited ratio of adults to children (Neuman, 1991). Lamme et al. (2002) stated that the beginnings of a successful literacy program are "a classroom rich with talk" (p. 74). And, research shows that these conversations can help children to further develop their language and literacy skills (Massey, 2004).

*Learning*. Not only do peer interactions increase children's language use, but peer interactions also influence the amount of learning and acquired knowledge about language that takes place in the classroom (Neuman, 1991). Lamme et al. (2002) stated that children learn by helping other children learn. A study by Neuman revealed that when children were allowed to work together while they played and engaged in literacy activities, their understanding of written language improved and further development. Peer interactions allow children to share their thoughts and ideas about literacy while they engage in literacy activities with their friends (Corsaro & Nelson, 2003). Studies also have shown that children take the things they learn, whether it is through informal lessons learned through peer interactions or formal lessons learned through direct teaching, and they "use, refine, and extend these activities" during the times when they have interactions with their peers (Nixon & Topping, 2001, p. 209).

According to Neuman, peers also greatly influence the amount of learning and offer more learning opportunities for children because, once again, peers are always available, when teachers may not be (Ryokai et al., 2003). And, although peers do not "bring the sophisticated strategies and knowledge" that adults are capable of bringing, "the social nature of the interaction around literacy learning is just as important as the absolute expertise of any partner" (Ryokai et al., p. 197). Therefore, it is more important the children are able to have more frequent social opportunities to interact with others, than it is to make sure that the other person is an adult, an older child, or a more highly competent peer.

*Views of literacy and voluntary literacy use*. Just as peer interactions influence children's increase in language use and knowledge, peer interactions have also been

shown to influence children's attitudes towards literacy and increase their voluntary use of literacy. In a literacy intervention by Nixon and Topping (2001), children were placed in situations where they were paired with another child and encouraged to engage in literacy activities, such as reading and writing. The study revealed that these children showed a drastic difference in their attitude towards literacy and their voluntary use of literature and literacy materials. These children used to be filled with anxiety towards reading, and they avoided it all together. However, after the study, these children were no longer showing signs of anxiety towards reading, and they were no longer avoiding it. These children's attitudes about literacy had changed drastically for the better and now they "were more willing to write and more enthusiastic about their attempts" (Nixon & Topping, p. 53). Nixon and Topping stated that especially the younger children were demonstrating a difference in their eagerness to read and write after their literacy experiences with their partner (Nixon & Topping). Even the teachers had a lot to share about the marked changes in their students as a result of the study. The teachers said that at the end of the intervention, the children demonstrated more confidence in their literacy abilities (Nixon & Topping). They said that the children were exceedingly proud of their writing that was displayed in the room, and the children were always eager to talk about it with their peers and teachers (Nixon & Topping). The teachers also stated that the literacy areas in their classroom continued to remain popular, well after the intervention period (Nixon & Topping).

*Literacy development*. Not only were all of the children from the studies more eager to read and write, but all of these children became more fluent in their reading and writing (Nixon & Topping, 2001). When children are given the opportunity to interact

with their peers around literacy materials, their literacy attitudes and literacy use increase, but so does their overall literacy development (Corsaro & Nelson, 2003; Nixon & Topping, 2001). A study by Nixon and Topping found that when children were paired into writing groups, it made a difference in the children's writing development. The study paired some children into writing groups where they were encouraged to write and to do writing activities with their peer partners, and they let some children work on writing alone. The study revealed that writing development "improved significantly more" in the children who had the paired peer interactions, than in the children who were not given the opportunity to have peer writing interactions (Nixon & Topping, p. 53). In fact, the writing development in the children who did not have peer interactions either did not change, or if it did, it declined (Nixon & Topping). The teachers of the children that were involved in peer paired writing also reported that their children were not only writing better, but that they were even "writing more independently" (Nixon & Topping, p. 52). Nixon and Topping stated that children were no longer completely reliant upon teachers for instruction, but they now had the help of their peers, and the whole writing experience was made "more like home" because the "mechanistic dependence upon the teacher lessened" (Nixon & Topping, p. 54).

In summary, research has shown that peers do make a positive contribution to children's language and literacy attitudes, use, knowledge, and development. Peer interactions with literacy materials often lead to positive changes in the literacy attitudes of young children. These positive attitudes that children have about literacy, then lead to an increase in their voluntary literacy use and to greater literacy development. Peer interactions do lead to greater literacy development in children. Not only that, but it also

seems as if the peer interactions have a positive long term effect on children's motivation to read and write because in the studies, children continued in their literacy behaviors long after the interventions ended. Overall, it has been documented time and again that peers play an important role in the development of young children's literacy and language development, and therefore, young children need several opportunities throughout their day to interact with their peers in a literacy-rich environment.

# Importance of Teachers

Not only do peers serve as a vital tool in children's literacy acquisition, but adults serve an equally, maybe even more important, role in children's literacy acquisition. Adults are capable of interacting with children in ways that peers alone cannot. Especially with preschool children, adults are often the only ones who can read stories, ask thought provoking questions, carry on sophisticated conversations, and scaffold children's learning. Adults are needed for each of these events to take place, and each of these events is an important part of children's literacy and language development.

Adult interactions. One of the most important ways adults aid in children's literacy development is through their daily interactions with them. However, when children were observed in a study by Rush (1999), the children were not engaging in any adult interactions "of any kind for over half of the observation period, even though caregivers were almost always present" (p. 8). This shows that some caregivers are not interacting with children like they should be. This same study by Rush also tested these children and the tests indicated that the low levels of adult interactions were directly related to the children's low levels of language and literacy development. Children need

adult interactions because they support and mold children's literacy learning and development (Morrow, 1990).

Adult interactions are also important because they provide children with the support that they need in their reading and writing development, which helps children improve their reading and writing skills (Schrader, 1990). A study by Raban and Coates (2004) revealed that in order for literacy interventions to be most successful, they must include adult interactions with children. They also found that in order for literacy interventions to be most successful, they must interventions to be most successful, children must have their attention drawn to print, they must observe print being used in a more sophisticated manner, and they must have their questions about print discussed and answered (Raban & Coate). In each of these instances, adults were needed to truly carry out these tasks in the most advanced manner.

Another type of literacy intervention is the shared reading experience, and once again, adults are a vital part of this intervention. Shared reading experiences have been shown to increase young children's language and literacy skills (Whitehurst & Lonigan., 1998). As teachers interact with children through shared reading experiences, children are able to make their own sense of the text that they are reading (Bloome, 1986). However, if adults are not present, children cannot have these rich shared reading experiences. Adults are an important part of the shared reading experience because of their level of knowledge and expertise. For example, in a reading intervention by Whitehurst and Lonigan, a system of shared-reading was developed where the child tells the story and "the adult assumes the role of an active listener, asking questions, adding information, and prompting the child to increase the sophistication of descriptions of the material in the picture book" (p. 859) The teacher also encourages the child's responses

to the book by praising them, and the teacher encourages the child to give more advanced responses by expanding upon what the child says and by asking the child more challenging questions (Whitehurst & Lonigan). Without the adult, the child would not have had the opportunity to have this rich reading experience. Adult interaction is a key ingredient to successful literacy interventions for preschool children.

Adult conversations. Adults are also an important tool in children's literacy development because of the level of conversations they have to offer children. Massey (2004) stated that "early childhood teachers should engage children in various levels of cognitively challenging talk during the day" (p. 228). Adults bring a different level of sophistication to conversations that peers are not capable of bringing. However, once again, several studies have shown that meaningful adult-child conversations are virtually nonexistent in preschool classrooms (Massey). Nonetheless, these conversations are extremely important to children's literacy development.

When teachers have conversations with the children in their classroom, these are educational experiences that are key to the development of the child's language and literacy skills (Massey, 2004). A study by Rush (1999) found that adult-child interactions, especially the ones that involve conversations, are directly related to an increase children's literacy development. That same study by Rush also found that when adults carried on conversations, the intentionality of the conversations did not make a difference. The most important factor was simply that the teacher was having a conversation with the child. Therefore, it seems as if the intentionality of the adult-child conversations is not as important as the sheer existence of the conversations.

Another reason that adult-child conversations are so important to children's literacy and language development is because they provide a model for children in which to observe and take part. According to Massey (2004), "children learn how conversations work by observing and interacting with adults, who are accomplished speakers of the language" (p. 227). Adults provide a model of language and literacy to children that is more advanced than that of their peers. Without adults modeling this level of language and literacy to children, these children would not have an accurate goal to work towards in their development in these areas.

Adult scaffolding. Another important way adults are useful to children in their literacy development is that adults are capable of scaffolding children's learning. Scaffolding is when a teacher asks questions or provides challenges that move a child along in their ZPD. Scaffolding has been shown to be an important variable in increasing literacy behaviors in young children. A study by Morrow (1990) observed two classrooms: one in which teachers guided children's development by introducing materials to the children and playing with these materials alongside of the children, and one classroom where the teachers did not guide the children. The results of this study showed that in classrooms where the teachers scaffolded young children, these children exhibited more literacy behaviors that the children in classrooms where they were not scaffolded (Morrow, 1990). A study by Morrow (1990) found that teacher guidance in the library center played a critical role in increasing the children's voluntary use of literacy materials. A study by Rybczynski and Troy (1995) found that children who had adult guidance in literacy-rich dramatic play areas participated in more literacy activities than the children that did not have adult guidance in the dramatic play areas. In all of

these studies, the adults played an important role in the scaffolding of children's literacy learning and development, and if they had not been there to guide the children, their literacy behaviors would not have been as great.

One of the literacy behaviors that adult scaffolding leads to is children's ability to read more environmental print. Vukelich (1994) stated that even though peers are capable of scaffolding children's literacy development, "it seems adults are better able to assist children in establishing print-meaning associations" (p. 165). In other words, adults do a better job of helping children make sense of the print in its context than peers alone are capable of doing. This may simply be because adults naturally have a greater understanding of print than peers, so they can help the children reach a greater understanding of print.

In a study by Vukelich (1994), some children were placed in a print-enriched play environment with interactions from both peers and teachers, and some were placed in the same environment, but only received interactions from peers. The results revealed that the children who were placed with the adult and the peers learned to read more environmental print in context that those children who did not have access to an adult, but only to their peers (Vukelich). The adult interaction and scaffolding clearly made a difference in the children's ability to read more print. Vukelich stated that this study suggests that social interactions with more competent others in print-rich environments is important in the literacy development of children, but that the study also demonstrates the importance of specifically adult interactions with these children. However, Vukelich also stated that another important factor in the children's greater ability to understand print

was that the teachers interacted with the children and print in a natural and playful way within the literacy-rich play areas and the print was made meaningful to the children.

Adult scaffolding also leads to children's greater ability to draw and write. Adults are capable of coaching and encouraging children's writing and drawing, in ways that peers are not (Lamme et al., 2002). Teachers have a greater ability to observe and respond sensitively to children's writing and drawing efforts, and research has shown that this results in children's increased ability to write and draw (Lamme et al.). With the adults' help, the children improved in their ability to draw, know letter sounds, put spaces between words, recognize words, and write sentences (Lamme et al.). Adult scaffolding is noticeably important because it helps to improve these literacy skills and the literacy development in young children (Lamme et al.).

In conclusion, adults as well as peers play an important role in the literacy development of preschool children. They each have their distinct contributions to the process that the other does not have. Peers are capable of being more available to children throughout the day, and therefore, they can offer more opportunities for scaffolding that the teachers cannot offer. However, teachers are more of an expert in the area of literacy, and they offer a more advanced level of scaffolding that the peers cannot. These two groups are both equally important and valuable resources to preschool children as they grow in their ability to become literate.

#### Active Learning Program

The active learning program is comprised of the activities within the physical environment, plus the developmental play within the social environment. It is much

more than what is commonly known as the "curriculum" or "teaching," yet it is similar to a combination of the two. It involves the materials that are made available to the children, the ways the children are allowed to interact with these materials, and the ways children interact with their peers and teachers (Gustafsson & Mellgren, 2002). The teaching that takes place in the active learning program takes place through play, and it is more facilitative and naturally occurring, and it is less teacher-directed and formal. Learning takes place by providing quality activities and opportunities for the children to play with them and the people around them. The active learning program is the way that children are allowed to interact and play with the activities and people within the physical environment and the social environment. One specific subdivision of the active learning program is the literacy program.

## *Literacy Activities*

*Current condition of literacy programs*. Studies have shown that several preschool classrooms do not have literacy activities for the children that are part of the daily routine in the classroom (Morrow, 1982b). When Morrow (1982b) observed preschool classrooms and reported the statistics, she found that teachers did not focus on literacy activities in their classrooms. These teachers did not plan times for children to read books for fun, and they did not have well-designed library corners (Morrow, 1982b). In general, they did not appear to value literacy, and they did not encourage children to read (Morrow, 1982b). These finding suggest that, on average, literacy activities and programs in early childhood classrooms are in appalling shape (Rowell, 1998). Teachers do not have quality literacy programs where meaningful literacy activities are made available to the children (Rowell).

*Curriculum and environment cannot be separated.* It is important that teachers have meaningful literacy activities that are made available to the children because research shows that children's learning is a result of more than just the physical and social environments, but it also involves the curriculum or activities within the environments. In a study by Morrow (1982a), classrooms were altered in various ways and later checked for changes in children's literacy use. Some classrooms were only changed in the physical design of rearranging the room and adding literacy materials, some were changed only in regards to the literacy activities that took place, and some where changed in both the physical design and the literacy activities. Results indicated that classrooms where only one change was made to either the design or the activities "were as effective in increasing literature use" as the classrooms that had changes made to the design and the activities (Morrow, 1982a, p. 135). When one area was altered, the other was automatically changed, as well. The results of this study showed that the preschool environment and the preschool curriculum "can never be completely separated" because changing one, involuntarily changes the other, so they are one in the same (Morrow, 1982a, p. 136). Both areas have significant effects on the increased literature use of young children, and both should be included in the design of the active learning program (Morrow, 1982a).

Availability and use. Studies have shown that the availability of literacy activities for children to engage in affects how much children engage in voluntary literacy use. Morrow (1982b) found that when teachers offered literacy activities to the children in their classrooms on a regular basis, more of their children chose to engage in literacy activities during their free-play time. A different study by Morrow (1982a) also found

that when changes were made to the literacy program by adding more literacy activities, the children's voluntary use of literacy materials and literature raised about 25% in each classroom.

Studies have also shown that the teachers' use of these literacy activities and literature in the classroom has a significant impact on the children's use of literacyrelated materials. Studies have shown that the more a teacher uses literature and literacy materials in the classroom, the more the children engage in the use of literature and literacy materials (Morrow, 1982b). In other words, if children see their teachers use literature and literacy materials more often, they will do the same. Therefore, teachers must not only provide literacy activities for children to engage in, but they must be an active participant in the activities, as well.

*Shared reading activities.* One specific literacy activity that teachers should include in their daily routine is shared reading. Reading to children throughout the school day has been shown to be a very important activity in developing more interest in literacy related activities, and it has also been shown to help increase young children's literacy and language skills and development (Dunn et al., 1994). According to Massey (2004), teachers should read to their children a minimum of three times throughout the day. When Rowell (1998) was observing children, he found that "the most engrossing literacy event for the children" was when they were listening to an adult read a story to them (p. 206). Children seem to deeply enjoy having a teacher read aloud to them, and it seems to capture their interest. However, a study by Morrow (1982b) revealed that on average teachers do not read to their children daily, much less three times a day.

Studies have revealed that not only is it important that teachers read to their children daily, but it is also important that the teachers engage the children in the text and try to draw them into the excitement of the story as it is being read (Lamme et al., 2002). Lamme et al. stated that it is important talk about the actions taking place in the pictures of books as you read them to the children. When teachers engage the children in the reading, it helps draw the children's interest in the story and in reading, and these shared reading experiences end up enhancing children's literacy and language development (Dunn et al., 1994; Lamme et al.).

Storybook reading has also been found to be a predictor of later reading skills and achievement in children (Haney & Hill, 2005). In a study by Bennett et al., (2002), they found that the frequency of joint book reading positively correlated with the child's literacy and language development. In other words, children had higher language and literacy development when they were in classrooms where teachers frequently engaged in shared reading experiences with them. A study by Rush (1999) compared four potential influencers of literacy and language development in children. When these factors were analyzed to determine which had the greatest degree of association with children's literacy and language development, they found that the amount of time teachers reported that their classes spent in literacy activities, such as the amount of shared book reading led to the highest levels of children's literacy and language development. Therefore, greater amounts of time children spend in literacy activities, like shared reading experiences, increase children's literacy and language development.

According to Watkins and Bunce (1996), all of these studies "leave little doubt about the potential of interactive book-reading sessions in accelerating young children's

language and emerging literacy abilities" (p. 193). Children need frequent adult shared reading experiences in order to help them develop their literacy and language skills to their fullest. This is one of the most important literacy activities to include in early childhood literacy programs.

*Storytelling activities.* Just as shared reading activities have been shown to be of great importance to children's literacy development, storytelling activities have been shown to be of value to children's literacy development, as well. Storytelling activities provide a way for children to develop and practice their decontextualized language skills, which, as was discussed earlier, are important skills to develop when speaking about literacy development in young children (Ryokai et al., 2003). Storytelling activities help children develop these skills by allowing them to practice telling stories in the past tense instead of the present tense (Ryokai et al.). Therefore, another form of language is being practiced and developed by the children as they tell stories, and this helps them develop their language and literacy skills. Storytelling has even been shown to be a predictor of later language and literacy development (Massey, 2004). Story-telling activities are another important part of the literacy program.

*Drawing activities*. Another important literacy activity to include in classrooms is drawing. A study by Lamme et al. (2002) discussed the importance of including drawing activities in preschool classrooms. Lamme et al. stated that when children are in their beginning stages of emergent writing, it usually starts when children add labels to pictures that they have already drawn (p. 75). Therefore, it is important that children have opportunities to draw, so that they have pictures in which to label. Children use the artwork that they create to spur their writing and literacy development (Corsaro &

Nelson, 2003). Throughout the process of drawing, children think about what they are drawing, what it does, what context it is in, and this usually leads to some sort of story that goes with the drawing. Lamme et al. stated that once children "learn to use drawing to think, to express, and to explore, they will do the same in writing" (p.76). Drawing is the canvas where young children's writing can emerge, and if children do not have opportunities to engage in self-selected drawing activities, then the canvas is removed from their use. Drawing activities are a very important part of the literacy program in early childhood classrooms because they give children a foundation for their writing and further literacy development.

*Writing activities*. Just as drawing activities should be included in the daily literacy program of classrooms, writing activities should also be included daily. Children need to be given the opportunities to experiment freely with writing throughout the day (Lamme et al., 2002). Children also need opportunities to experiment with their writing in supportive learning environments. Children develop their writing skills best when they are given time to write in a supportive learning environment, where they have developmentally appropriate guidance and modeling (Lamme et al.). Research has shown that just as drawing provides an outlet for children to move into the beginning stages of writing, writing helps children move into the beginning stages of reading (Haney & Hill, 2004). Haney and Hill stated that "children construct a great deal of knowledge about print and decoding through writing activities" (p. 224). Reading, writing, and drawing activities are all important activities to include in preschool classrooms and they all facilitate growth within one another which leads to greater language and literacy development in young children.

## Instruction

*Developmental play*. Developmental play is another form of instruction that is much more informal. Play is the context where children are involved with the literacy materials and activities and people in the classroom. It allows children to make choices about their learning and to be in control of it (Vukelich, 1994). Vukelich stated that when children are playing, they must be free to use the materials in a variety of ways where they can explore their different uses. She stated that childrenmust also be free to choose which centers to enter and for how long they want to remain in that area (Vukelich). Classrooms rich with developmental play will have children joyfully, yet seriously, engaging in meaningful play activities in a way that allows them to "explore the materials and roles of the adult world" (Rybczynski & Troy, 1995, p. 2). Children must be given choices to make about their play, and they must be given freedom within their play to really explore and learn.

*Teachers' role in facilitating play.* Research demonstrates that developmental play can be used by teachers as a means of helping preschool children come to a greater understanding of language and literacy (Schrader, 1990). However, teachers must facilitate the play, and make it a prime time for children to engage in self-selected literacy activities with peers. Teachers play a very important part in the role of developmental play in the classroom. They do not play as direct of a role as if they were "teaching," but they do contribute a lot to the success of the ability of the children to truly engage in developmental play. Nonetheless, teachers must take advantage of the opportunities that developmental play situations do offer them.

Play situations allow teachers to have opportunities where they can model reading and writing and where they can introduce new ways of using print and literacy materials (Schrader, 1990). Play also gives teachers the chance to include props in the dramatic play areas that encourage the children to use more language (Massey, 2004). Teachers can also influence the literacy and language development of their children during playtimes by participating with the children in their play, as long as they do not try to control or interfere with the play (Schrader). During play, teachers can enrich the language use by asking open-ended questions that expound on the current topic of the children's play (Massey). "When teachers respond to children's play, they have the opportunity to provide just those learning experiences that are meaningful to children" (Schrader, p. 99). However, many teachers do not completely understand how they can rationalize and explain using play to meet their educational objectives, and therefore, do not allow their children to engage in substantial amounts of play throughout the day (Schrader).

*Learning*. Developmental play is a strong contributor to children's learning in the preschool classroom (Lauritzen, 1992). Developmental play has been found to serve as a "powerful medium for learning" for young children (Schrader, 1990, p. 82). In other words, it is through play that children are best able to learn and understand different concepts and skills. Preschool children are very capable of learning different literacy concepts and developing literacy skills, such as reading and writing, during their young preschool years (Schrader). And, research has also shown that the best way for children to learn these literacy skills by allowing children to use these skills in their daily play time (Schrader).

*Language and literacy behaviors.* Developmental play has been shown to provide opportunities for children to engage in more voluntary literacy and language behaviors. Children have been found to use more language during free-play times. Studies have revealed that children role-play in literacy-rich thematic areas during free-play times and that during these times children use more language and incorporate literacy materials into their play (Corsaro & Nelson, 2003; Morrow, 1990). Developmental play gives children the opportunity to use and refine their language skills (Lauritzen, 1992). Lauritzen found that developmental play is an outlet for children to use their language skills in a variety of different ways.

Play gives children opportunities to engage in more literacy activities, such as reading, writing, and drawing. When children are pretending to read and write, these are important early stages of emergent literacy and these behaviors take place naturally while children are involved in play (Whitehurst & Lonigan, 1998). Free-play also gives children the opportunity to create artwork or projects, and as was discussed earlier, this artwork has been shown to spur children's writing and literacy development (Corsaro & Nelson, 2003).

Developmental play also allows children to use literacy and language in more meaningful ways, which inspires and gives children more reason to increase their literacy and language use. In a study where children were exposed to literacy rich-environments with literacy materials and where they were allowed to explore them through play, the children voluntarily "wrote for real-life purposes, read their writing, and discussed the meaning" of their writing with their teachers and peers (Schrader, 1990, p. 80). When children were given control over their play opportunities, they voluntarily chose reading

and writing activities that were meaningful to them. Children will increase their literacy use, if they are allowed to do so within the context of play where the literacy activities become meaningful to them.

Children will also actively pursue their own understanding of print during freeplay times. Corsaro and Nelson (2003) found that when children are allowed to have free-play times where they can engage in literacy activities and explore literacy materials, they actively sought their own understanding of literacy. Schrader (1990) found that during free-play times, children chose to incorporate literacy concepts and knowledge into their play. When children voluntarily integrate their knowledge about print into their play, this helps them to develop a greater understanding of print and literacy. Corsaro and Nelson found that this active pursuit of print knowledge led to children no longer needing teachers to nag them to pursue literacy activities or the learning that takes place as a result of them because the children choose to pursue them on their own through developmental play.

Developmental play has also been found to give children opportunities to "become more confident in using literacy materials" (Corsaro & Nelson, 2003, p. 222). According to Corsaro and Nelson, it is important for children to have these opportunities and to build their confidence because the children's confidence in using literacy materials leads them to use the materials even more, which allows them to have increased practice and experience with literacy. Therefore, is it important that children are provided with opportunities to engage in free-play time and that they have a literacy rich environment and materials during this time of play, so that they will voluntarily engage in more literacy behaviors.

Language and literacy development. "Natural literacy development can be cultivated within the context of children's symbolic play" (Schrader, 1990, p. 99). Play is not only related to an increase in children's literacy behaviors, but it has also been shown to relate to children's language and literacy development (Schrader; Vukelich, 1994). The social interactions that take place during play help children develop an understanding of print and its function in society (Lauritzen, 1992). Actually, several of the same representational mental processes that children develop and use through their experiences with developmental play are the same representation mental processes that children need for literate behaviors (Schrader). Therefore, the skills that children are learning by playing are actually able to help the children as they are learning to read and write.

Developmental play gives children priceless opportunities to increase their language development and the skills involved, such as more developed conversational turn-taking skills and a greater vocabulary (Rybczynski & Troy, 1995). Play allows children to develop their language skills by providing opportunities for children to tell stories, and storytelling is another vehicle for language growth and comprehension. Play allows children to have storytelling opportunities, which allow them to use language more and to make connections between oral and written language, which in turn increases children's language development (Ryokai et al., 2003).

Developmental play also contributes to written literacy development through its contributions to language development. A study by Schrader (1990) found that children's development of symbolic play and of language occurs at the same time and they both lead to written language development. In fact, play has been said to be the medium through which oral language moves to written language because it facilitates oral

language development (Schrader). Schrader stated that the process that children go through to develop written language is "one which leads from oral language, through symbolic play, to written language" (p. 81).

## Teachers' Stated Philosophy

Another variable that may have an influence on the opportunities and interactions that take place in preschool classrooms is the teachers' pedagogical beliefs (Smith & Dickinson, 1994). These are the beliefs that teachers have about children and teaching. Their beliefs about children include "how they develop, how they learn, and what is appropriate" for their age, and their beliefs about teaching include "orientation to control, to children's play, and to curriculum planning and development" (Smith & Dickinson, p. 348). In other words, pedagogical beliefs are beliefs about the nature of children and how it relates to the way they should be taught in the classroom.

There are two different measures of teachers' beliefs: "Reported pedagogical orientations" and "Observed pedagogical orientations" (Smith & Dickinson, 1994, p. 349). In other words, there are the beliefs that teachers state, when asked about them (stated beliefs), and there are the beliefs that are actually observed through their teaching and interactions with children in the classroom (observed beliefs).

#### Literacy Interactions and Environments

According to the research, teachers' beliefs have been shown to influence the way they interact with children in the classroom and the way they contribute to the overall language environment of the child (Stauffer, 1970; Smith & Dickinson, 1994). Smith and Dickinson stated more specifically that teachers' beliefs "are likely to affect the kinds of

settings they create and the way they interact with the children" (p. 348). This includes the language and literacy settings that teachers create for the children in their classroom and the language and literacy interactions they have with their children.

Research shows that the beliefs teachers have concerning the importance of literacy, social skills, and play influence the language environment that they establish for the children in their classrooms (Smith & Dickinson, 1994). A study by Smith and Dickinson interviewed teachers about their beliefs concerning the importance of literacy development, social development, and play. This study showed that teachers that valued literacy most engaged in more rich conversations with the children in their classrooms. This same study showed that teachers who valued social development most engaged more frequently in rich pretending experiences with the children during play-time (Smith & Dickinson). The study also showed that teachers, who valued developmental play opportunities for the children, provided their children with more language opportunities that were rich in nature (Smith & Dickinson).

Along the same lines, negative pedagogical beliefs can lead to poor literacy interactions and environment. A study by McGill-Franzen et al. (2002), found that when the teachers' stated beliefs and observed beliefs "reflected a limited view of children of learners," these children "had less access to print, fewer opportunities to participate in literacy, and little experience listening to or discussing" literature (McGill-Franzen et al., p. 443, 462). In essence they found that the beliefs of the teachers were directly related to the experience they gave their children. This study also found that these negative beliefs that teachers had about children as learners were having detrimental impact on the

children they were teaching, and that these teachers were not even aware of it (McGill-Franzen et al.).

Teachers' beliefs are also important because "children sense what the teacher views as important and often take on those values themselves (Stauffer, 1970)" (Morrow, 1982b, p.340). Therefore if the teacher believes that literacy is important, the children will also tend to view literacy as important. Furthermore, if teachers' beliefs and values influence their actions, then teachers that value literacy will engage in more literacy activities, and we know that young children will imitate what they see modeled (Rowell, 1998). So, if children see their teachers engaging in literacy activities, they are more likely to want to engage in similar literacy activities.

# CHAPTER III

### Methodology

The data that was used for this study came from the preexisting data set of a study called the Child Outcomes Study, which examined preschool children in Oklahoma child care centers. The Child Outcomes Study began in 2003 and was conducted by Dr. Deborah Norris and Dr. Loraine Dunn. The funding was from the Oklahoma State Department of Human Services' Division of Child Care. The Child Outcomes Study was an ongoing 3-year study, however the data used for this particular study was from only the first year's data collection.

## Sample

The sample consisted of 455 preschool children that came from a total of 76 child care centers with 115 preschool classrooms. Each classroom yielded an average of 4 children with a range from 1 to 12. The classrooms that participated in the study represented the range of child care quality available in the state of Oklahoma. The majority of the children in the study were three- (n=159, 33%) and four- (n=238, 52%) years-old, with the rest being either five-years-old (n=64, 14%) or younger than three (n=3, 1%).

Within these 115 classrooms, 105 teachers filled out information concerning their demographics. Of the 105 teachers, 104 were female, leaving only 1 to be male. The teachers were between the ages of 18 and 59, with an average age of 36 years. The

majority of the teachers indicated their race to be white (72.4%), and the second highest number of teachers indicated to be black (16.2%). Only 6.7% indicated that they were American Indian and 4.8% were Hispanic. Sixty-seven percent were married, 18% were separated or divorced and 14% were single or never married.

## Procedures

A letter was mailed to the directors of the child care centers that described the importance of research in the field of child care. Then the Project Director phoned the directors to discuss the details of setting up dates and classrooms to visit. The Child Outcomes Study observed infant, toddler, and preschool classrooms, but for the purpose of this study, only the preschool classroom information wasused. The classrooms were visited a total of three times throughout the study.

During the first visit, the classrooms were observed and questionnaire packets were passed out. The teachers were asked to fill out a few other questionnaires at their convenience because the questionnaires took about 25 minutes to complete. These surveys included the Instructional Activities Survey (IAS) and the Pre-K Survey of Beliefs and Practices instrument (Charlesworth et al., 1993; Marcon, 1994). During this time, the preschool and kindergarten classrooms were also observed for three hours in the morning. The observers used the Early Language & Literacy Classroom Observation (ELLCO) instrument to rate the classrooms while observing (Smith & Dickinson, 1994).

About a week later, the second observational visit took place. This time it lasted for about three and a half hours in the morning. During this time, the observers used the

Learning Center Quality Instrument (LCQI) to rate the classrooms. They also picked up the questionnaires that the teachers had completed from the previous week.

During the third visit, one of the observers assessed each of the children one-onone. This visit lasted about four or five hours over the course of three days. The children were assessed during two 30-minute sessions for a total of one hour. The children were assessed using the Early Steps to Literacy (ESTL) Concepts about Print instrument.

## **Instruments**

The purpose of this study was to examine how the Teachers' Stated Philosophy (beliefs about how children learn and should be taught) related to the Children's Print Concepts, and how the Teachers' DALP (actual observed literacy practice) was associated with this relationship. After the relation between Teachers' Stated Philosophy and Children's Print Concepts was determined, DALP was examined to determine whether it was a mediating or moderating factor in this relationship. The following describes the instruments and rating systems used to assist in this process.

# Teachers' Stated Philosophy

The teachers' stated philosophy was measured using the IAS (Appendix A) and the Pre-K Survey of the Beliefs and Practices (Appendix B). The Instructional Activities Survey and the Pre-K Survey of Beliefs and Practices are tools that measure the teachers' teaching practices in the classroom, and their beliefs concerning Child Development and Early Childhood Education. These surveys were filled out by the teacher, at their convenience, and they took between 20 to 30 minutes to complete. Twenty-six questions were chosen from the IAS (Table 1) based upon their ability to measure the Teachers' Stated Philosophy according to the definition given earlier. The questions had to measure the teachers' attitudes towards children concerning "how they develop, how they learn, and what is appropriate" (Smith & Dickinson, 1994, P. 348). The questions also had to measure teachers' attitudes towards teaching concerning their "orientation to control, to children's play and to curriculum planning and development" (Smith & Dickinson, p. 384). Each had a score ranging from 1 to 5. One was the lowest score representing the least developmentally appropriate teacher beliefs, and 5 was the highest score representing the most developmentally appropriate teacher beliefs. The individual scores were then added to form a total score for this instrument that ranged from 26 to 130, with a score of 26 representing the least developmentally appropriate teacher beliefs and 130 representing the most developmentally appropriate teacher beliefs. A mean score for the instrument was created by dividing the total score by 26. Reliability for this instrument was .73.

Seven of the questions from the Pre-K Survey of the Beliefs and Practices (Table 2) were also used as a measure of the teachers' stated philosophy. Each question had a score ranging from 1 to 10, 1 representing developmentally inappropriate teacher beliefs and 10 representing developmentally appropriate teacher beliefs. These scores were added to form a total score for this instrument that ranged from 7 to 70, with 7 representing the lowest levels of belief and 70 representing the highest levels of belief. The reliability for this instrument was .78.

Reliability tests were conducted on the combination of the 33 items from the two instruments and Cronbach's Alpha was determined to be .81. Then, the scores from the

two instruments were combined to form a total score for the teachers' stated philosophy. This was done by transforming the scores to z-scores and adding them together for analysis purposes.

## Teachers' DALP

The teachers' actual observed practices, known as their DALP, had three components that were measured: the Physical Environment, the Social Environment, and the Active Learning Program. The ELLCO (Appendix C) and the LCQI (Appendix D) were used to measure these three subsections of the teachers' observed DALP.

Physical Environment. The quality of the Physical Environment was measured using 25 selected questions from ELLCO instrument (Table 3). The ELLCO measured environmental factors concerning literacy and language development in children from prekindergarten to fourth grade. It took about 1 to 1 and 1/2 hours to complete in each classroom. It has three parts: the Literacy Environment Checklist, the Classroom Observation and Teacher Interview, and the Literacy Activities Rating Scale. The Literacy Environment Checklist took about 15-20 minutes to complete and it had 25 items to measure the availability of materials, the contents of the classroom, and the variety of literacy materials. The Classroom Observation and Teacher Interview Tool took about 20-45 minutes to complete, and it had 14 items that rated the teachers' interactions with the children and the general classroom environment, as well as specifically concerning the language and literacy curriculum. The observer also met with the teacher for about 10 minutes and asked questions to clarify any confusion he/she might have had about the observations. The Literacy Activities Rating Scale consisted of 9 questions that the observer used to rate the frequency and duration of writing and book

reading activities that took place in the classroom. The ELLCO demonstrated 90% or better reliability, when used in over 150 preschool classrooms.

The questions from the ELLCO were scored using the following system: The questions that had responses of "yes" received a score of "1" and the questions that had responses of "no" received a score of "0". The questions that were measured on an ordinal scale either received a score ranging from 0 to 2, 0 to 3, or 1 to 3, based upon how many choices for answers the question offered. These numbers were then added and a score ranging from 2 to 41 was obtained for the physical environment. Two represented the least developmentally appropriate literacy practices for the physical environment measure and 41 represented the most developmentally appropriate literacy practices for the physical environment. Cronbach's Alpha was calculated for the 25 questions to test for reliability (a=.79).

The physical environment was also measured by using 3 questions from the LCQI about the organization of each of the five interest centers in the classroom: Blocks, Dramatic Play, Manipulative Play, Art, and Library/Books (Appendix D). The observer watched during a three hour visit to the classroom and documented information about the organization, the accessibility of materials, and the nature of experience in each of these learning centers. However, only the information about the organization of the physical environment was used for this measure of the physical environment. The first 3 questions under the Organization category were used. Questions 2 and 3 were recoded to be stated positively, and question 1 was left as it was, due to the fact that it was already stated positively. For each of the five interest centers, they received a rating of 0 for having no materials available, a 1 for having materials available (not as a center), and a 2
for being clearly defined and labeled. Then the numbers from the five centers were added to form a score that ranged from 0 to 10, with 0 representing the lowest level of developmentally appropriate organization in the physical environment and 10 representing the highest level of developmentally appropriate organization in the physical environment. Table 10 shows how many classrooms received a 0, 1, or 2 for each of the five learning centers. The Cronbach's Alpha reliability for this instrument was .67.

The scores from the ELLCO and the LCQI were then aggregated to form a total score for the level of developmentally appropriate practices concerning literacy in the physical environment. The scores were transformed to z-scores and added together for analysis purposes.

*Social Environment.* The Social Environment was measured using question number 6 under the Nature of Experience category from the LCQI (Appendix D). This question measured how freely the children were allowed to interact with other children and adults within the classroom. Each of the five interest centers received a score of either a 0 or a 1, one being the highest level of socialization that takes place within the interest center and 0 being the lowest. Then the five interest center scores were added to form a total score ranging from 0 to 5, with 0 representing the lowest level of developmentally appropriate practices in the social environment and with 5 representing the highest level of developmentally appropriate practices in the social environment. Table 10 shows how many classrooms allows their children to interact freely with others in each of the five interest centers.

The Social Environment was also measured using two questions from the Early Childhood Environment Rating Scale (ECERS) (Appendix E). The questions assessed

staff-child interactions and interactions among children. Each question could receive a score ranging from 1 to 7. The two questions were summed to form a score ranging from 2 to 14. Cronbach's Alpha was calculated for the questions to test for reliability and it was .82.

The measures from these two instruments were then added to form a total score for the Social Environment. This was done by converting the scores to z-scores and summing.

Active Learning Program. The Active Learning Program was measured using 14 selected questions from the ELLCO instrument (Table 4). Some of the questions were scored on a scale from 1 to 5, with 1 representing the lowest level of developmentally appropriate literacy practice in the active learning program and with 5 representing the highest level. The questions that had responses of "yes" received a 1 and questions that had responses of "no" received a 0, with 1 representing the presence of developmentally appropriate practice and with 0 representing absence of developmentally appropriate practice. The questions that had ordinal measures of response either received a score ranging from 0 to 2 or 1 to 4, depending upon the number of choices for answers that each question had. All of the individual items were then summed and a total score for developmentally appropriate literacy practice in the active learning program was formulated. This score ranged from 6 to 40, with 6 representing the lowest levels of DALP in the active learning program and with 40 representing the highest levels of DALP in the active learning program. Reliability was calculated for the 14 items and Cronbach's Alpha was determined to be .79.

The Active Learning Program was also measured using questions from the LCQI concerning the accessibility of literacy materials (Table 5), and the nature of experience (Table 6) in each of the five learning centers in the classroom. Each of the questions was given a score of 0 for a "no" response and 1 for a "yes" response. Certain questions were recoded because they were negatively stated on the instrument. All questions were stated positively so that a response of "yes" was the desired response. The scores for Table 5 were added and had a total score ranging from 0 to 20, with 0 representing the lowest levels of DALP concerning the active learning program and with 20 representing the highest levels of DALP concerning the active learning program. Cronbach's Alpha for this instrument was .82. The scores for Table 6 were added and had a total score ranging from 0 to 20, with 0 representing the lowest levels of DALP concerning the active learning program and with 20 representing the highest levels of DALP concerning the active learning program. Cronbach's Alpha for this instrument was .66. These two scores were then combined to form a total score for the LCQI instrument and the range was from 0 to 40, with 0 representing the lowest levels of DALP concerning the active learning program and 40 representing the highest levels.

Then, the scores from the ELLCO and the LCQI were culminated to form a total score for the DALP concerning the Active Learning Program. The scores were transformed to z-scores and added together for analysis purposes.

### Children's Print Concepts

The Children's Print Concepts were measured by using the ESTLConcepts about Print (Appendix F). The ESTL Concepts about Print instrument measured the children's understanding of letters, words, and punctuation marks by observing their actions. The

children either demonstrated or did not demonstrate the understanding, and therefore received either a "yes" or "no" score for each of the concepts measured by the instrument. This instrument had 24 print concepts that were assessed in order to determine the total measure of print understanding and development in the children. Each question was given a score of 0 for a "no" response and 1 for a "yes" response. The scores were added to form a total score for the Children's Print Concept understanding and development. This score ranged from 0 to 24, with 0 representing the highest levels of Print Concept development and understanding and with 24 representing the lowest levels of Print Concept development and understanding. Reliability was run on these 24 items and Cronbach's Alpha was determined to be .83.

#### Data Analysis Plan

Multiple regression analysis was conducted on the variables to determine which model of Teachers' Stated Philosophy to Child Print Concepts, provided the most explanatory power. The data was analyzed using the recommendation for model testing that Holmbeck (1997) described. This allowed the data to be analyzed in such a fashion as to see which model of Teachers' Stated Philosophy to Child Print Concepts provided the best explanation of the child print concepts. It allowed for the relation between Teachers' Stated Philosophy and Child Print Concepts to be assessed, using Teachers' DALP as both a moderatorand mediator in o rder to determine with model provided the most explanatory power.

# CHAPTER IV

# Results

## Findings

The purpose of this study was to examine how the Teachers' Stated Philosophy (beliefs about how children learn and should be taught) related to the Children's Print Concepts, and how the Teachers' DALP (actual observed literacy practice) was associated with this relationship. After the relation between Teachers' Stated Philosophy and Children's Print Concepts was determined, DALP was examined to determine whether it was a mediating or moderating factor in this relationship. The following describes the results found during this process.

# Teachers' Stated Philosophy

The Teachers' Stated Philosophy was measured using two different instruments (Appendices A and B) and the descriptives for each of these instruments have been listed in Tables 7 and 8 respectively. Table 7 shows Teachers' Stated Philosophy on a scale ranging from 1 to 5. A score of 5 indicated that the statement represents the highest level of developmentally appropriate teacher philosophy. Teachers had the highest levels of developmentally appropriate philosophy in relation to the belief that their children should be allowed to play, to sing and listen to music, and to choose from a variety of learning areas and projects. They demonstrated the lowest level of developmentally appropriate philosophy in regards to their belief that children should not participate in whole class

teacher directed instruction or rote counting, and that parents should read stories to the children in class.

The instrument present in Table 8 measures Teachers' Stated Philosophy on a scale ranging from 1 to 10. A score of 10 indicated that the statement represents the highest level of developmentally appropriate teacher philosophy, and a score of 1 indicated that the statement represents the lowest level of developmentally appropriate teacher philosophy. Teachers had the highest levels of developmentally appropriate philosophy in relation to the belief that children learn through active experience and in believing that class materials and resources should be child accessible. Teachers had the lowest level of developmentally appropriate philosophy in relation to the belief that children learn through active experience and in believing that class materials and resources should be child accessible. Teachers had the lowest level of developmentally appropriate philosophy in relation to the belief that programs should use learning which is individualized one-to-one learning and that activities should be child initiated.

## Teachers' DALP

The teachers' actual observed practices, known as their DALP, had three components that were measured: the Physical Environment, the Social Environment, and the Active Learning Program. The following is a description of the results found in each category.

*Physical Environment.* The physical environment was measured using two different instruments (Appendices C and D) and the descriptives for these instruments have been listed in Tables 9 and 10 respectively. Table 9 shows the developmental appropriateness of the physical environment according to the percentage of classrooms that were observed to have met the requirements. Percentages were calculated based upon a total of 117 classrooms that were evaluated. High percentages do not necessarily

indicate higher levels of developmentally appropriate practice. Seventy-nine percent of classrooms were found to have a book area for reading and 75% of classrooms had a book area that was orderly and inviting. Fifty-two percent of the classrooms had 26 or more books available for the children to read. The majority of classrooms did not have books in the science, dramatic play, or block areas. Eighty percent of the classrooms had the alphabet visible. Only 25% of classrooms were found to have areas for writing, only 6% had writing tools in other areas, and 3% had writing props in other areas. Forty-three percent of classrooms did not have any teacher writing visible to the children, and 78 % of the classrooms did not have any of the children's writing visible.

Table 10 shows the developmental appropriateness of the physical environment according to the percentage of the number of classrooms that were observed to have met the requirements. Percentages were calculated based upon a total of 114 classrooms that were evaluated. High percentages do not necessarily indicate higher levels of developmentally appropriate practice. The majority of the classrooms observed were indicated to have all five of the learning centers clearly defined and labeled. At 95%, the dramatic play area was observed as being the most common learning center for classrooms to have clearly defined and labeled. The least common centers, at 78%, to be clearly defined and labeled, were the art center and the manipulative play center.

*Social Environment.* The social environment was measured by using two different instruments (Appendices D and E). Descriptives for these two instruments have been listed in Tables 11 and 12 respectively. Table 11 showsthe social environment of 115 classrooms and lists the percentages of the classrooms that demonstrated the ability children have to freely interact with others in each of the five learning centers in the

classroom. Children were observed to have the freedom to interact with others the most in the manipulative play areas (70%) and the least in the library or book area (44%).

Table 12 shows the social environment in relation to the children's interactions with teachers and the children's interactions with other children. The interactions were rated on a scale ranging from 1 to 7. A score of 1 indicated that interactions were inadequate, and they demonstrated a low level of developmentally appropriate social environment. A score of 7 indicated that the interactions were excellent, and they demonstrated a high level of developmentally appropriate social environment. The mean for the teachers' interactions was 6.58 and the mean for the children's interactions was 6.69.

Active Learning Program. The active learning program was measured using two different instruments (Appendices C and D) that were broken down into three Tables (Table 4, 5, and 6). The descriptives for each of these tables have been listed in Tables 13, 14, and 15 respectively. Table 13 shows the active learning program for 117 classrooms. The scores varied from 1 to 5, from 0 to 2, and from 1 to 4. Higher numbers represented higher levels of developmentally appropriate practice in regards to the active learning program. Most classes were observed to have about 1 book reading session a day where the teacher read 1 book for about 5 to 10 minutes. Nineteen percent of the classrooms were observed to have an adult reading one-on-one with a child or to a small group of children. Ninety-two percent of the classrooms were found to have time set aside for children to read alone or with others. Few classrooms had children that attempted to write (29%) or to include writing in their play (35%). The majority of the

classrooms had teachers that did not model writing (78%) and did not help children with their own writing (74%).

Table 14 shows the developmental appropriateness of 115 classrooms in regards to the active learning program. Each of the five interest centers was observed for evidence of children's freedom to use the center, centers not being limited to the number of children allowed to play in them, children not being rotated through them, and children's initiated access to the centers. Percentages of the classrooms that were observed meeting the requirements were calculated for each of the four items observed for each of the five learning centers. Higher percentages indicated higher levels of developmentally appropriate practice in regards to the active learning program. The results indicate that 100% of the classrooms allowed children to use the block, dramatic play, and library areas, 98% of the classrooms allowed children to use the manipulative play and art areas. The art center was the most limited center of the five, with only 22% of the classrooms limiting the area, and it was the center with the least amount of freedom because of controlled rotation (76%). Low percentages of classrooms were observed having children that initiated access to the block (44%), dramatic play (59%), art (45%), and library (41%) areas, and the percent of classrooms that had children initiate access to the manipulative play areas was higher (69%).

Table 15 shows the active learning program by observing the freedom that children had to explore and play with materials in each of the five learning centers. No models or specific instructions were given in the majority of the classrooms for all of the interest centers except for the art center. Sixty-eight percent of the classrooms did not provide a model or specific instructions for this center. Very few of the classrooms

allowed children to add other materials to each of the learning centers. Fewer classrooms had children that were found to be creative in the library center (45%), with the block area coming in a close second (52%), and more classrooms had children that were creative in the manipulative play area (84%), with art coming in a close second (72%), and dramatic play in the middle (69%).

### Children's Print Concepts

Children's literacy scores were measured for 451 children using the ESTL Child Assessment tool (Appendix F). Descriptives for this instrument have been listed in Table 16. For each of the items measured, a number and percentage of children capable of demonstrating that task was given. The higher the percentage, the higher the level of literacy development observed in the children. The majority of the children were able to recognize the cover of a book (83%). Less than 50% of the children demonstrated the ability to comprehend any of the other literacy tasks, except for the "bottom picture" task, and even then, only 65% of the children completed this task.

#### Correlations between Variables

Correlations were examined between each of the predictor variables in the study: Active Learning Program, Physical Environment, Social Environment, and Teachers' Stated Philosophy. Intercorrelations between predictor variables have been presented in Table 17. Significant correlations were shown to exist between the Active Learning Program and each of the other variables. No other significant correlations were found.

Correlations between predictor variables and Children's Print Concepts have been presented in Table 18. Significant correlations were found to exist between the

Children's Print Concepts and each of the variables except for the Teachers' Stated Philosophy variable.

#### Hypotheses

The hypotheses were tested using Holmbeck's (1997) example for testing moderating and mediating models. When testing the mediating model concerning the relation between Teachers' Stated Philosophy, Developmentally Appropriate Literacy Practice, and Children's Print Concepts, it was found that there is no relation between the Teachers' Stated Philosophy and the Children's Print Concepts. In other words, teachers' beliefs about how children learn and their beliefs about how to teach children do not influence how high children score on the Print Concepts test. Due to the fact that there was not a relation between Teachers' Stated Philosophy and the Children's Print Concepts, the mediating model could not be fully tested. This is because according to Holmbeck, there must be a relation between Teachers' Stated Philosophy and Children's Print Concepts in order to proceed forward with testing the mediating effects of Developmentally Appropriate Literacy Practices.

Next, the moderating model was tested, according to Holmbeck's (1997) example, to determine whether or not Developmentally Appropriate Literacy Practices can be shown to be a moderator. When testing this model, it was found not to be significant [f(3, 261) = .288, p = .834]. See Table 19 for more detailed results. However, a significant relation was found between Teachers' Stated Philosophy and Developmentally Appropriate Literacy Practices. This means that the teachers' beliefs and thoughts about how children learn and how teachers should teach affect how teachers choose to facilitate the children's learning through the environment and experiences they

create in their classroom. Teachers' Stated Philosophy was significantly correlated with the Active Learning Program (r = .25). Therefore, Developmentally Appropriate Literacy Practices was broken down into its three components: Physical Environment, Social Environment, and Active Learning Program. Each of these three components was then entered into separate multiple regression equations to determine the influence of Teachers' Stated Philosophy on each of these individual components.

When looking at the Teachers' Stated Philosophy in relation to the Physical Environment, the results of the multiple regression analysis indicated that Teachers' Stated Philosophy significantly predicted the Physical Environment [f (1, 87) = 4.51 p =.037]. The adjusted R<sup>2</sup> indicated that the Teachers' Stated Philosophy accounted for 4% of the variance in the Physical Environment. The standardized beta for Teachers' Stated Philosophy was .22. Therefore, for every 1 point increase in Teachers' Stated Philosophy, the quality of the Physical Environment will increase by .22 of a point. This means that the teachers' beliefs and thoughts about how children learn and how teachers should teach affect how teachers design the physical environment of their classrooms. It determines what materials they provide the children and how the room is arranged for the children.

When running the multiple regression equation on the Teachers' Stated Philosophy in relation to the Social Environment, the results indicated that Teachers' Stated Philosophy significantly predicted the Social Environment [f (1, 86) = 4.783 p = .031]. The adjusted  $R^2$  indicated that the Teachers' Stated Philosophy accounted for 4% of the variance in the Social Environment. The standardized beta for Teachers' Stated Philosophy was .23. Therefore, for every 1 point increase in Teachers' Stated

Philosophy, the Social Environment score will increase by .23 of a point. This means that the teachers' beliefs and thoughts about how children learn and how teachers should teach affect how much teachers allow children to interact with one another in the classroom. Their beliefs also affect how much they interact with the children.

The multiple regression equation for the Teachers' Stated Philosophy in relation to the Active Learning Program indicated that Teachers' Stated Philosophy significantly predicted the Active Learning Program [f (1, 85) = 6.64 p = .012]. The adjusted R<sup>2</sup> indicated that the Teachers' Stated Philosophy accounted for 6% of the variance in the Active Learning Program. The standardized beta for Teachers' Stated Philosophy was .27. Therefore, for every 1 point increase in Teachers' Stated Philosophy, the Active Learning Program scorewill increase by .27 of a point. This means that teachers' beliefs and thoughts about how children learn and how teachers should teach affect how teachers facilitate the learning of the children. It influences the kinds of activities teachers provide for the children and the ways they allow the children to interact with the materials that are provided.

Next, due to the significant correlations found between Children's Print Concepts and each of the three components of the Developmentally Appropriate Literacy Practices, as listed in Table 18, a multiple regression equation was run to determine the relation between Developmentally Appropriate Literacy Practice and Children's Print Concepts. The results indicated that Developmentally Appropriate Literacy Practices significantly predicted Children's Print Concepts [f (3, 419) = 6.96, p < .00]. The adjusted  $\mathbb{R}^2$ indicated that the Developmentally Appropriate Literacy Practices accounted for 4% of the variance in the Children's Print Concepts. The results indicated that the Social

Environment and the Active Learning Program were significant predictors of Children's Print Concepts (p = .001, p. = .032 respectively). However, the Physical Environment was not a significant predictor of the Children's Print Concepts (p = .065).

# CHAPTER V

### Discussion

### **Conclusion**

## Teachers' Stated Philosophy

As stated in the review of the literature, Teachers' Stated Philosophy is defined as the beliefs that teachers have about how children "develop, how they learn, and what is appropriate" for their age, and it also includes teachers' beliefs about their "orientation to control, to children's play, and to curriculum planning and development" (Smith & Dickison, 1994, p. 348). In the results section, it was found that teachers had the highest levels of developmentally appropriate philosophy in relation to the belief that their children should be allowed to play, to sing and listen to music, and to choose from a variety of learning areas and projects. They also had high levels of developmentally appropriate philosophy in relation to the belief that children learn through active experience and in believing that class materials and resources should be child accessible. In other words, teachers believe that children learn through active experience by playing and having different learning experiences and materials made available for them to choose.

According to the literature, these beliefs influence the way teachers interact with children and the way they contribute to the language environment of the classroom (Stauffer, 1970; Smith & Dickinson). For example, the literature reveals that teachers who value play should also be found to provide the children with more language

opportunities that are rich in nature (Smith & Dickinson). Therefore, the teachers in this sample should ideally be providing language-rich opportunities for the children in their classroom that would most likely be taking place through play and active experiences with the children.

The results also indicated that teachers demonstrated the lowest level of developmentally appropriate philosophy in regards to their belief that children should not participate in whole class teacher directed instruction or rote counting, and that parents should read stories to the children in class. They also had low levels of developmentally appropriate philosophy in relation to the belief that programs should use learning which is individualized one-to-one learning and that activities should be child initiated. In other words, the majority of teachers from this study believe that children should participate in more whole class teacher directed instruction, and they do not find it as important that the learning be individualized to the child or that the activities be chosen by the children.

This view of children as learners is very limited, and according to the literature, teachers with these kinds of views tend to provide "less access to print, fewer opportunities to participate in literacy, and little experience listening to or discussion" literature (McGill-Franzen et al., p. 443, 462). Therefore, the teachers in this sample can be expected to provide their children with fewer experiences with literature and print.

It is interesting that these teachers believe that the materials in their classroom should be child accessible, but they believe that the teachers should choose what the children access, and how the children use the materials. It is also interesting that the teachers believe that children should be active learners, but that the teaching should be

teacher directed at the whole group. These beliefs seem to limit the amount the children can actually be responsible for their own learning and learn at their own pace.

Therefore, according to the literature and the beliefs of the teachers in this study there are a couple of conclusions that can be drawn. First, because of their developmentally appropriate beliefs in relation to play and children as active learners, it would seem as if these teachers would provide children with various opportunities for conversations to take place within play-time and that these conversations would be rich in quality. However, due to the teachers' limited views of children as learners, these teachers would not provide children with opportunities to engage in literature or print activities. In other words, the children in these classrooms would experience the spoken language aspect of becoming literate, but not the written aspect.

One final area to mention is the lack of importance that teachers seem to place on having parents read stories to the children in the classroom. This belief has huge implications for the children in these classrooms. According to the literature, "children sense what the teacher views as important and often take on those values themselves (Stauffer, 1970)" (Morrow, 1982b, p. 340). Therefore, the children are able to sense that their teachers do not view parents reading stories to the children as important, and these children are at risk for adopting this same view. Even more, these teachers' beliefs are going to influence their actions, and if they do not value parents reading to children, then they will not have parents read to the children (Rowell, 1998). This belief could lead to children having very limited experiences with parents as readers, and could in turn lead to less literacy development in this area.

# Teachers' DALP

Physical Environment. According to one body of literature, 70% of the classrooms observed in the Dunn et al. (1994) study were found to have literacy areas. However, in studies by Morrow (1982b) and Rowell (1998), they found the opposite to be true. They found that very few classrooms had writing centers and/or library corners and the classrooms that did, had library corners that were in poor condition. Raben and Coats (2004) also found that most classrooms do not have literacy materials and resources for the children. In looking at the results of this study, most classrooms were found to have a book area for reading, and in most classrooms this area was orderly and inviting. Most of the classrooms also had the alphabet visible for the children to see. These findings do not seem to be supported by the majority of literature. The fact that these classrooms had library corners and literacy resources, such as the alphabet, is not the norm, according to the majority of the literature. However, the fact that the library corners were attractive to the children has implications for the children's behavior and literacy development. The literature states that when the library corners in classrooms are made to be attractive, more children engaged in literacy activities, children were more willing to participate in literacy activities, children were involved in literacy activities more frequently, and children were more creative with the materials that were provided (Morrow, 1982b, 1990).

Very few classrooms in this study were found to have areas for writing, and even fewer had writing tools and writing props in other areas of the classroom. Only about half of the classrooms had a sufficient amount of books available for the children to read. The majority of these classrooms also did not have books in the science, dramatic play, or

block areas. About half of the classrooms did not have any teacher writing visible to the children, and even more did not have any of the children's writing visible. These findings are congruent with the literature because the literature states that the majority of classrooms observed were found to be missing print enriched centers, literacy materials, and literacy props in the dramatic play center or other areas of the classroom (Raben & Coats, 2004; Rowell, 1998). Furthermore, the literature states that children's writing and literacy related work is seldom on display in the classroom, and this is exactly what this study revealed (Rowell). The implications of these findings are that the classrooms in this study are not literacy-rich environments, and children are not going to have opportunities to interact with print, literature, literacy materials, and literacy activities (Watkins & Bunce, 1996). Therefore, children will not benefit from these experiences, and their early literacy development will not be enhanced (Dunn, et al., 1994; Lamme et al., 2002; Morrow, 1992; Rybczynski & Troy, 1995; Rowell, 1998; Whitehurst & Lonigan, 1998)

The majority of the classrooms observed were indicated to have all five of the learning centers clearly defined and labeled. The dramatic play area was observed as the most common learning center for classrooms to have as being clearly defined and labeled. This is a positive finding because the dramatic play area is one of the most facilitating areas in the classroom for children's play. And children's play is important because the literature shows that it provides opportunities for teachers to model reading and writing, to introduce literacy props, and to use more language in conversation (Schrader, 1990). According to the literature, play contributes to learning, language and literacy behaviors, as well as language and literacy development (Corsaro & Nelson,

2003; Lauritzen, 1992; Morrow, 1990; Rybczynski & Troy, 1995; Ryokai et al., 2003; Schrader, 1990; Vukelich, 1994; Whitehurst & Lonigan, 1998).

The least common centers to be clearly defined and labeled were the art center and the manipulative play center. The fact that the art center is not commonly present in the classroom has significant implications according to the literature. The literature sates that children's writing often develops out of children's artwork (Corsaro & Nelson, 2003; Lamme et al., 2002). For example, children will make a picture and then write about it or label it. The artwork is the foundation upon which the writing builds and develops. Therefore, the art center provides a very valuable outlet for children to use to develop their literacy skills, and if it is missing, the children will not have these opportunities in this area. Accordingly, the literature would lead one to believe that as a result of the classrooms in this study not having many art centers, the children in this study are not having as many literacy experiences as they would be having if they were to have the art center available to them.

*Social Environment*. The literature states that the social environment is important for young children because it is a channel that leads to literacy development and to the development of their literacy skills (Yaden & Tardibuono, 2004). In this study, children were observed to have the freedom to interact with other children and teachers. The most common area where they were allowed to have this freedom was in the manipulative play area. However, the area where the children had the least freedom to interact with others was in the library or book area.

The fact that the children in the majority of the classrooms in this study were not allowed to interact with others in the library corner has huge implications for the literacy

development of these young children. The literature reminds us that the nature of reading and writing is inherently social, and it is an active process that involves interactions with others (Bloome, 1986; Corsaro & Nelson, 2003). Children learn literacy skills by not only interacting with literacy materials, but with people who are more competent in the area of literacy than they are (Lauritzen, 1992; Morrow, 1990). Studies have shown that when children are allowed to interact with literacy materials and more competent others, they can read more environmental print and their overall reading achievement in enhanced (Raben & Coats, 2004; Vukelich, 1994). However, these findings from this study are congruent with the literature. The literature states that reading and writing are becoming "socially isolated and largely purposeless" (Nixon & Topping, 2001, p. 43).

Regardless of the lack of interactions allowed in the library area, this study did find that overall the interactions that took place between the children and between the children and the teachers was very high. The literature does not say much about the amount of interactions that take place in classrooms, except that it is becoming less of a social process (Nixon & Topping, 2001). Therefore, the findings of this study do not seem to be congruent with the literature. However, the literature does refer to the importance of these interactions on the development of children's literacy skills. When children are allowed to interact with others in the classroom who are more competent in the area of literacy, there are several positive outcomes for the children's literacy development. Children have been found to engage in more conversations, learn more about literacy, have more positive views of literacy, use literacy materials more, and develop their literacy skills (Corsaro & Nelson; 2003; Lauritzen, 1992; Nixon & Topping, 2001; Neuman, 1991).

Active Learning Program. The active learning program is comprised of the activities within the physical environment, plus the developmental play within the social environment. In looking at this area of the study, it was found that most classrooms were observed to have about 1 book reading session a day where the teacher read 1 book for about 5 to 10 minutes. Most classrooms were also found to have time set aside for children to read alone or with others. However, very few of the classrooms were observed to have an adult reading one-on-one with a child or to a small group of children. The literature discusses the importance of shared reading activities, and how teachers should read to their children a minimum of three times a day (Massey, 2004). The findings of this study agree with the literature because a study by Morrow (1982b) found that on average, teachers do not even read to their children once a day, much less three times a day. However, the literature states that shared reading experiences are important for young children because they increase children's language and literacy development (Bennett et al., 2002; Watkins & Bunce, 1996). The literature also reveals that greater amounts of time spent in shared reading increases children's literacy and language development (Rush, 1999).

The majority of the classrooms had teachers that did not model writing and did not help children with their own writing. Few classrooms had children that attempted to write or to include writing in their play. These findings agree with the literature because the literature states that most classrooms do not have literacy activities for children (Morrow, 1982b; Rowell, 1998). These findings also make sense because of the findings stated earlier in the Physical Environment section that show that teachers from this study do not make writing tools and writing props available to children in the various learning

centers of the classroom. If teachers are not allowing children to have access to writing materials, then the children will not even have the opportunities to attempt to write.

The results indicate that all of the classrooms allowed children to use the block, dramatic play, and library areas, and most of the classrooms allowed children to use the manipulative play and art areas. The teachers limited the access to the art center more than any of the other five centers, and the art center was the center with the least amount of freedom from controlled rotation of the children through the center by the teacher. All of these findings give insight into the importance of developmental play and the ability the children have to engage in it.

Developmental play includes children's ability to use the learning centers freely. The results of this study show that children are allowed to use the centers, free of controlled rotation and limited access. This means that the children are most likely allowed to engage in some form of developmental play as a means of learning. This is important because the literature states that these play opportunities allow for more modeling, learning, and language and literacy development to take place because children can use literacy in more meaningful ways (Corsaro & Nelson, 2003; Lauritzen, 1992; Massey, 2004; Morrow, 1990; Schrader, 1990; Whitehurst & Lonigan, 1998). The literature does not state any statistics concerning the use, controlled rotation, or limitation of centers, but it does state that most teachers do not allow their children to engage in lengthy amounts of developmental play (Schrader, 1990).

The art center was the center that was most likely to be controlled and limited, however the majority of teachers still did not do either. Once again the implications of the art center being limited and controlled are that the children will not be allowed to use

this as an avenue for their writing to develop (Corsaro & Nelson, 2003). So, these children will have fewer opportunities for meaningful writing experiences, and as a result of this they could potentially have lower levels of literacy development.

No models or specific instructions were given in the majority of the classrooms in all of the interest centers. However, the art center was the most likely center of the five centers to have models or specific instructions, if they were to be provided. Very few of the classrooms allowed the children to add other materials to each of the learning centers. Fewer classrooms had children that were found to be creative in the library and block centers. More classrooms had children that were creative in the manipulative play and art centers, and the creativity found in the dramatic play center was mediocre.

These results seem to indicate that the teachers are limiting children's creativity because they are not allowing children to add materials to the centers or to be creative in all of the learning centers. The literature does not specifically address creativity in relation to literacy development. However, once again, if the art center had specific instructions for the children to follow, then the children will not be able to create their own pictures which have the potential to spur children on to write about them (Corsaro & Nelson, 2003). Also, the children are not allowed to engage in complex play by moving materials around the centers. This indicates that the children are not able to engage in the fullness of developmental play because part of developmental play is allowing children to choose how to use the materials creatively. And, once again, developmental play is important because it allows for more opportunities for modeling, learning, and language and literacy development to take place because children can use literacy in more

meaningful ways (Corsaro & Nelson, 2003; Lauritzen, 1992; Massey, 2004; Morrow, 1990; Schrader, 1990; Whitehurst & Lonigan, 1998).

## Children's Print Concepts

Research has shown that literacy skills begin to develop in the early years of a child's life and these skills can be measured in children as young as preschool age (Whitehurst & Lonigan, 1998). Children's literacy skills are important because studies have found that early measures of them are predictive of later literacy development and success (Whitehurst & Lonigan). In this study the majority of the children were able to recognize the cover of a book. However, less than half of the children demonstrated the ability to comprehend of all of the other literacy tasks that were tested, except for the "bottom picture" task, and even then, only slightly more could complete this task. The literacy skills and their importance. Therefore, even though the skills from this study were not in the research, they are part of a larger skill-set that was addressed in the literature as being important and valuable for young children to acquire (Whitehurst & Lonigan).

#### Correlations between Variables

Significant correlations have been shown to exist between the Active Learning Program and each of the other predictor variables: Physical Environment, Social Environment, and Teachers' Stated Philosophy. Therefore the Active Learning Program has some sort of relation to the Physical Environment, Social Environment, and Teachers' Stated Philosophy. This is interesting because by definition the Active Learning Program consists of the interplay between the Physical Environment and the

Social Environment. Therefore, these results seem to confirm the interplay between the two. No other significant correlations were found between the predictor variables.

Significant correlations were also found to exist between the Children's Print Concepts and each of the predictor variables except for the Teachers' Stated Philosophy variable. In other words, there is a relation between the Physical Environment, Social Environment, and Active Learning Program, and the Children's Print Concepts. Therefore, the Developmentally Appropriate Literacy Practice as a whole is related to Children's Print Concepts. This also means that there is no relation between Teachers' Stated Philosophy and Children's Print Concepts.

### Hypotheses

*Mediator*. Since there is no relation between the Teachers' Stated Philosophy and the Children's Print Concepts, the mediator model could not be tested. Holmbeck (1997) stated that there must be a relation between the two in order for the model to be tested. Therefore, Developmentally Appropriate Literacy Practices cannot be shown to be a mediator in the model presented. This means that varying levels of DALP do not affect the relation between Teachers' Stated Philosophy and Children's Print Concepts because there is no relation to begin with.

*Moderator*. When the moderator model was tested using Holmbeck's (1997) example, Developmentally Appropriate Literacy Practices were not shown to be a moderator, either. This means that Teachers' Stated Philosophy did not cause DALP, which would then cause Children's Outcomes. However, a significant relation was found between Teachers' Stated Philosophy and Developmentally Appropriate Literacy

Practices. The results indicated that Teachers' Stated Philosophy significantly influences teachers' DALP. Therefore, this relation was looked at more closely.

## Teachers' Stated Philosophy x DALP

A significant relation was found between Teachers' Stated Philosophy and Developmentally Appropriate Literacy Practices. Teachers' Stated Philosophy was found to influence DALP. This means that the beliefs that teachers have about children and teaching impact the way they teach and facilitate learning in the classroom. When looking at each of the components of DALP, the following was found.

*Teachers' Stated Philosophy x Physical Environment*. Teachers' Stated Philosophy significantly predicted the Physical Environment. This means that the beliefs that teachers have about children and teaching impact the way that they develop the physical environment of their classroom. It influences areas of the physical environment such as, how teachers arrange the classroom and different literacy materials they have available for the children. The Teachers' Stated Philosophy accounted for 4% of the variance in the Physical Environment. In other words, 4% of the way teachers develop the physical environment of their classrooms is determined by their beliefs that they have concerning children and teaching. Therefore, even though Teachers' Stated Philosophy influences the Physical Environment, it is not influencing it very much.

*Teachers' Stated Philosophy x Social Environment*. Teachers' Stated Philosophy significantly predicted the Social Environment. This means that the beliefs that teachers have about children and teaching impact the way that they facilitate the social environment in their classroom. It determines how much they allow children to interact with one another and how much teachers interact with them. The Teachers' Stated

Philosophy accounted for 4% of the variance in the Social Environment. In other words, 4% of the way teachers facilitate the social environment of their classrooms is determined by their beliefs that they have concerning children and teaching. Therefore, even though Teachers' Stated Philosophy influences the Social Environment, it is not influencing it very much.

*Teachers' Stated Philosophy x Active Learning Program.* Teachers' Stated Philosophy significantly predicted the Active Learning Program. This means that the beliefs that teachers have about children and teaching impact the way that they facilitate the active learning program in their classroom. It determines how teachers allow children to interact with the materials in the Physical Environment, as well as the children and teachers in the Social Environment. The Teachers' Stated Philosophy accounted for 6% of the variance in the Active Learning Program. In other words, 6% of the way teachers facilitate the Active Learning Program of their classrooms is determined by their beliefs that they have concerning children and teaching. Therefore, even though Teachers' Stated Philosophy influences the Active Learning Program, it is not influencing it very much. However, Teachers' Stated Philosophy significantly predicted more of the Active Learning Program that it did the Physical Environment or the Social Environment.

Even though a significant relation was found between Teachers' Stated Philosophy and DALP, the Teachers' Stated Philosophy did not account for very much of the variance in the teachers' DALP. One possible explanation for this could be that the measure for the Teachers' Stated Philosophy was not as good as it could have been because it was not developed as a result of this study, but as a result of a previous study that this data was taken from. Some of the teachers' DALP could also be influenced by

other factors, such as the beliefs of the principal or director. The teachers might have not had a choice in how they set up their classroom or carried out their curriculum because it may have been predetermined by the principal or director. Therefore, it would be interesting to have been able to include the principal or directors' beliefs in this study. Another factor in the teachers' DALP might be the income of the school or child care center. If the facility does not have much money, then the teachers will have limited resources, irregardless of their stated philosophy.

#### DALP x Children's Print Concepts

The results also indicated that Developmentally Appropriate Literacy Practices significantly predict Children's Print Concepts. This means that the way that teachers set up their classrooms, the materials they have, the peer/teacher interactions that take place, the activities that are provided, and the importance placed on developmental play as a means of instruction all influence the children's literacy development as measured in this study. The results also indicated that Developmentally Appropriate Literacy Practices accounted for 4% of the variance in the Children's Print Concepts. In other words, 4% of the children's literacy development is determined by the teachers' DALP. So, even though DALP significantly influences Children's Print Concepts, it is not influenced much.

When looking at the individual components of the teachers' DALP, the results indicated that the Social Environment and the Active Learning Program were significant predictors of Children's Print Concepts. However, the Physical Environment was not a significant predictor of the Children's Print Concepts. In other words, the way that teachers facilitate the social interactions that take place between children and between

children and teachers, as well as the interplay between the materials provided and how children are allowed to interact with them both influence children's literacy development. However, just the way that the classroom is arranged and the materials that are provided do not influence the children's literacy development independently. These materials must be combined with the social interactions and the activities and instruction that the teachers provide.

#### **Implications of Results**

The results indicated that Teachers' Stated Philosophy does not influence Children's Print Concepts. Therefore, if the goal of hiring the teacher is so that she/he will improve the literacy development of young children then, one of the most important implications of these results is that teachers should not be evaluated and hired based upon their stated beliefs about teaching and children. Teachers should not be hired based upon an interview where they are asked about these beliefs because these beliefs have been shown to be unrelated to the actual literacy development of children.

Even though Teachers' Stated Philosophy was shown to influence the teachers' classroom practice (DALP), it was not shown to influence it by much. Therefore, an interview that would be used to determine how a teacher would teach is not very beneficial either. This is an important finding because teachers are often hired based upon an interview where they are asked their beliefs with the expectation that these beliefs will influence their practice and the success of the children in their classroom. However, the results of this study indicate that teachers' beliefs do not influence how the

children will succeed in literacy, and they also do not greatly influence how teachers will teach.

When looking at the fact that teachers' classroom practice (DALP) influences the children's literacy scores, it is also found that it does not influence it much. One possible explanation for this is that the teachers' DALP is greatly influencing the development of the whole child and not just the area of literacy, but the area of literacy was the only area tested. Therefore, a true measure of the influence of teachers' DALP on the whole development of the child is not determined, and its influence on literacy development alone is not very noticeable.

Another reason for the lack of significant influence of the DALP on the Children's Print Concepts could be that the method used for testing the children is not a good method. The children were questioned individually concerning different literacy tasks, instead of being observed in their natural setting, engaging in the activities of their own accord. The children may not have been willing to be tested and therefore may not have given a true representation of their literacy abilities.

Another reason for the lack of significant influence might be that the questions used to determine the children's literacy development may not have been an appropriate measure of literacy development for preschool children. The questions involved knowing some advanced print concepts. These print concepts may not be known by preschool children in general, regardless of their instruction or of the teachers' practice.

The results that indicate that the Active Learning Program influences Children's Print Concepts more than the Physical Environment or the Social Environment are important to mention, as well. The implications of this are that the Active Learning

Program needs to be an area that is studied and researched more. Right now there is not a good measure or definition of the Active Learning Program in the research world. However, as the results indicate, this is not an area to be overlooked. Once the Active Learning Program is further investigated and a good instrument for its measurement is created, then professional development concerning it needs to take place. Teachers, directors, principals, and parents need to be made aware of its importance and of how to maximize its influence in the classroom.

Not only does future research need to be conducted concerning the Active Learning Program, but it also needs to be conducted concerning the impact of Teachers' Stated Philosophy on more of what the teacher actually practices in the classroom. When researching the topic for the literature review, very little was found regarding the topic of Teachers' Stated Philosophy. This area needs to be looked at in more detail because so many teachers are hired based upon this variable. Therefore, it is important to understand what the Teachers' Stated Philosophy actually influences, and if it even does have an influence on anything.

### Limitations of Study

One of the greatest limitations of this study is that a preexisting data set was used to gather data for this study. The instruments for collecting the data were created and used prior to the study. The instruments were not designed as a result of the study; therefore instruments and the data that they collected were not perfectly fitted to this study. This also leads to some of the measures being compromised. If the data had been

collected as a result of the study, the measures for collecting some of the data might have been different and more appropriate measures of the variables.

Some of the measures that were compromised were the areas of measuring the Social Environment and the Children's Print Concepts. These two areas did not have sufficient measures. Only three questions were used to determine the measure of the Social Environment, and the print concepts that were used to determine the Children's Print Concepts may not have been developmentally appropriate for this preschool age group of children.

Another limitation is that the teachers in this study were not interviewed concerning their specific beliefs about literacy development in children. They were interviewed concerning very general beliefs about how children learn and how to teach children. It would have been more helpful to know their beliefs concerning how children learn literacy concepts and how they believe teachers should teach these concepts. This could also be an area for future research.

### REFERENCES

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge: MIT Press.
- Armbruster, B., Lehr, F. & Osborn, J. (2001). Put reading first: The research building blocks for teaching children to read. Ann Arbor, MI: Center for the Improvement of Early Reading Achievement. Accessed April 25, 2006 at http://www.mfl.gov/partnershipforreading/publications/reading\_first/.html
- Bennett, K. K., Weigel, D. J., & Martin, S. S. (2002). Children's acquisition of early literacy skills: Examining family contributions. *Early Childhood Research Quarterly*, 17, 295-317.
- Bloome, D. (1986). Building literacy and the classroom community. *Theory Into Practice*, *25*, 71-76.
- Bredekamp, S., & Copple, C. (1997). *Developmentally appropriate practice in early childhood programs* (Rev. ed.). Washington, DC: National Association for the Education of Young Children
- Burgess, S. R. (2002). The influence of speech perception, oral language ability, the home literacy environment, and pre-reading knowledge on the growth of phonological sensitivity: A one-year longitudinal investigation. *Reading and Writing: An Interdisciplinary Journal*, *15*, 709-737.
- Charlesworth, R., Hart, C. H., Burts, D. C., & Hernandez, S. (1991). Measuring the developmental appropriateness of kindergarten teachers' beliefs and practices. *Early Childhood Research Quarterly*, 8, 255-276.
- Corsaro, W. A., & Nelson, E. (2003). Children's collective activities and peer culture in early literacy in American and Italian preschools. *Sociology of Education*, 76, 209-227.
- Dunn, L., Beach, S. A., & Kontos, S. (1994). Quality of the literacy environment in day care and children's development. *Journal of Research in Childhood Education*, 9, 24-34.
- Guisbond, L., & Neill, M. (2004). Failing our children: No Child Left Behind undermines quality and equity in education. *The Clearing House*, 78, 12-16.

- Gustafsson, K., & Mellgren, E. (2002). Using text in pre-school: A learning environment. *Early Child Development and Care, 172*, 603-624.
- Haney, M., & Hill, J. (2004). Relationships between parent-teaching activities and emergent literacy in preschool children. *Early Child Development and Care*, 174, 215-228.
- Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literature. *Journal of Consulting and Clinical Psychology*, 65, 599-610.
- Johnston, F. R. (2004). Phonics, phonological awareness, and the alphabet. Educators Publishing Service. Accessed April 25, 2006 at http://www.epsbooks.com/downloads/articles/phonological\_awareness.pdf
- Lamme, L. L., Fu, D., Johnson, J., & Savage, D. (2002). Helping kindergarten writers move toward independence. *Early Childhood Education Journal*, *30*, 73-79.
- Lauritzen, P. (1992). Facilitating integrated teaching and learning in the preschool setting: A process approach. *Early Childhood Research Quarterly*, 7, 531-550.
- Marcon, R. A. (1994). Doing the right thing for children: Research and policy reform in the District of Columbia public schools. *Young Children*, 50(1), 8-20.
- Marms, T., Clifford, R. & Cryer, D. (1998). Early Childhood Environment Rating Scale (rev. ed.). New York: Teacher's College Press.
- Massey, S. L. (2004). Teacher-child conversation in the preschool classroom. *Early Childhood Education Journal*, *31*, 227-231.
- McGill-Franzen, A., Lanford, C., & Adams, E. (2002). Learning to be literate: A comparison of five urban early childhood programs. *Journal of Educational Psychology*, *94*, 443-464.
- Morrow, L. M. (1982a). Increasing children's use of literature through program and physical design changes. *Elementary School Journal*, *83*, 131-137.
- Morrow, L. M. (1982b). Relationships between literature programs, library corner designs, and children's use of literature. *Journal of Educational Research*, 75, 339-344.
- Morrow, L. M. (1990). Preparing the classroom environment to promote literacy during play. *Early Childhood Research Quarterly*, *5*, 537-554.

- Neuman, S. B. (1991). Peers as literacy informants: A description of young children's literacy conversations in play. *Early Childhood Research Quarterly*, *6*, 233-248.
- Nixon, J. G., & Topping, K. J. (2001). Emergent writing: The impact of structured peer interaction. *Educational Psychology*, 21, 41-58.
- No Child Left Behind Act. (2001). The White House: President George W. Bush. Retrieved February 6, 2006 from http://www.whitehouse.gov/news/reports/nochild-left-behing.htm.
- Pellegrini, A.D., Melhuish, E., Jones, I, Trojanowska, L, & Gilden, R. (2002). Social contexts of learning literate language: The role of varied, familiar, and close peer relationships. *Learning and Individual Differences*, 12, 375-389.
- Raban, B., & Coates, H. (2004). Literacy in the early years: A follow-up study. *Journal* of *Research in Reading*, 27, 15-29.
- Rowell, E. H. (1998). A letter a week, a story a day, and some missed opportunities along the way: A study of literacy in prekindergarten classes. *Child Study Journal, 28*, 201-222.
- Rush, K. L. (1999). Caregiver-child interactions and early literacy development of preschool children from low-income environments. *Topics in Early Childhood Special Education*, 19, 3-14.
- Rybczynski, M., & Troy, A. (1995). Literacy-enriched play centers: Trying them out in "the real world". *Childhood Education*, 72, 7-12.
- Ryokai, K., Vaucelle, C., & Cassell, J. (2003). Virtual peers as partners in storytelling and literacy learning. *Journal of Computer Assisted Learning*, 19, 195-208.
- Schrader, C. T. (1990). Symbolic play as a curricular tool for early literacy development. *Early Childhood Research Quarterly*, *5*, 79-103.
- Smith, M. W., & Dickinson, D. K. (1994). Describing oral language opportunities and environments in head start and other preschool classrooms. *Early Childhood Research Quarterly*, 9, 345-366.
- Smith, M. W., & Dickinson, D. K., with Sangeorge, A., & Anastasopoulos, L. (2002). Early language & literacy classroom observation (ELLCO) toolkit, research edition. Baltimore: Paul H. Brookes Publishing Co.
- Teale, W., & Sulzby, E. (Eds.). (1986). *Emergent literacy: Writing and reading*. Norwood, NJ: Ablex.
- Vukelich, C. (1994). Effects of play interventions on young children's reading of environmental print. *Early Childhood Research Quarterly*, *9*, 153-170.
- Walsh, K. (2004). Through the looking glass: How NCLB's promise requires facing some hard truths about teacher quality. *The Clearing House*, 78, 22-25.
- Watkins, R. V., & Bunce, B. H. (1996). Natural literacy: Theory and practice for preschool intervention programs. *Topics in Early Childhood Special Education*, 16, 191-212.
- Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 69, 848-872.
- Yaden, D. B., & Tardibuono, J. M. (2004). The emergent writing development of urban Latino preschoolers: Developmental perspectives and instructional environments for second-language learners. *Reading & Writing Quarterly*, 20, 29-61.

#### IAS: Criteria for Measuring Teachers' Stated Philosophy

#### Build with blocks

Select from a variety of learning areas and projects the teacher makes available (i.e., construction, art, music, science, experiences, etc.)

Participate in dramatic play

Experiment with writing by drawing, copying, and using their own invented spelling

Play with games and puzzles

Explore science materials (animals, plants, wheels, gears, etc.)

Sing and/or listen to music

Color and cut freely (only self-drawn shapes, no pre-drawn shapes)

Use manipulatives (like pegboards, Legos, and Unifix Cubes)

Do commercially-prepared phonics activities (R)

Work in predetermined ability level groups (R)

Circle, underline, and/or mark items on worksheets (R)

Use flashcards with ABCs, sight words, and/or math facts (R)

Participate in rote counting (R)

Practice handwriting on lines (R)

Help other children get or work with materials if they are unable to do it alone (i.e., if a child with a special need cannot do an activity alone)

Color, cut, and paste pre-drawn forms (R)

Participate in whole class teacher directed instruction (R)

Discuss how children in the class are similar and how they are each unique individuals

Table 1 (continued)

Sit for long periods of time (i.e., 15 minutes or more) (R)

Participate in non-stereotypical activities

Have parents read stories or share a skill or hobby with the class

Participate in specifically planned outdoor activities

Play

Draw, paint, work with clay, and use other art media

Solve concrete math problems that are incorporated into other subject areas

(R) – Questions have been recoded in the final analysis in order for all questions to be stated positively.

#### <u>Pre-K Survey of Beliefs and Practices: Criteria for Measuring Teachers' Stated</u> <u>Philosophy</u>

I believe the most important developmental goal of pre-k is: academic preparation vs social and emotional growth

- I believe that pre-k children learn best through: direct instruction vs active experience
- I believe that activities in a pre-k program should be: teacher initiated vs child initiated
- I believe that my role as teacher of pre-K children is to: dispense knowledge vs facilitate learning
- I believe that pre-K programs should use a learning format which is: group oriented vs individualized one-to-one
- I believe that pre-K children in a group learn effectively through interaction with: adults vs peers
- I believe that class materials and resources for pre-K children should be: distributed vs child accessible

## ELLCO: Criteria for Measuring the Physical Environment

#### **Book Area**

1. Is an area set aside just for book reading?
2. Is the area where books are located orderly and inviting? $\rightarrow \rightarrow \rightarrow$
3. Does the area where books are located have soft materials?
Book Selection
4. Do the books in the classroom range in difficulty level?
5. How many books are easily available to children?
6. How many books convey factual information?
7. Are there three or more books related to the current theme?
Book Use
8. How many books are available in the science area?
9. How many books are available in the dramatic play area?
10. How many books are available in the block area?
11. How many books are available in other areas (not including the book area)? $\rightarrow$
12. Is there a place for children to listen to recorded books/stories?

#### Writing Materials

13. Is the alphabet visible?
14. Are there word cards with names or familiar words?
15. Are there templates or tools to help children form letters?
16. How many varieties of paper are available for writing?
17. How many varieties of writing tools are available?
18. Is a distinct area set up and functioning for writing?
Writing Around the Room
19. How many varieties of teacher dictation are on display in the classroom?
20. How many charts, big books, or other evidence of full-group literacy are there in the classroom?
21. How many varieties of children's writing are on display in the classroom?
22a. Are there writing tools in the dramatic play or block area?
22b. Are there props that prompt children to write in the dramatic play or block area?
23. Are there alphabet puzzles available for children's use?
24. Are there puzzles with words available for children's use?

#### ELLCO: Criteria for Measuring the Active Learning Program

Opportunities for child choice and initiative

Oral language facilitation

Approaches to book reading

Approaches to children's writing

Approaches to curriculum integration

Number of full-group book-reading sessions

Total number of minutes spent on full-group book-reading

Total number of books read during the full-group book-reading sessions(s)

Adult observed engaging in one-to-one book reading or small-group book-reading

Time set aside for children to look at books alone or with a friend

Children include writing in their play

Children attempt to write letters or words

Number of times an adult helped a child write

Adult modeled writing

# LCQI-Accessibility of Print Materials: Criteria for Measuring the Active Learning <u>Program</u>

#### Blocks

	Children not allowed to use (verbal or physical restrictions) (R) Limit number of children (verbal or physical restrictions) (R) Controlled rotation (R) Child initiated access (freedom to move in and out and stay as long as want)
Dramatio	c Play
( [ ( (	Children not allowed to use (verbal or physical restrictions) (R) Limit number of children (verbal or physical restrictions) (R) Controlled rotation (R) Child initiated access (freedom to move in and out and stay as long as want)
Manipul	ative Play
1 [ [ [ [ [ [	Children not allowed to use (verbal or physical restrictions) (R) Limit number of children (verbal or physical restrictions) (R) Controlled rotation (R) Child initiated access (freedom to move in and out and stay as long as want)
Art	
( ] ( (	Children not allowed to use (verbal or physical restrictions) (R) Limit number of children (verbal or physical restrictions) (R) Controlled rotation (R) Child initiated access (freedom to move in and out and stay as long as want)
Library/	Books
	Children not allowed to use (verbal or physical restrictions) (R) Limit number of children (verbal or physical restrictions) (R) Controlled rotation (R) Child initiated access (freedom to move in and out and stay as long as want)

<sup>(</sup>R) – Questions have been recoded in the final analysis in order for all questions to be stated positively.

#### LCQI-Nature of Experience: Criteria for Measuring the Active Learning Program

#### Blocks

Models or specific instructions provided (R) Children can explore, experiment, problem solve, be creative Materials may be added to an activity by the children Children can bring materials from other areas of the room

#### Dramatic Play

Models or specific instructions provided (R) Children can explore, experiment, problem solve, be creative Materials may be added to an activity by the children Children can bring materials from other areas of the room

#### Manipulative Play

Models or specific instructions provided (R) Children can explore, experiment, problem solve, be creative Materials may be added to an activity by the children Children can bring materials from other areas of the room

#### Art

Models or specific instructions provided (R) Children can explore, experiment, problem solve, be creative Materials may be added to an activity by the children Children can bring materials from other areas of the room

#### Library/Books

Models or specific instructions provided (R) Children can explore, experiment, problem solve, be creative Materials may be added to an activity by the children Children can bring materials from other areas of the room

(R) – Questions have been recoded in the final analysis in order for all questions to be stated positively.

## IAS: Descriptives for Teachers' Stated Philosophy N = 101

Criteria <sup>a</sup>	Mean	SD
Build with blocks	4.74	.50
Select from learning areas and projects	4.82	.40
Participate in dramatic play	4.76	.70
Experiment with writing	4.58	.68
Play with games and puzzles	4.77	.46
Explore science materials	4.20	.95
Sing and/or listen to music	4.89	.35
Color and cut freely (self-drawn shapes)	4.34	.83
Use manipulatives	4.76	.49
Do not do phonics activities <sup>b</sup>	3.22	1.46
Do not work in ability level groups <sup>b</sup>	3.00	1.51
Do not mark on worksheets <sup>b</sup>	3.40	1.51
Do not use flashcards <sup>b</sup>	2.87	1.47
Do not participate in rote counting <sup>b</sup>	1.96	1.18
Do not practice handwriting on lines <sup>b</sup>	3.30	1.42
Help other children with materials	4.09	1.25
Do not color, cut, and paste (pre-drawn forms) <sup>b</sup>	2.62	1.38
Do not participate in whole class teacher directed instruction <sup>b</sup>	1.80	1.10

Table 7 (continued)

Children are similar and unique	3.72	.99
Do not sit for long periods of time <sup>b</sup>	3.21	1.48
Non-stereotypical activities	3.96	1.22
Parents read stories or share with class	1.86	.74
Participate in planned outdoor activities	3.31	1.03
Play	4.95	.35
Use art media	4.80	.49
Math problems in other subject areas	3.28	1.38

<sup>a</sup> scale for this instrument was 1-5; 1=Low DAP, 5=High DAP <sup>b</sup> statement has been recoded to reflect reverse coding of score

Table 8

Criteria <sup>a</sup>	Mean	SD
Most important developmental goal is: social and emotional growth	7.72	2.00
Children learn best through: active experience	8.54	1.77
Activities should be: child initiated	6.97	2.07
My role as teacher of is to: facilitate learning	7.80	1.96
Programs should use learning which is: individualized one-to-one	6.23	2.39
Children learn through interaction with: Peers	7.52	1.92
Class materials and resources should be: child accessible	8.08	2.19

Pre-K Survey of Beliefs and Practices: Descriptives for Teachers' Stated Philosophy N=93

<sup>a</sup> scale for this instrument was 1 - 10

## ELLCO: Descriptives for Physical Environment N=117

Criteria	<u>n</u>	%
Book area for reading	92	78.6
Book area orderly and inviting	88	75.2
Book area soft materials	86	73.5
Books range in difficulty	114	97.4
How many books available		
0-15	17	14.5
16-25	39	33.3
26+	61	52.1
How many books (factual)		
1-2	11	9.4
3-5	39	33.3
6+	67	57.3
3 or more books related to theme	51	43.6
How many books in science area		
0	85	72.6
1-3	17	14.5
4+	15	12.8
How many books in dramatic play area		
0	107	91.5
1-3	3	2.6
4+	7	6.0
How many books in block area		
0	109	93.2
1-3	5	4.3
4+	3	2.6

How many books in other areas		
0	56	47.9
1-3	20	17.1
4+	41	35.0
Place to listen to books on tape	58	49.6
Alphabet visible	94	80.3
Word cards	75	64.1
Templates to help form letters	70	59.8
How many varieties of paper		
0	3	2.6
1-2	56	47.9
3+	58	49.6
How many varieties of writing tools		
0	3	2.6
1-2	29	24.8
3+	85	72.6
Area for writing	29	24.8
How may varieties of teacher writing		
0	50	42.7
1-2	41	35.0
3-5	18	15.4
6+	8	6.8
How many charts, big books, etc		
0	14	12.0
1-2	29	24.8
3-5	35	29.9
6+	39	33.3

How many varieties of child's writing 0 1-2 3-5 6+	90 19 4 3	77.6 16.4 3.4 2.6
Writing tools in dramatic play/block area	7	6.0
Writing props in dramatic play/block area	3	2.6
Alphabet puzzles	58	49.6
Puzzles with words	68	58.

## LCQI: Descriptives for Physical Environment N=114

Criteria	<u>n</u>	%
Blocks		
Clearly defined center area labeled	85	73.9
Materials available (not as center)	20	17.4
No materials or center	10	8.7
Dramatic Play		
Clearly defined center area labeled	109	94.8
Materials available (not as center)	4	3.5
No materials or center	2	1.7
Mainipulative Play		
Clearly defined center area labeled	89	78.1
Materials available (not as center)	25	21.9
No materials or center	0	.0
Art		
Clearly defined center area labeled	90	78.3
Materials available (not as center)	24	20.9
No materials or center	1	.9
Library/Books		
Clearly defined center area labeled	95	83.3
Materials available (not as center)	14	12.3
No materials or center	5	4.4

Criteria	<u>n</u>	%
Blocks	55	47.8
Dramatic Play	72	62.6
Manipulative Play	81	70.4
Art	80	69.6
Library/Books	51	44.3

## LCQI-Children's Freedom to Interact with Others in Each of the 5 Interest Centers: Descriptives for Social Environment N=115

## ECERS: Descriptives for Social Environment

Criteria <sup>a</sup>	Mean	SD
Staff-child Interactions	6.58	1.28
Interactions among children	6.69	1.12

<sup>a</sup> scale for this instrument was 1 - 7

## ELLCO: Descriptives for Active Learning Program N=110

Criteria	Mean	SD	<u>n</u>	%
Opportunities for child choice and initiative <sup>a</sup>	3.60	1.15		
Oral language facilitation <sup>a</sup>	3.27	.84		
Approaches to book reading <sup>a</sup>	3.55	.95		
Approaches to children's writing <sup>a</sup>	2.87	1.05		
Approaches to curriculum integration <sup>a</sup>	3.24	1.32		
Number of full-group book- reading sessions <sup>b</sup> 0 1 2 +	.84	.58	30 74 12	25.9 63.8 10.3
Total number of minutes spent on full-group book- reading <sup>c</sup> < 5 5-10 11-14 15 +	2.28	1.05	32 37 26 19	28.1 32.5 22.8 16.7
Total number of books read during the full-group book- reading sessions(s) $b^{b}$ 0 1 2 +	1.17	.80	28 39 48	24.3 33.9 41.7

Table 13 (continued)

Adult observed engaging in one-to-one book reading or small-group book-reading <sup>d</sup> Yes No	.19	.39	22 94	19.0 81.0
Time set aside for children to look at books alone or with a friend <sup>d</sup>	.92	.27		
Yes No			108 9	92.3 7.7
Children include writing in their play <sup>d</sup>	.35	.48		
Yes No			41 75	35.3 64.7
Children attempt to write letters or words <sup>d</sup>	.29	.46		
Yes			34	29.3
No			83	70.7
Number of times an adult helped a child write <sup>b</sup>	.32	.58		
0			86	74.1
1-2			23	19.8
>2			1	0.0
Adult modeled writing <sup>d</sup>	.22	.41		
Yes			25	21.6
No			91	78.4

<sup>a</sup> scale used for these questions was 1-5<sup>b</sup> scale used for these questions was 0-2<sup>c</sup> scale used for these questions was 1-4<sup>d</sup> scale used for these questions was 0-1

Table 14

Criteria	<u>n</u>	%
Blocks		
Children allowed to use	115	100.0
Do not limit number	103	89.6
Do not control rotation	108	93.9
Child initiated access	51	44.3
Dramatic Play		
Children allowed to use	115	100.0
Do not limit number	99	86.1
Do not control rotation	107	93.0
Child initiated access	68	59.1
Manipulative Play		
Children allowed to use	113	98.3
Do not limit number	99	86.1
Do not control rotation	105	91.3
Child initiated access	79	68.7
Art		
Children allowed to use	113	98.3
Do not limit number	90	78.3
Do not control rotation	88	76.5
Child initiated access	52	45.2
Library/Books		
Children allowed to use	115	100.0
Do not limit number	105	91.3
Do not control rotation	103	89.6
Child initiated access	48	41.7

LCQI-Accessibility of Print Materials: Descriptives for Active Learning Program N=115

Criteria	<u>n</u>	%
Blocks		
No models or specific instructions provided	115	100.0
Children can explore, experiment, problem solve, be creative	60	52.2
Materials may be added to an activity by the children	8	7.0
Children can bring materials from other areas of the room	23	20.0
Dramatic Play		
No models or specific instructions provided	114	99.1
Children can explore, experiment, problem solve, be creative	79	68.7
Materials may be added to an activity by the children	3	2.6
Children can bring materials from other areas of the room	18	15.7
Manipulative Play		
No models or specific instructions provided	113	98.3
Children can explore, experiment, problem solve, be creative	96	83.5
Materials may be added to an activity by the children	8	7.0
Children can bring materials from other areas of the room	22	19.1

## <u>LCQI-Nature of Experience: Descriptives for Active Learning Program</u> N = 115

Table 15 (continued)

Art		
No models or specific instructions provided	78	67.8
Children can explore, experiment, problem solve, be creative	83	72.2
Materials may be added to an activity by the children	2	1.7
Children can bring materials from other areas of the room	2	1.7
Library/Books		
No models or specific instructions provided	114	99.1
Children can explore, experiment, problem solve, be creative	52	45.2
Materials may be added to an activity by the children	1	.9
Children can bring materials from other areas of the room	8	7.0

## Descriptives for Children's Print Concepts N=451

Criteria	<u>n</u>	%
Cover/front of book	376	83.4
Print contains message	215	47.7
Where to start	182	40.4
Which way to go	148	32.8
Return sweep to left	77	17.1
Word by word pointing	38	8.4
First and last concept	83	18.4
Bottom picture	291	64.5
Inverted print	95	21.1
Line sequence	10	2.2
Left page read before right page	66	14.6
Word sequence	2	.4
Letter order	1	.2
Re-ordering of letters w/in word	1	.2
Meaning of question mark	19	4.2
Meaning of period	14	3.1
Meaning of comma	4	.9
Meaning of quotations	3	.7

Table 16 (continued)

Locate Mm Hh	27	6.0
Reversible words "Was" "no"	4	.9
One letter/two letters	164	36.4
One word/two words	87	19.3
First and last letter	64	14.2
Capital letter	37	8.2

## Intercorrelations for Predictor Variables

Variable	1	2	3	4
1. Physical Environment	1.00	.10	.49**	.17
2. Social Environment		1.00	.21*	.15
3. Active Learning Program			1.00	.25*
4. Teachers' Stated Philosophy				1.00

p < .05, p < .01

Correlations between Predictor Variables and Children's Print Development Outcomes

Variable	Children's Print Concepts
Physical Environment	.12*
Social Environment	.14**
Active Learning Program	12*
Teachers' Stated Philosophy	.08

p < .05, p < .01

## <u>Regression Analysis Summary for Teachers' Stated Philosophy Predicting Individual</u> <u>Components of Developmentally Appropriate Literacy Practices</u>

Variable	В	SEB	Sig.
Philosophy x Physical Environment	.04	.02	.75
Philosophy x Social Environment	.02	.01	.89
Philosophy x Active Learning Program	.06	.04	.55

\*p < .05, \*\*p < .01

## Appendix A

C#	
TT#	
T#	

#### INSTRUCTIONAL ACTIVITIES SURVEY

Teacher Form, 1998 Version - Modified

Please check the box that best represents the average frequency of each statement

	Almost	Rarely (monthly)	Sometimes	Regularly	Very Often (daily)
How often do children in your class:	than monthly)	(montiny)	(weekiy)	week)	(uany)
1. Build with blocks	• (				
2. Select from a variety of learning areas and projects the teacher makes available (i.e., construction, art, music, science, experiences, etc.)			2		
3. Participate in dramatic play					
<ol> <li>Have their work displayed in the classroom</li> </ol>					
<ol> <li>Experiment with writing by drawing, copying, and using their own invented spelling</li> </ol>					
<ol><li>Play with games and puzzles</li></ol>					
<ol> <li>Explore science materials (animals, plants, wheels, gears, etc.)</li> </ol>			-		
8. Sing and/or listen to music					
9. Move creatively in planned activities					
10. Color and cut freely (only self-drawn					
shapes, no pre-drawn shapes.					
11. Use manipulatives (like pegboards,					
12. Do commercially-prepared phonics activities					
<ol> <li>Work in predetermined ability level groups</li> </ol>					
14. Circle, underline, and/or mark items on worksheets					
15. Use flashcards with ABCs, sight words, and/or math facts					
16. Participate in rote counting					
17. Practice handwriting on lines					
18. Help other children get or work with					
materials if they are unable to do it					
alone (i.e., if a child with a special need					
cannot do an activity alone)					
19. Color, cut, and paste pre-drawn forms					

How often do children in your class:	Almost Never (less than monthly)	Rarely (monthly)	Sometimes (weekly)	Regularly (2-4 times a week)	Very Often (daily)
20. Participate in whole class teacher directed instruction					
21. Discuss how children in the class are similar and how they are each unique individuals					
22. Sit for long periods of time (i.e., 15 minutes or more)					
23. Meet people with special needs (ex., a speaker or character in a book					
24. Lose special privileges (trips, recess, free time, parties, etc.) for unacceptable behavior				14	
<ol> <li>Participate in non-stereotypical activities</li> </ol>					
<ol> <li>Receive social reinforcers (verbal encouragement, approval, attention, etc.) for appropriate behavior and/or performance</li> </ol>					
27. Get placed in time-out (such as isolation, sitting on a chair, in a corner, or being sent outside of the room)					-
28. Have parents read stories or share a skill or hobby with the class	-				
29. Participate in specifically planned outdoor activities					
<ol> <li>Participate in culturally diverse activities</li> </ol>					
31. Play					
<ol> <li>Draw, paint, work with clay, and use other art media</li> </ol>					
<ol> <li>Solve concrete math problems that are incorporated into other subject areas</li> </ol>					

- 2 -

## Appendix B



Pre-K Survey of Beliefs and Practices page 2 of 2 (adapted from Marcon, 1994; Provider, Teacher, Director Version) Director IAS continued

-

Each statement on this survey represents a continuum of two different thoughts or ideas regarding Early Childhood Education. Mark an "X" anywhere on the line which best represents your conception of Early Childhood Education. Because situations often affect how we implement our actual beliefs, this survey asks first about your belief and then about your actual program situation. Pre-K refers to the child's child care experience the year before kindergarten.

<ol> <li>I believe the most important developmental goal of pre-K is:</li> </ol>	academic preparati	on <	□ <					□ >	social and emotional growth
2. My pre-K program is most effective in fostering	g:								
3. I believe that pre-K children learn best through	n: direct instructio	n .	□ <						active experience
<ol> <li>Children in my pre-K program are learning predominantly through:</li> </ol>									
5. I believe that activities in a pre-K program sho	uld be: teacher							□ >	child
6. The activities in my pre-K program are typical	ly;								
8. In my present pre-K program, I am more likel	dispens knowled by to: arning	ie dige C	<					> 	facilitate learning
format which is: 10. My pre-K program is typically:	group oriented	- - -	< 0			 _		>	individualized one-to-one
11. I believe that pre-K children in a group learn effectively through interaction with:	adults		□ <					;	peers
<ol> <li>Most learning in my pre-K program takes pl through interactions with:</li> </ol>	ace				] [				
<ol> <li>I believe that class materials and resources for pre-K children should be:</li> </ol>	distribute	D d						C ;	1  child caccessible
14. In my pre-K program, materials and resour	ces are:								
ECC03_D1 Director IAS Jan 2004						F	age	2 of	2 76

Early Childhood Collaborative of Oklahoma An OUOSU Parth ELLCO Environment Checklist	ership	ELLCO	Cei
Fill in the circle to the correct response.			
Book Area	Y	/ N	
1. Is an area set aside just for book reading?		) 0	
2. Is the area where books are located orderly and inviting? $\rightarrow \rightarrow \rightarrow$		) Ø	
3. Does the area where books are located have soft materials? $\rightarrow$	···••··•• ···•• ···•• ···•• ···•• ···•• ···•• ···•• ···•• O	) Ø	
Book Selection			
4. Do the books in the classroom range in difficulty level? $\rightarrow \rightarrow \rightarrow \rightarrow$	Y	.O	
5. How many books are easily available to children? $\rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$		) - 15 16 - 25 D @	26 + O
6. How many books convey factual information?	•••••••• (	) 1-2 3-5 D O ©	6 + O
7. Are there three or more books related to the current theme?		Y N O ©	
Book Use	Г		
8. How many books are available in the science area?	\$\$\$\$\$\$\$\$ .	0 1-3 Ø O	4 + 0
9. How many books are available in the dramatic play area? $\rightarrow$ $\rightarrow$	• • • • • • • • • • • • • • • • • • •	© 0	0
10. How many books are available in the block area?	•	© O	0
11. How many books are available in other areas (not including th	e book area)?	Ø 0	0
12. Is there a place for children to listen to recorded books/stories	;?	Y N O Ø	

## Appendix C

#### **ELLCO**

Environment Checklist - page 2

Writing Materials	Y	N	7	
13. Is the alphabet visible?	0	0		
14. Are there word cards with names or familiar words?	Ø	0		
15. Are there templates or tools to help children form letters?	٢	0		
	0	1 - 2		3 +
16. How many varieties of paper are available for writing?	0	•	(	С
17. How many varieties of writing tools are available?	0	0	(	0
	Y	N		
18. Is a distinct area set up and functioning for writing?	0	0		
Writing Around the Room	0	1 - 2	3 - 5	6+
19. How many varieties of teacher dictation are on display in the classroom? $\rightarrow \rightarrow \rightarrow$	٢	0	0	0
20. How many charts, big books, or other evidence of full-group literacy are there in the classroom?	٢	0	0	0
21. How many varieties of children's writing are on display in the classroom? $\rightarrow \rightarrow \rightarrow$	ø	0	0	0
	Y	N		
22a. Are there writing tools in the dramatic play or block area?	0	6		
22b. Are there props that prompt children to write in the dramatic play or block area? $\rightarrow \rightarrow \rightarrow$	0	Ø		
23. Are there alphabet puzzles available for children's use?	0	Ø		
24. Are there puzzles with words available for children's use? $\rightarrow \rightarrow \rightarrow$	0	0		

ELLCO

Flemente									
Elements		5	4		3	2	1		5
<ol> <li>Organization of the classro</li> </ol>	om	Ø	0		0	 0	0	6. Classroom climate	C
	5.1 5.2 5.3	© © ©		3.1 3.2 3.3	0 0 0	1.1 1.2 1.3	0 0 0		5.1 © 5.2 © 5.3 ©
2. Contents of the classroom		5 0	4		3 O	2 ©	1 0	7. Oral Language Facilitation	5
	5.1 5.2	0		3.1 3.2	0	1.1 1.2	0		5.1 O 5.2 C
3. Presence and use of technology	ology	5 0	4 0		3 0	 2 0	1 ©		5.3 O 5.4 O
	5.1 5.2	0		3.1 3.2	0	1.1 1.2	© ©	8. Presence of books	5 C
4. Opportunities for child cho and initiative	oice	5 O	4		3 ©	 2 0	1 0		5.1 C 5.2 C 5.3 C
	5.1 5.2 5.3	0 0 Ø		3.1 3.2 3.3	() () ()	1.1 1.2 1.3	0 0 0		5
·								9P. Appoaches to book re	eading C
5. Classroom management strategies		5 ©	4 0		3 0	2 O	1 0		5.1 O 5.2 O 5.3 O
30002	5.1 5.2 5.3	© 0		3.1 3.2 3.3	0 0 0	1.1 1.2 1.3	0 0 0		5.4 O

#### **Observation** - page 3

4 0 3 © 2 0 1 0 1.1 O 1.2 O 1.3 O 1.4 O 3.1 Ø 3.2 Ø 3.3 Ø 3.4 Ø 4 0 3 © 2 0 1 0 1.1 O 1.2 O 1.3 O 3.1 © ) 3.2 Ø 3.3 Ø 3 0 2 0 1 © 4 0 ) 3.1 O 3.2 O 3.3 O 1.1 © 1.2 Ø 1.3 Ø ) )

4

0

3

0

3.1 O 3.2 O 3.3 O 1 0

1.1 O 1.2 O 1.3 O

2 0



1 0

 1.1
 Image: 0

 1.2
 O

 1.3
 Image: 0

 1.4
 O

 1.5
 Image: 0

#### ELLCO **Observation -** page 4

10P. Appoaches to Children's v	vriting	5 O	4 O	3 O	2 ©	1 0	14. Approaches to assessment 0
	5.1 5.2 5.3 5.4	0 0 0 0	3.1 3.2 3.3 3.4	0 © 0 ©	1.1 1.2 1.3 1.4	@ 0 @ 0	5.1 O 5.2 O 5.3 O 5.4 @
11. Appoaches to curriculum integration		5 O	4 0	3 O	2 ©	1 0	5.5 0
	5.1 5.2	0 0	3.1 3.2	@ 0	1.1 1.2	0 ©	Write the correct number in th circles under the boxes.
12. Recognizing diversity in		5	4	3	2	1	classroom at mid-morning.
the classroom	51	0	0	0	õ	©	
	5.1 5.2 5.3 5.4	0	3.2 3.3 3.4	0	1.1 1.2 1.3 1.4	00	
							16. Number of staff present in t classroom at mid-morning.
13. Facilitating home support for literacy		5 0	4 0	3 ©	2 0	1 0	
0002	5.1 5.2 5.3	0 0 0	3.1 3.2	6	1.1 1.2	0 0	
0							

in the boxes then fill in the correct

4 0

3 0

3.1 O 3.2 © 3.3 O 3.4 O 3.5 O

2 ©



## ELLCO

#### Literacy Activities Rating Scale - page 5

This rating scale should be completed at the end of your observation. When answering questions that refer to adults, please consider all adults who were present in the classroom, including lead and assistant teachers, teachers' aides, parents, and volunteers.

<b>Book Reading</b> 1. How many full-group book-reading sessions did you observe?	sessi 0 @ 1 O $\geq 2 O$	ons	Writing 6. Did you see children include writing in their play?	Yes O No Ø
2. What was the total number of minutes spent on full-group book reading ? < Time	minutes 5 5 - 10	° 0	7. Did you see children attempting to write letters or words?	Yes O No Ø
Start Stop	11-14 15 or m	ore O	8. How many times did you see an adult help a child write?	0 💿 1 - 2 O
3. What was the total number of books read during the full-group book-reading session(s)?	book 0 $01$ $0\geq 2 0$		> 9. Did an adult model writing?	>2 O Yes C No ©
4. Did you observe an adult engaged in one-to-to-to-to-to-to-to-to-to-to-to-to-to-	one Yes <b>(</b> No C			
5. Is time set aside for children to look at books alone or with a friend?	Yes 🕻	D		

No O

.
# Appendix D

Early Childhood Collaborative of Oklahoma An OU/OSU Partnership 2004 Interest Center Observation Tool

	CenterID	TeacherII	
0	000	000	
1	000	001	
2	000	002	
3	000	003	
4	000	004	
5	000	00 5	
6	000	006	
7	000	007	
8	000	008	
9	000	009	

Please darken each circle for each statement to which it applies.

	Blocks	Dramatic Play	Manipulative Play	Art	Library/ Books
Organization Choose 1, 2 or 3 for each area.					
1. Clearly defined center / area labeled	0	0	0	0	0
2. Material available (not as a clear center)	0	0	0	0	0
3. No materials or center	0	0	0	0	0
Association (Fill in all that apply)					
<ol> <li>Children not allowed to use (verbal or physical restrictions)</li> </ol>	0	0	0	0	0
<ol> <li>Limit number of children (verbal or physical restrictions)</li> </ol>	0	0	0	0	o
3. Controlled rotation	0	0	0	0	0
<ol> <li>Child initiated access (freedom to move in and out and stay as long as want)</li> </ol>	ο	0	0	0	ο
Nature of Experience (fill in all that apply)					
1. Models or specific instructions provided	0	0	0	0	0
<ol> <li>Children can explore, experiment, problem solve, be creative</li> </ol>	0	0	0	0	0
<ol> <li>At least some materials must be used in a certain way or stay in a certain place</li> </ol>	0	о	0	0	o
<ol> <li>Materials may be added to an activity by the children</li> </ol>	0	0	0	0	o
<ol> <li>Children can bring materials from other areas of room</li> </ol>	о	ο	O	0	o
<ol> <li>Children may freely interact with other children and adults</li> </ol>	0	0	0	0	o
7. Center was not used	0	0	0	0	0

ECC03\_07 Interest Center Obs January 2004

Page I of I

# Appendix E

### Early Childhood Environment Rating Scale (ECERS-R)

Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
32. Staff-child interactions*						
<ul> <li>1.1 Staff members are not responsive to or not involved with children (Ex. ignore children, staff seem distant or cold).</li> <li>1.2 Interactions are unpleasant (Ex. voices sound strained and irritable).</li> <li>1.3 Physical contact used principally for control (Ex. hurrying children along) or inappropriately (Ex. unwanted hugs or tickling).</li> <li>Note for Clarification</li> <li>* While the indicators for quality in cultures and individuals, the ways i example, direct eye contact in som disrespect. Similarly, some individ than others. However, the requirer can be some variation in the way to</li> </ul>	3.1 3.2 this item gene n which they ? e cultures is a alas are more l nents of the ir nis is done.	Staff usually respond to chil- dren in a warm, supportive manner (Ex. staff and chil- dren seem relaxed, voices cheerful, frequent smiling). Pew, if any, unpleasant interactions. rally hold true across a diversity re expressed may differ. For sign of respect; in others, a sign kley to smile and be demonsula dicators must be met, although	of of tive there	<ul> <li>5.1 Staff show warmth through appropriate physical contact (Ex. pat child on the back, return child's hug).</li> <li>5.2 Staff show respect for children (Ex. listen attentively, make eye contact, treat children fairly, do not discriminate).</li> <li>5.3 Staff respond sympathetically to help children who are upset, hurt, or angry.</li> </ul>		<ul> <li>7.1 Staff seem to enjoy being with the children.</li> <li>7.2 Staff encourage the development of mutual respect between children and adults (Ex. staff wait until children finish asking questions before answering; encourage children in a polite way to listen when adults speak).</li> </ul>

Inadequate		Minimal		Good		Excellent
1	2	3	4	5	6	7
33. Interactions among children						
<ol> <li>Interaction among children (peers) not encouraged (Ex. talking with peers discour- aged, few opportunities for children to choose own playmates).</li> <li>Little or no staff guidance for positive peer interaction.</li> <li>Little or no positive peer interaction (Ex. teasing, bickering, fighting are common).</li> </ol>	3. 3.3	<ol> <li>Peer interaction encouraged (Ex. children allowed to mo freely so natural groupings and interactions can occur).</li> <li>Staff stop negative and hurful peer interactions (Ex stop name calling, fighting).</li> <li>Some positive peer interaction occurs.</li> </ol>	l vve x.	<ul> <li>5.1 Staff model good social skills (Ex. are kind to others, listen, empathize, cooperate).</li> <li>5.2 Staff help children develop appropriate social behavior with peers (Ex. help children talk through conflicts instead of fighting; encourage socially isolated children to find friends; help children understand feelings of others).</li> </ul>		<ul> <li>7.1 Peer interactions usually positive (Ex. older children often cooperate and share; children generally play well together without fighting).</li> <li>7.2 Staff provide some opportunities for children to work together to complete a task (Ex. a group of children work to cover a large mural paper with many drawings; make a soup with many ingredients; cooperate to bring chairs to table).</li> </ul>

(7.2) Are there any activities you use that encourage children to work together? Could you give me some examples?

## Appendix F

8546

Early Childhood Collaborative of Oklahoma An OU/OSU Partnership ESTL Child Assessment Short Version

ALPHABET RECOGNITION

Lower CASE 

CenterID TchID	ChildID	
		10.000
00000	000	0
00000	000	1
00000	000	2
00000	000	3
00000	000	4
00000	000	5
00000	000	6
00000	000	7
00000	000	8
00000	000	9

01234567

8 9

CONCEPTS ABOUT PRINT	

	Vor.	No		Upper CASE			
	res	NO	1				
1.	0	0	Cover / Front of book				
2.	0	0	2/3 Print contains message	0 00			
3.	0	0	4/5 Where to start	2 00			
4.	0	0	4/5 Which way to go	3 00			
5.	0	0	4/5 Return sweep to left	5 00			
6.	0	0	4/5 Word by word pointing	6 OO 7 OO			
7.	0	0	6 First and last concept	B OO			
8.	0	0	7 Bottom picture	9 00			
9.	0	0	8/9 Inverted print				
10.	0	0	10/11 Line sequence				
11.	0	0	12/13 Left page read before right page	2			
12.	0	0	12/13 Word sequence				
13.	0	0	12/13 Letter order				
14.	0	0	O 14/15 Re-ordering of letters within a word				

- O 14/15 Meaning of question mark 15. O
- O 16/17 Meaning of period 16. O
- 17. O O 16/17 Meaning of comma
- 18. O O 16/17 Meaning of quotations
- 19. O O 16/17 Locate Mm Hh
- 20. O O 18/19 Reversible words "was" "no"
- 21. O O 20 One letter / two letters
- 22. O O 20 One word / two words
- 23. O O 20 First and last letter
- 24. O O 20 Capital letter

ECCO3\_C4 - ESTLS Jan 2004

Page 1 of 1

#### VITA

#### Shannon Elizabeth White

#### Candidate for the Degree of

#### Master of Science

# Thesis: THE INFLUENCE OF TEACHERS' PHILOSOPHY AND PRACTICE ON PRESCHOOLERS' PRINT DEVELOPMENT

Major Field: Child Development

Biographical:

- Personal Data: Born in Keflavik, Iceland, On January 24, 1981, the wife of Joshua D. White, the daughter of Wayne and Patty Callison.
- Education: Graduated from Pryor High School, Pryor, Oklahoma in May 1999; received Bachelor of Science degree in Family Relations and Child Development with an option in Early Childhood Education from Oklahoma State University, Stillwater, Oklahoma in May 2004. Completed the requirements for the Master of Science degree with a major in Human Development and Family Science with an option in Child Development at Oklahoma State University in May, 2006.
- Experience: Over 1,000 field experience hours in a variety of early childhood classrooms as an undergraduate; Employed by Oklahoma State University, Department of Human Development and Family Science as a graduate research assistant, May to August 2004; Employed by Oklahoma State University as a lead teacher in the Child Development Laboratory, August 2004 to May 2005; Employed by Oklahoma State University as a research coordinator, May 2005 to present

Professional Memberships: The Honor Society of Phi Kappa Phi

Name: Shannon E. White

Date of Degree: May, 2006

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

#### Title of Study: THE INFLUENCE OF TEACHERS' PHILOSOPHY AND PRACTICE ON PRESCHOOLERS' PRINT DEVELOPMENT

Pages in Study: 140

Candidate for the Degree of Master of Science

#### Major Field: Child Development

- Scope and Method of Study: The purpose of this study was to examine the relation between Teachers' Stated Philosophy about how children learn and should be taught, Teachers' Developmentally Appropriate Literacy Practice (DALP), and Children's Print Concepts. Teachers' DALP consists of the classrooms' Physical Environment, Social Environment, and Active Learning Program. Both mediating and moderating models were tested. The sample consisted of 455 preschool children that came from 115 preschool classrooms. Teachers completed the Instructional Activities Survey (IAS) and Pre-K Beliefs and Practices Survey, classrooms were observed using the Early Language & Literacy Classroom Observation (ELLCO), Learning Center Quality Instrument (LCI), and Early Childhood Environment Rating Scale (ECERS), and children were observed using the Early Steps to Literacy (ESTL) Concepts about Print. Multiple regression analysis was conducted on the variables to determine which model provided the most explanatory power: mediator or moderator. The data was analyzed using the recommendation for model testing that Holmbeck (1997) described.
- Findings and Conclusions: Teachers' Stated Philosophy was not a significant predictor of Children's Print Concept development. Therefore, the mediating model could not be tested. The moderating model was tested and was not found to be a significant representation of the relation. However, Teachers' Stated Philosophy was found to predict Teachers' DALP (Physical Environment, Social Environment, and Active Learning Program), and Teachers' DALP (with the exception of the Physical Environment) was found to predict Children's Print Concept development. Therefore, the beliefs that teachers have about how children learn and should be taught literacy skills influence the learning environment they create in their classroom, and the environment they create influences the children's understanding of print concepts. But, the teachers' beliefs about how children learn and should be taught literacy skills does not directly influence the children's understanding of print concepts.