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A Study of Prekindergarten Literacy Experiences in a Northeast Tennessee School System.

Barbara Jean Gamble

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A Study of Prekindergarten Literacy Experiences
in a Northeast Tennessee School System

A dissertation
presented to
the faculty of the Department of Educational Leadership and Policy Analysis
East Tennessee State University

In partial fulfillment
of the requirements for the degree
Doctor in Education

by
Barbara Jean Gamble
May 2009

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ABSTRACT

A Study of Prekindergarten Literacy Experiences

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Barbara Jean Gamble

To meet the guidelines generated by the No Child Left Behind law (NCLB) pressures to raise student achievement have filtered down to and emerged in prekindergarten classrooms. The leadership of state, federal, and local policymakers is critical to the movement for high quality prek for all. The purpose of this study was to examine the scores of prekindergarten students when presented 3 different methods of literacy instruction and to compare the scores according to gender and among 3 age groups.

This study found a significant difference in the scores of students when analyzed according to age. The youngest students scored significantly higher than the older students. The results support the literature that young children’s brains are more active. There is evidence to support the move to provide high quality prekindergarten for all, which includes Tennessee Governor Phil Bredeson’s preK Initiative.
DEDICATION

This study is dedicated to my husband, Ralph, who has given me the encouragement to finish. Behind the scenes, he has spent many hours taking care of the demands of home and family while I have been in class, studying, and completing this dissertation. I also dedicate this work to my daughter, Elizabeth, who would tell her sorority sisters that her mother was graduating from the same college at the same time she was. And last, I dedicate my work to Aunt Ruth who sets such a fine example for working and educated women and to our other children and grandchildren who have given up so much time for me to achieve this goal.
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Special thanks to the SREB “Rats of ELPA” cohort; the friends who made the impossible seem possible; to Marisol Hernandez who always made sure I kept moving along. A special thanks to Sharon Horne who encouraged me to start a career in early childhood education.

And a very special acknowledgement goes to my principal, Carolyn Kennedy, a shining example of a true school administrator, for her continued support, guidance, and kindness.
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CHAPTER 1
INTRODUCTION

“The foundations of literacy are laid in the early years.”
New Zealand Ministry of Education, 1996, p.1

Most children with prekindergarten experience present better language skills and a broader base of knowledge in kindergarten. To meet the guidelines generated by the No Child Left Behind law (NCLB) pressures to raise student achievement have filtered down to and emerged in prekindergarten classrooms. Even though school readiness is the overarching goal of prekindergarten, the emphasis has shifted to “more explicit literacy instruction” (Whitehorn, 2007, p. 1). According to Boyer (1991), teachers identify language deficiencies as the problems that most restrict school readiness. Quality literacy experiences are the key to learning. Children who are not exposed during their first years of life are “up to six times more likely to experience reading problems in school” (Boyer, p. 42). Oral language needs to blossom progressively in all children, and we can help it along through rich verbal interactions” (Levine, 2002, p. 147).

Early childhood researchers and teachers have been involved with policymakers to prove the importance of early literacy practices in constructing basic concepts to prepare students for formal education. The leadership of state, federal, and local policymakers is critical to the movement for high-quality prek for all. “Momentum across the country illustrates that prek for all is a bipartisan issue and will benefit every community” (Pre-K Now, 2007, p. 1).

With recent studies of children’s learning and intelligence, one can conclude that the child’s experiences, childhood environment, and educational training are effective

**Background of the Study**

“Children who lack an environment that promotes learning opportunities may be at risk throughout life” (Morrison, 1995, p.79).

Regardless of the socioeconomic status of the family, many children are not given early literacy experiences (Morrison). According to Bond and Wagner (1966), preschoolers add to their understandings hourly and daily throughout their lives. By looking at their environmental surroundings, one can see they have had quite different opportunities to build on.

Each year, many students enter prekindergarten without adequate literacy experiences. Some children have not had access to books in their home, while other children are read to every day. Many children are not part of quality conversations with caregivers, thus limiting oral language development. Many children are left to play alone or in the presence of many hours of video games or television. Consequently, the language skills needed for success at school are not developed (Bredeson, 2006; Scarborough, Dobrich, & Hagar, 1991).

In addition to the fact that early experiences have an impact on learning, research shows that boys and girls learn differently. “Girls’ brains mature earlier than boys’…Girls can acquire their complex verbal skills as much as a year earlier than boys. Thus, quite often a preschool girl reads faster and with a larger vocabulary than a peer boy does, and she speaks with better grammar” (Gurian & Henley, 2001, pg 26).

Another factor in student learning is chronological and developmental age. Children acquire knowledge at different developmental age stages. “Piaget and Inhelder
(1969) described the cognitive development of children as progressing in several stages. Intellectual development is influenced by both maturation and experience” (Brewer, 2004, p. 26). The child’s patterns of development in physical, social, emotional, and cognition skills must be taken into consideration when planning literacy rich activities. “During the preschool years, the child has a boundless supply of energy, which permits him or her to learn all kinds of activities and ideas quickly and avidly” (Brewer, p. 18).

Although we know a great deal about early literacy instruction, we need to continue to research literacy development in the early years. We need to place a great deal of emphasis on preschool literacy instruction. “If prekindergarten teachers do not view their students as beginning readers and writers the minute they walk through the door, then students do not receive the kind of instruction that is developmentally appropriate for literacy learning” (Mattheson & Freeman, 2005, p. 7).

A child’s literacy abilities will increase significantly during the year before kindergarten. Therefore, a child who is a year away from starting kindergarten should spend the year in a literacy rich early childhood program (Yellin & Blake, 1994).

**Purpose of the Study**

The purpose of this study was to examine the readiness scores of prekindergarten students when presented three different methods of literacy instruction.

In order to give students equal opportunities to learn and grow literally, the prekindergarten classroom must give the students equal access to a literacy rich environment. All students need opportunities to build knowledge in the area of literacy.

This study examined the readiness scores of prekindergarten students who were provided different literacy experiences at school. The teachers who provided the teaching
used current research based practices integrating language and literacy experiences. Research suggests that boys and girls learn differently (Gurian & Henley, 2001). This study examined the scores of boys and girls to compare outcomes when presented the same literacy opportunities. Chronological ages of the students were examined to see if there was a difference in scores according to the children’s developmental stages after the same literacy experiences. The prekindergarten students’ ages were divided into three levels for comparison.

*Literacy Practices Investigated in this Study*

The 1st year, the classrooms were not exposed to controlled literacy experiences but were exposed to individual teacher preferred practices. In this study, year 1 was referred to as Preprogram Literacy Practice 1 (LP1), and served as the control group. In years 2 and 3, prekindergarten students received different high quality literacy experience treatments. Each of the 3 years all groups were given pre- and posttests.

The independent variables in this study were the quality literacy experiences presented to students during years 2 and 3. During year 2, the literacy practice introduced was Kindergarten Literature Program (KLP) – referred to in this study as Literacy Practice 2 (LP2), using the theory that reading to children continues the development for children who have been read to and provides missed stimulation for those who have not. KLP is designed to enrich “children’s experiential and language background” (Sulzby, 2005, p. 3). During year 3, the prekindergarten teachers were trained by David Matteson to incorporate his concept of “every picture tells a story” – referred to in this study as Literacy Practice 3 (LP3).
Year 1 Control Group – LP1

This year was identified as a preprogram year. The students received instruction by methods that reflected individual teacher preferences.

Year 2 Independent Variable – LP2

KLP, the Kindergarten Literature Program (for preschool head start and kindergarten classrooms) was introduced by Sulzby (University of Michigan). Using KLP as a guide, teachers use classic and popular children’s literature already found in many preschool and kindergarten classrooms. KLP has been used in preschools and kindergartens across the United States for 15 years. It is designed for all children, not just for those who come to school ready or with rich literacy experiences (Sulzby, 2005, p. 1).

Four copies of a specific set of children’s book titles listed in Appendix I were purchased for each classroom. Each week, a new book was introduced. Each day, another new copy of the book was read to the class and displayed in a designated place. There was discussion about the book, developing the children’s oral language and ability to predict. Over a period of 4 days, the book was read four times and the four copies were displayed in an easy access place for the children. The next step was drawing and writing in the students’ journals. The students were encouraged to pick their favorite part of the book by talking to a buddy. Each student drew a picture of his and her favorite part of the story in the journal and dictated the story to the teacher, and the teacher penned the story below the drawing. Another critical part of this program was making the books available to the students to “play at reading” the books to themselves, to other children, and to the teacher. After hearing the story four times, the students were able to tell the story from the picture pages or from word memory. In the KLP process, “there is no push toward
print or decoding. It will develop when the child needs it, particularly if the child is doing emergent writing and is having rich literacy experiences throughout the day” (Sulzby, 2005, p. 3).

*Year 3 Independent Variable – LP3*

Prekindergarten teachers were trained by David Matteson with the focus “knowing how books work and knowing how stories work” (Matteson & Freeman, 2006, p. 3). According to Matteson (2006), students need opportunities to acquire language. They develop oral language by looking at picture details to tell a story.

During LP3 instruction students were not drawing from a story in a book or working with a given topic. The focus was drawing about a real life event. Because the children knew all the information about the picture they were drawing, the focus was on details of the story. The students were encouraged to draw a picture with a character, a setting, and a significant event. After the students drew, the teacher encouraged the students to add more details by teacher questioning about what else happened. Then students were encouraged to write using labeling, speech bubbles, or what sounds they heard (Matteson, 2007).

*Research Questions*

The questions researched in this study were:

1. Are there differences in Bracken scores (postscore minus prescore) for prekindergarten students in regard to the students’ type of literacy experiences-preprogram (LP1), Kindergarten Literature Program (LP2), or Matteson theories (LP3)?
2. Are there differences in Bracken scores (postscore minus prescore) for each of
the 3 literacy programs (LP1, LP2, or LP3) between prekindergarten boys and
girls?

3. Are there differences in Bracken scores (postscore minus prescore) for each of
the 3 literacy groups (LP1, LP2, or LP3) among the 3 age groups at the end of
the school year; Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5
yr. 3 mo.), Group C (5 yr. 4 mo.–5 yr. 7 mo.).

Significance of the Study

“The preschool years are the natural time for young children to develop early
literacy skills” (Beatty & Pratt, 2007, p.5). The significance of this study was the
comparison of three different types of literacy instruction for prekindergarten students.
This study may contribute guidance for school districts when planning early literacy
instruction and provide a framework for researchers or school districts to compare these
and other early literacy programs.

Limitations of the Study

The results were limited to a Northeast Tennessee school system, using five
prekindergarten classrooms for 255 students and may not be representative of
prekindergarten programs in other systems. The results may not be generalized to other
school systems.
Definition of Terms

1. **Cognitive Development.** Development of the child’s thinking and reasoning abilities (Brewer, 2004).

2. **Developmentally Appropriate.** Age (sequences of growth and changes that occur in children during the first 9 years of life) and individually (individual pattern and timing of growth) appropriate for each child (Bredekamp, 1996).

3. **Early Childhood.** Children from birth through age 8 (Bredekamp, 1996).

4. **Emergent Literacy.** Emergent literacy refers to the reading and writing behaviors that precede and develop into conventional literacy. Sulzby and Teale (1996, p. 728) state, "Emergent literacy is concerned with the earliest phases of literacy development, the period between birth and the time when children read and write conventionally. The term emergent literacy signals a belief that, in a literate society, young children--even 1- and 2-year-olds--are in the process of becoming literate."

5. **Emergent Writing.** Emergent writing refers to a child’s first attempts at writing (scribbling) to use print in a meaningful way. For example, children use known letters or approximations of letters to represent written language. They attempt to write names; and from knowledge of how text should look, they group letters together into words with spaces between words.

6. **Formal Education.** Education starting with Kindergarten in a public, private, or home school setting.
7. **Linguistic Awareness.** A child’s understanding of how language works. For example, being able to count the words in a spoken sentence and being able to hear the individual sounds in a spoken word.

8. **Literacy Practice 1 (LP1).** Pre program literacy experiences–teaching strategies chosen using individual teacher preferences.

9. **Literacy Practice 2 (LP2).** Kindergarten Literature Program for Preschool and Kindergarten students. This experience uses classic and popular children’s literature already found in many preschool and kindergarten classrooms. The focus is to read a children’s book four times and then ask the child to draw and write about his or her favorite part of the book (Sulzby, 2005)

10. **Literacy Practice 3 (LP3).** Literacy experiences focusing on beginning readers and writers. This experience uses the practice that “a picture is worth a thousand words” and “every picture tells a story” (Matteson, 2007). This theory supports the idea that comprehension is related to attention to picture detail and knowing how stories work.

11. **Prekindergarten.** The school year immediately preceding Kindergarten.

12. **Print Knowledge.** A child’s understanding of books, printed letters, and words. For example, understanding that print carries a message, recognizing that people read the text rather than pictures, and being aware of how to read a book (right side up, from the first page to the end, from left to right, from the top to the bottom of the page).
Overview of the Study

Chapter 1 provides an introduction, background of the study, purpose of the study, research questions, limitations, definition of terms, and overview. Chapter 2 contains a review of the literature. Chapter 3 discusses the methodology and procedures to obtain data. Chapter 4 contains the statistical analysis of the results. Chapter 5 presents a summary of the findings, conclusions, and recommendations for the future.
CHAPTER 2
REVIEW OF THE LITERATURE

Overview

“The quality of a prekindergarten experience will consequentially shape a child’s readiness for school” (Boyer, 1991).

This review of the literature and research focuses on prekindergarten literacy experiences. The literature review is subdivided into sections covering the history of early childhood and progressing through the current prekindergarten teaching and learning trends practiced today.

Why Prekindergarten?

According to Ibuka (1977), preschool children prefer learning over eating, and they obtain the most pleasure in gaining understanding. Therefore, young children should be given opportunities to learn as much as they desire.

Preschoolers have been adding to their understandings daily, even hourly, throughout their lives. They have been refining and enriching their understandings, even though many of their understandings are inaccurate, incomplete, and prejudiced. Looking at the environmental surroundings in which children have lived will show that they have had quite different opportunities to build backgrounds of knowledge (Bond & Wagner, 1966).

According to Beaty and Pratt (2007), children’s literacy skills are mirrored as to how they acquire oral language, while literacy knowledge depends on those around them and the level of print in their environment.

According to many researchers, children’s learning patterns are etched in place before school age. Therefore, cultural deprivation has the most impact when children are
the most vulnerable—the preschool years. This knowledge has created an awareness of the need to level the field by putting into place enriching opportunities for underprivileged children of preschool age (Ribich, 1968).

**Factors Impacting Student Achievement**

According to Morrison (1995), research supports intelligence as developmental, not fixed. The extent to which individual intelligence develops depends on many variables.

*Experiences*

“Children who are exposed to interactive reading at an early age are among the most advanced in language development” (Dworetsky, 1993, p. 236). “The earlier a child reads, the more he or she is likely to read and the better he reads” (Doman & Doman, 1994, p. 10). Very young children are far more capable of learning than we ever imagined. Children from birth to age 6 learn better and faster than older children do (Doman & Doman). “Environment determines the extent to which the limits are achieved” (Morrison, 1995, p. 79).

Children entering school have come from 6 years of environmental experiences that have given them varying degrees of proficiency in abilities that are related to learning in the initial reading program. If the ability to read is reduced or nonexistent, there is no question that the ability to express intelligence is also markedly diminished (Doman & Doman, 1994).

While it is obvious that lack of materials to read, or the lack of ability to read it, inevitably results in lack of education, it is infinitely more important that it also results in lower intelligence. Lack of reading and lack of intelligence go hand in hand both in
individuals and in nations. Language is a vital tool. It seems obvious that an individual’s intelligence is limited to the information gained from the world through his or her receptive sense. The highest of these receptive abilities is the ability to read (Doman & Doman, 1994).

Differences are especially marked between very poor youngsters and the middle class children who are being provided with a rich environment of language and experiences (Barnette & Boocock, 1998). Anderson and Dearborn (1952) drew attention to the difficulties children encountered in learning to read when they have not had the support of a good language atmosphere in the home. For the child who is limited in any area, it is important to provide opportunities to build knowledge in that area. However, vast numbers of children grow up in environments that are literacy poor. In many homes, it is even hard to find a children’s book. Often parents will admit they do not have books at home or they are not sure which books are appropriate.

There has been much controversy about whether a disadvantaged child can catch up. According to Hirsch (2006), an advantaged child learns an average of 10 to 15 new words a day.

The number of new words gained per unit of time is rather small at age 2, and it rises with each succeeding year. The vocabulary gap between advantaged and disadvantaged students widens the longer they stay in school. If a student who is behind in word knowledge can be brought to know 90% of the words that he or she hears and reads in school, then he or she can pick up new words at a faster rate than the advantaged student who already knows 98% of the words. There is a further opportunity for catching up, which depends on the special richness of the
vocabulary that is studied in school. That is because the vocabulary heard in school is potentially richer than the vocabulary heard outside school (Hirsch, 2006, p. 66-67).

According to Otto (2008), students who have parents with low literacy skills must have a language and literacy rich environment with many oral language opportunities.

Gender

Gurian (2001) stated that brains of girls and boys operate differently. “Girls’ brains mature earlier than boys’ brains” (p. 19). Preschool girls speak more fluently than preschool boys because boys’ complex verbal skills generally develop a year later than girls’. Therefore, preschool girls read earlier and present a larger vocabulary than preschool boys.

Gurian (2001) found that parts of the brain have physical gender differences. The arcuate fasciculus develops earlier in girls and initiates girls to speak in sentences earlier than boys. The Broca’s area of the brain is more active in girls and increases verbal communication skills. The frontal lobe is highly active in females creating improved verbal communication skills in girls. The cerebellum has stronger connecting pathways in the female brain which initiates superior language and fine motor skills in girls. The female cerebrum is always active, causing a greater capacity to multitask. Gender differences also affect memory in boys and girls. Girls remember more random information, and boys have a better memory of information that is organized. Boys store trivia-type information longer than girls.

Many children, particularly boys, do not have the small motor coordination required for doing pencil and paper drills or acquire the readiness skill to sit and attend to
activities. Some youngsters will be restless or misbehave if they are forced to concentrate on tasks that have little developmental appropriateness for them. Children may get bored, in which case learning to read is likely to become distasteful rather than a joyful discovery at the appropriate time (Brenner, 1990).

The preschool environment can be overwhelming for many boys, especially boys who are sensitive to novel visual stimulation. The greater distractibility among boys (frequent switching between activities, high number of interruptions of ongoing play) seems to be as much a function of the environment as of the child (McGuiness, 2004).

Some children struggle with the intellectual task of lessons. The most tension was found in the children with some developmental lag, mainly boys, whose development is delayed as compared to girls (Antropova, 2003).

**History of Early Childhood**

According to Morrison (1995), the history of preschool and nursery school education cannot be separated from the history of kindergarten education. Early childhood programs today trace their development back to early philosophers and educators. Combining philosophies from hundreds of years, ideas that drive today’s nursery schools and preschools were formed in the United States, Italy, Germany, England, and other European countries. Early childhood education has a long tradition of philosophy and teaching reflecting on the most effective ways to teach children and how children learn best. The next section of the literature review focuses on those philosophers and teachers whose beliefs developed the concept of early learning.
Formal Schooling

Martin Luther and Philipp Melanchton. Martin Luther’s (1483-1546) reformation put an emphasis on formal schooling to teach children to read. His concept of teaching children to read “marked the real beginning of teaching and learning” (Morrison, 1995, p. 56).

Luther and his coworker, Philipp Melanchthon (1497-1560), soon came to promote universal elementary education, including the education of girls. Luther and Melanchthon stated that education should be provided for every one regardless of class and should be compulsory for both girls and boys, which was a radical thought for this time according to Brewer (2004). Their ideas of education included that it should be state-controlled, state-supported, and centered on classical languages, grammar, mathematics, science, history, music, and physical education. Luther’s argument for increased governmental support for education is the foundation for the idea of public education today (Johnson, 1996).

Dame Schools. The first schools for early education in the United States were the dame schools in Boston, Massachusetts, developing as early as the 1600s. Dame schools were academic classes taught by widows in their homes to serve young children. Parents paid the widows to teach their 3, 4, and 5 year olds to memorize verses from the Bible and to learn to read. The Puritans’ basis for their passion for education was focused on their children’s ability to read the Bible, which guided their daily life. These early reading experiences were meant to guide the children to live by the laws of the colony and give purpose to reading. Therefore, the Puritans gave the idea of learning real life skills, as
opposed to learning isolated from life that drives many preschool theories today. (Brenner, 1990).

Friedrich Wilhelm Froebel. European educator Friedrich Wilhelm Froebel (1782-1852) provided us with a new concept of childhood. Before his theories, children were thought of as imperfect miniature adults. Froebel stated that childhood was not just a time to prepare for adulthood, but that childhood was a separate time for learning and growing, and the childhood stage had much value in life. Serving children ages 3 to 7, he established the first kindergarten, Kleinkinderbeschäftigungsanstalt, as he called it in 1837 (Morrison, 1995). Froebel’s term “kindergarten” means children’s garden in German. He suggested that children should be nourished and cared for like a garden. His kindergarten had “an emphasis on social development, a concern for the cultivation of creativity, and the concept of learning by doing” (Johnson, 1996, p. 308). “Froebel stated that play is the foundation for children’s learning and envisioned the kindergarten as the child’s bridge between home and school” (Brewer, 2004, p. 36). He stated that home and school should merge physically. Part of the kindergarten day was at home, where the teacher spent time with the child and the mother, sharing the child’s education. The idea of partnership between parents and teachers is a strong component of most good preschool programs today (Brenner, 1990). Because his theories focused on play, he created the “first educational toys, or “gifts” as he called them, and fostered their use in children’s play” (Day, 1994, p. 11). In his kindergarten, children played as part of their learning. Froebel’s kindergarten students learned rhymes and fingerplays.

Froebel suggested that teachers needed to maintain a child’s interest and use the child’s curiosity to plan learning. The teacher was responsible for guidance and direction.
so children could “become creative, contributing members of society” (Morrison, 1995, p. 66). He declared the teacher should provide activities so that children would be able to learn when they were ready to learn (Morrison). During the process of developing his curriculum and methodology for educating young children, “Froebel earned the distinction as the “father of kindergarten”’’ (Morrison, p. 64).

Maria Montessori. Maria Montessori (1870-1952) was an Italian doctor whose life was devoted to “developing a system of educating young children” (Morrison, 1995, p. 68). Montessori’s ideas of teaching young children were developed through working with mentally retarded youngsters. As Montessori studied and taught these special children (most from deprived backgrounds), she developed conclusions to include all children. Montessori stated that if children were given proper stimulation at the right time, they would learn regardless of their environment. Montessori’s methods included a prepared learning environment and suggested that children’s curiosity occurred in different stages which caused them to acquire knowledge. Montessori’s theory was that all young children went through stages of development, and each stage needed certain types of learning, that learning materials should be designed to match the stages, and suggested that the teacher and older students should be mentors to shape the younger students innate capabilities (Brenner, 1990). Therefore, it was crucial to give children a learning environment that affirmed early education emphasis on the importance of sensory development. “To this end, most of the educational materials were tactile, to challenge the senses as well as the mind” (Day, 1994, p 12).

In 1906, Montessori implemented and perfected those ideas when organizing schools for young children of families who occupied tenement houses under the Roman
Association for Good Building (Morrison, 1995). Montessori’s ideas are used in many preschool programs and are the guidelines for current Montessori schools (Brenner, 1990).

*Rachel and Margaret MacMillan.* In England, Rachel and Margaret MacMillan were two sisters who presented a theory that included physical care and development. They established the first nursery school in 1911, the Open-Air Nursery School and Training Centre in Peckham. Within a few weeks, there were 30 children ranging in age from 18 months to 7 years old in attendance (Spartacus Educational, 2008). The schedule of activities was more like our modern day-care centers. Children arrived in early morning and stayed until 5:30 in the evening or later. The children were fed and taught basic health routines because the MacMillans emphasized physical care as the most important part of meeting the needs of the children. They introduced free school meals under the 1906 Provision of School Meals Act, and they introduced medical care for school children by opening the first clinic devoted to school children in 1908 (Figures in Education, 2008). In MacMillan schools, education was the second focus, and the children received formal lessons by age 5. Educational experiences included nature, physical movement, music, and art. The MacMillan nursery school ideas have been copied and are still good preschool models (Brenner, 1990).

*Lucy Sprague Mitchell.* In 1916, Lucy Sprague Mitchell founded the Bureau for Educational Experiments, which was to become the Bank Street School for Children. She used pediatricians, psychologists, educators, and researchers to take one of the first holistic looks at young children. Mitchell’s Bureau introduced the idea of looking at childhood in a more complete way and developing an early childhood program that came
out of scientific study. As more research on child development grew, preschools multiplied in various parts of the United States (Brenner, 1990).

*Child Development*

*John Amos Comenius.* John Amos Comenius (1592-1670), a Czech educator, laid the foundation for the beliefs of later educators by recognizing the natural order of child development. He agreed that all children should attend school. Comenius suggested that children should learn to speak by speaking, write by writing, and to reason by reasoning—the equivalent of current thoughts on active learning and an integrated hands-on curriculum. In the 20th century educators such as Dewey, Montessori, and Piaget promoted Comenius’s ideas of active learning (Brewer, 2004).

Comenius proposed universal education starting early in life and continuing throughout life. “Following this natural order implies a timetable for growth and learning, and early childhood professionals must observe this pattern to avoid forcing learning before children are ready” (Morrison, 1995, p. 57).

Comenius is also known for the contribution of his textbooks. The invention of printing made it possible to produce books, which was a development, according to Johnson (1996), essential to the growth of education. Comenius wrote and illustrated *Orbis Pictus –The World of Pictures* in 1658, which was the first picture book for children (Day, 1994).

*Environment*

declared that children were born with a *blank slate*, an unshaped mind containing no innate ideas, and that all behaviors and learning were acquired through interactions with the environment. “The culture would determine what was written on the blank slate” (Dworetzky, 1993, p. 5). This theory laid the foundation for environmentalism—a theory that views environment rather than heredity as the important factor in the development and especially the cultural and intellectual development of an individual or group. Therefore, he promoted early intervention for poor or disadvantaged children (Morrison, 1995).

*Robert Owen.* Robert Owen (1771-1858) professed that the environment in which children were reared was the main contributing factor to the children’s beliefs, behaviors, and achievements (Morrison, 1995). Using this theory, the Owen’s Infant School movement started in England around the beginning of the 19th century. Owen’s family owned a cotton mill, and he saw the needs of the mill workers’ children who were living in poverty. Owen created a child care education center for the workers. He suggested these children could be better educated in his school than at home or current primary schools. Owen’s preschool introduced new ideas for his time. In addition to teaching young children specific concepts and allowing them time to play and be creative, he stated that the school should have some responsibility for building a child’s character. He also stated that everyone, including children, had the right to happiness and that early education should do its part in providing it. The foundation of his theory was that the childhood years were important in people’s lives (Brenner, 1990). Owens’ experiment was the first corporate preschool.
Owen moved to New Harmony, Indiana and developed the Owen Infant Schools in the United States. The original plan for the United States’ Owen school was to facilitate the learning of students 3 to 10 years old, but the idea caught the attention of prominent parents of younger children. Then, toddlers as young as 18 months were in the action-oriented Owen settings. In the beginning the Owen school was to serve the needy, but later Owen preschools tended to be for the affluent families (Brenner, 1990).

**Maturationist**


Rousseau’s educational beliefs were known as naturalism because learning must be a natural process (Johnson, 1996). “According to Rousseau, a natural education promotes and encourages qualities such as happiness, spontaneity, and the inquisitiveness associated with childhood” (Morrison, 1995, p. 60).

His theory was built on educational decisions being made on the basis of the child’s nature. He concluded that children from birth to age 5 learn best from physical experiences and children from age 5-12 learn best by direct exposure and from exploring the environment. When educators advocate hands-on learning, they are agreeing with Rousseau (Brewer, 2004).

Rousseau’s views of education were drastic for his time. He provided educators with the idea that we have control over education coming from social and sensory experiences, but we have no control over the child’s natural growth and development. He
spoke of unfolding in which the nature of children “unfolds as a result of maturation according to their innate timetables” (Morrison, 1995, p. 61). These ideas were the beginning of present day developmentally appropriate practices. He maintained it was the responsibility of the early childhood educator and parents to provide appropriate educational experiences at the right time so that children could reach their full potential (Morrison). He also supported the idea that it was useful for children to teach one another as well as to have a teacher, and he did not want teachers to use wordy methods of teaching young children. His idea of child-centered education was novel in the middle of the 18th century but is a foundation of quality preschool education.

*Johann Heinrich Pestalozzi.* Swiss educator, Johann Heinrich Pestalozzi (1746-1827) who was not a scholar nor well-educated, started a school at his farm. He used the ideas of integration of home life, vocational education, and education for reading and writing. His farm school closed due to financial difficulties, but he continued his study of education. His focus was that education should follow the child’s nature (Morrison, 1995). Pestalozzi had a great understanding of children and recognized the kind of nurture they needed. Teachers of young children should treat the students with love, understanding, and patience. He stated that the teachers should provide the warmth and caring that parents give at home—teachers should be surrogate parents. He also stated that public education must consider the family life and that education should have a compassion for the poor.

Pestalozzi pointed out that early childhood educators should not teach by using rote learning. He supported the idea that education was based on sensory impressions and experiences and that children should participate in real meaningful activities using
manipulatives (counting, measuring, feeling, and touching). His theory included using objects and sense perception to acquire knowledge (Johnson, 1996). “He stressed the development of the senses, as well as the teaching of basic skills” (Day, 1994, p. 10).

Pestalozzi suggested that the best teachers were those who taught children not subjects. He also supported “multiage grouping” (Morrison, 1995, p. 62). Pestalozzi suggested that children should be in groups of “various ages so that the older ones could help the younger ones” (Brewer, 2004, p. 36). This theory supports multiage learning today.

Progressive

John Dewey. John Dewey’s (1859-1952) progressive education theory emphasizes children and their interests rather than subject matter. According to Morrison (1995), in a classroom based on Dewey’s theories the students are learning by social interactions, intellectual pursuit, physical activities, and using manipulatives. Dewey and other progressives maintained that the curriculum should be “based on the children’s interest and should engage children in active experiences” (Brewer, 2004, p. 38). Dewey’s influence is evident today in active curriculum that is integrated and contains units developed to reflect the interests of the children.

Individualized Instruction

Rudolph Steiner. Rudolph Steiner (1861-1925) suggested that learning should be developed and designed to meet the needs of children as they developed mentally, physically, and emotionally. He stated that the goal should be to meet the individual child’s potential, not the goals of society and adults in general. He wanted children to learn through play and participate in storytelling and drawing until age 7. Steiner
supported the idea that children should be allowed to learn individually at their own pace, and the focus should be on learning not just learning to prepare for a test (Figures in Education, 2008).

**Constructivist**

*Jean Piaget.* Jean Piaget, a Swiss scientist (1896-1980), examined cognitive development of children (Dworetzky, 1993). Piaget began studying children’s intellectual development, using his own children for studies. According to Morrison (1995), Piaget based his theories on his own research and came to the following conclusions. Children play an active role in their own cognitive development, and children’s cognitive development must include mental and physical activity. Experiences supply the foundation children use to develop learning, and children learn through interaction with and by adapting their environment. A child’s development is a continuous process, and development results from maturation and by transactions or interactions between children and their physical and social environments.

Piaget reported that children progress through four stages of learning: sensorimotor (birth to 2), preoperational (2-7), concrete operation (7-11), and formal operations (11-15). He further reported that children construct knowledge through social interactions and experiences with concrete objects, that they learn by doing, and that children discover through play. Piaget expected the teacher should set up conditions for learning to occur by using the child’s innate curiosity (Day, 1994).

*Lev Vygotsky.* Lev Vygotsky (1896-1934), did not agree with Piaget’s theory in which children are developers of their own intelligence and language. Vgotsky suggested that social interaction supported and developed a child’s mental, language, and social
development (Morrison, 1995). Vygotsky is most known for his concept of the “zone of proximal development”. As cited in Morrison, Vygotsky defines this zone as “the area of development into which a child can be led in the course of interaction with a more competent partner. It is the difference between what the child can accomplish independently and what he or she can achieve in conjunction with another more competent person” (Morrison, p. 74). Vygotsky encouraged social interactions and collaboration as keys to learning and development. Today, cooperative learning, coaching, mentoring, and collaboration are built upon those theories.

Multiple Intelligence

Howard Gardner. At the same time that scientific tests were validating what Owen, Montessori, and others had found, important changes in family patterns were taking place. These new family changes and new understandings of how young children develop changed preschool education. Pennsylvania native Howard Gardner (1943-) developed the theory of multiple intelligences. Garner identified seven intelligences: logical-mathematical, spatial, linguistic, musical, bodily-kinesthetic, interpersonal, and intrapersonal (Morrison, 1995). Gardner suggests that all children have all seven of these intelligences, and that, for each child, some may be stronger than others. The strengths define differences in learning styles, interests, and habits. According to Morrison, early childhood professionals should make changes in teaching styles, activities, and materials to accommodate each child’s learning styles.

Truly there is a wide range of ideas in the teachers and philosophers who founded early childhood programs. But there is one thing that remains constant in the early efforts; most of them were designed to help poor and disadvantaged children learn. The
early education trend is filtering to middle and upper class families who have their children’s educational best interests in mind. Research in child development had been extensive during postwar years. As more research becomes available on children, it becomes increasingly clear that early childhood is an important, crucial time in the lives of children. “Our current knowledge of childhood is enormous” (Dworetzky, 1993, p. 8).

Prekindergarten Today

Head Start

Head Start was introduced as part of President Lyndon Johnson’s War on Poverty during his State of the Union Address in January 1964. Head Start was a plan put into place to “break the cycle of poverty in the United States” (Brewer, 2004, p. 43). It is the largest federal program for young children from disadvantaged backgrounds, and is “designed to better prepare poor children for school by providing free education and support services to children whose families are below the federal poverty level” (US Department of Education, 2003, p. 16).

Due to evidence that the earliest years matter a great deal to children's growth and development, child development experts created the Project Head Start program in 1965 at the request of the Federal Government. Originally, it was an 8-week summer program that was designed to help end poverty by providing preschool children (birth to 3 years) from low socioeconomic families the opportunities to meet emotional, social, health, nutritional, and psychological needs. In 1969, Head Start was transferred to the Department of Health and Human Services under the Nixon Administration.

Today, it is a program within the Administration for Children and Families (ACF) within the Health and Human Services (HHS). Head Start has a special focus on helping
preschoolers develop the early reading and math skills they need to be successful in school and promotes parent engagement in their child’s learning (ACF, 2008). The main goal is to help disadvantaged children deal with their environment and responsibilities in school and life. Head Start takes into account “the interrelatedness of cognitive and intellectual development, physical and mental health, nutritional needs, and other factors that enable a child to function optimally” (Morrison, 1995, p. 386).

Today, Head Start Programs are administered locally by nonprofit organizations and local education agencies.

*Public School Prekindergarten and Funding Sources*

“More and more 4 year olds are enrolled in preschool programs operated by the public schools” (Morrison, 1995, p. 280).

According to the U.S. Department of Education (2003), public school systems have increased their involvement in creating high quality prekindergarten programs. Public schools are interested in readiness for incoming kindergarten students and have access to the resources to expand prekindergarten programs. Title I (Elementary and 2ndary Education Act) funding is delegated to aid educationally disadvantaged children, and can be used to “improve the teaching and learning of young children in high-poverty schools and those who are at most risk of school failure” (US Department of Education, p. 16).

Public school prekindergarten programs also receive funds from state initiatives for enhancing school readiness. Fourteen states have restricted their initiatives to public schools (US Department of Education, 2003).
In Tennessee, Governor Phil Bredeson founded the PreK Initiative and the Governors Books from Birth Foundation. In 2004, before Bredesen’s preK initiative plan, there were only 146 prekindergarten classrooms in Tennessee servicing 2,900 children (Tennessee, 2008).

According to Education Group (2005), Bredesen unveiled the legislation of his preschool plan in February 2005. He introduced the voluntary prekindergarten program which would use $25 million in lottery proceeds. Local districts would help fund the program at the same rate as K-12 education. Bredeson states that “preschool gives students a better chance to succeed in school” (Education Group, p. 1).

Governor Bredeson made the following statements during his Promises to America’s Children: 2007 Governors’ State of the State Address, “We need to work hard to help our youngest children arrive on the first day of kindergarten prepared to take advantage of what lies ahead. Across our state, there's one thing educators agree on: Tennessee needs a strong preK program.” As an advocate of early education, Governor Bredeson’s focus is to make sure children are intellectually and socially prepared to learn in the classroom. During this State of the State Address, he proposed to commit $2.5 million to add prekindergarten classrooms throughout the state and has set a goal to make prekindergarten available to every parent who wants to enroll his or her child (Education Group, 2005).

Bredeson intends to keep Tennessee focused on the importance of education and the importance of children starting school ready to learn. In a press release dated July 24, 2007, Governor Bredeson announced the addition of 257 new preK classrooms that would open for the 2007-2008 school year, serving an additional 4,000 students by
making an investment of $80 million. He stated that nearly 40,000 boys and girls have started on an educational path “designed to help them achieve academically in the long run” (Bredeson, 2007, p.1). Tennesseans want more students to graduate from high school and it “starts by making sure students start out right from day one” (Bredesen, p. 1). Tennessee has been recognized by the National Institute for Early Education Research (NIEER) for the past 2 years as one of only six states meeting the highest quality prekindergarten program standards (Bredeson).

Bredeson states that he wants to be remembered as “the children’s governor”. On April 1, 2008, Governor Bredesen spoke to members of the Rotary Club in Johnson City, Tennessee, proposing to expand his prekindergarten program by funding $25 million to open 250 to 300 new prekindergarten classrooms for the upcoming 2008-2009 school year. Bredeson has established more than 800 classrooms in 4 years and wants Tennessee to be viewed as a national model for early childhood education (Hayes, 2008).

Dedicated to placing high quality children’s books in the homes of Tennessee’s young children, Governor Phil Bredeson created Governors Books from Birth Foundation (GBBF) in June 2004. GBBF is a resource to Tennesseans establishing and sustaining county wide Imagination Libraries made available to every home of young children.

Since the Foundations beginning, Tennessee’s Imagination Library has grown to all 95 counties to provide books to children. Tennessee’s Imagination Library is free and available to every child under age 5 in Tennessee (Imagination Library, 2006). As of July 30, 2007, more than 217,000 Tennessee children received books since its creation in 2004 (Governor’s Foundation, 2007).
GBBF raises funds from corporations, foundations, and individuals throughout the state to make grants available for purchasing full sets of Imagination Library books for each of the state’s voluntary preK classrooms and local Head Start facilities (Imagination Library, 2006).

Importance of Preschool Experiences

Preschool is one of the most talked about issues in America today. Presidential candidates include preschool in their platforms, and state legislators are taking interest in the importance of prekindergarten experiences. “Research has documented the benefits of high quality early childhood programs for young children” (Weis, Altbach, Kelly, & Petrie, 1991, p. xi).

“The introduction of hundreds of early childhood bills into Congress and state legislatures indicates a pervasive concern about early education and care in our society and among our elected officials” (Weis et al., p. xi). The country’s future is influenced by those who teach the youngest citizens and the quality of their education. Recently, legislators and parents are on the same page by agreeing that preschool is an important part in child care issues. Both see that school is where education and child care overlap. Early childhood is the place where children can have some of their most significant learning experiences (Brenner, 1990).

The United States is far behind most of the major industrialized countries in the availability and affordability of prekindergarten. In contrast, many European countries give high priority to preschool. In France, 97% of 3-to-5 year olds are in programs; in Belgium, 95%, and in Germany, 80%. Most of the programs in these countries are government related at no cost to the families. In Italy, children receive Reggio Emilia
child care programs starting as infants; the first school is for children up to age 3, and the second school is for children up to age 6. In Copenhagen, preschool children go on a daily neighborhood excursion-learning by experiences (Burns, Griffin, & Snow, 1999).

In the early 1990s, Boyer (1991) noted that if America was serious about school readiness, quality prekindergarten must become a priority. In a prekindergarten trend, the nation’s public schools quadrupled 4-year old classes from 1980 to 1990. At that time in a Carnegie survey, respondents said they favored publicly funded preschools, that every school district should establish a preschool program for children not covered by Head Start, and the program should be financed partly by the state (Boyer).

According to Passer and Smith (2006), 4 ½ year olds who spent time in preschool performed better (than peers who spend less time) on several cognitive and linguistic tasks. The students scored better regardless of the following factors: a child’s sex or ethnicity, parents’ socioeconomic status, or parenting quality. Regular exposure to a high quality preschool was associated with even better cognitive performance, and these benefits seemed to persist at least through third grade.

A quality preschool can be helpful to all children. Kindergarten teachers point out that preschool education most improves school readiness in children, and they stress the value of preschool. Most children who have had preschool experience come to kindergarten with better language skills and a broader base of knowledge (Boyer, 1991).

Preschools can build language and literacy skills and boost reading achievement. Preschool programs should strive, using research based guidelines, “to help children overcome language problems as early as possible” (Burns et al., 1999, p. 44). Quality
preschool teachers should model good verbal language throughout the day to help children learn, think, and talk about new knowledge (Burns et al.).

Dawn Frutangelo, a reporter for NBC News Report, covered a story on October 18, 2006, on “Tutoring Tots”. Parents are realizing the importance of early education and are now enrolling their preschool age children in tutoring programs covering math and reading. They want their children to excel in school and become high achievers; therefore, early tutoring is the beginning of preparing their children for college acceptance.

All of America’s children need opportunities to be able to attend affordable preschools. They need to experience a high quality literacy environment and quality language experiences. Children need to start school ready to learn with the language skills needed to succeed. The time spent in a prekindergarten program before entering formal schooling will have a great influence on a child’s education and life. If every child could have a high quality preschool year, many of the education problems would be resolved (D. M. Matteson, personal communication, August 13, 2008).

Evolution of Early Literacy Instruction

The earliest literacy teaching methods were mainly facilitated and taught problematic like other skills, only available to a select few members of society. But, there is some evidence of the Sumerian period having formal schools (Hannon, 2000). Since schools were first established in the United States, teaching literacy has been through many phases. Instructional methods have been developed, tried for a while, and gradually discarded for something better. The current methods of teaching literacy are integrated and include good ideas from numerous methods that have been tested through time.
According to Brewer (2004), researchers have been trying to develop a literacy model that focuses on the process of teaching reading and how to administer that process to children.

In order to see how the integrated method of teaching literacy came to be, let’s take a walk through literacy history.

**Alphabetic**

The pre-20th century method of teaching literacy was the alphabetic method. Children were taught the names of letters of the alphabet, and then used this knowledge to decode words. Some letter names contained phonemes, but often letters gave no clue to what sound that letter represented. The basic alphabetic teaching method was probably supplemented by teaching further sound-letter associations (Hannon, 2000).

**Hornbooks**

Children in the Middle Ages used hornbooks to display upper and lower case letters, common syllables, and text children already knew. When paper and printing became available, the alphabetic method became more elaborate. Seventeenth and 18th century teachers taught spelling before reading (Hannon, 2000).

For many centuries, teaching focused on knowing words in prayers and in the hornbooks, but in the mid-20th century, the main focus turned to teaching the whole word method.

**Word Method**

Samuel Worcester developed the word method in the early 19th century. This teaching was influenced by the Gestalt philosophy that words could be perceived as wholes (Hannon, 2000). This method looked at a word as a unit of thought, and it was the
first method to emphasize meaning in learning to read. Children were given long lists of sight words, often words unrelated to their background or experiences. The sight words were learned with flashcards, and children were able to quickly recognize many words in a book (Burton, 1956). The word method taught children to recognize individual words, and they learned to read without sound-letter relationships. It was based on the idea that children could read new words by seeing similarities between unknown and known words. Children who were taught the word method possibly inferred some sound-letter relationships, but the teaching of sound–letter relationships was not part of instruction until the child’s reading was well developed or until the child experienced difficulties (Hannon, 2000). Subword methods never went away. But, instead of being alphabetic, they became phonic.

Basal Readers

In the mid 1860s the McGuffey Readers were the first basal readers in the United States. Basal readers were reading textbooks and presented one textbook for each grade level. Basal readers taught reading sequentially and included skill orientation but did not follow developmentally appropriate practices. The stories had vocabulary words, moving from easy to complex. The beginning reading sentences were short (using three words) and progressed to longer sentences containing more and harder words. All children started from the same point and moved sequentially. As some children needed more language development to begin to read, those children started the program behind, creating a negative beginning (Perrone, 1994).
**Phonics**

In the second half of the 19th century and early 20th century, phonic methods were developed. Children worked through books with controlled text rather than meaningless text (Hannon, 2000). The words were based on the relationships between sounds and specific letters or combinations of letters. Phonic methods presented children with letters or letter combinations and taught the relationship between known letters and sounds, therefore, moving from letters to sounds. Children were taught to blend sounds associated with letters to make words. This method was known as synthetic phonics because words were synthesized out of sounds. Synthetic was contrasted with analytic phonics when children were taught sound-letter relationships by analyzing how parts of words contributed to how a word was pronounced. Even though the two phonics methods were different, the two often coexisted in teaching methods of teachers (Hannon).

**Whole Language**

Some of the reading instruction programs were criticized because of the quality of text being offered to children (basal readers). In the late 1960s, a whole language approach was introduced by American educator Kenneth Goodman. Goodman’s approach came about as a reaction against the basal reader program. The whole language movement challenged basic assumptions about literacy instruction in schools. Assuming furnishing books and print in the classroom environment would build readers, the whole language method taught prereading, reading, and other language skills through all the processes that involve language—writing, talking, listening to stories, creating stories, artwork, and dramatic play as well as through more traditional ways. Using this theory,
show and tell, reading stories, writing, dictating original stories, and dramatic play were all part of a whole language experience in the good preschool setting (Brenner, 1990).

The philosophy of whole language was to increase children’s literacy by changing teachers’ beliefs about literacy and learning. An important whole language idea is that the teacher is a learner and does not teach children directly (Church, 1996; Vacca & Rasinski, 1992). Therefore, in whole language, the teacher and children interact and communicate with each other. The students are not expected to always give the right answers, and the teacher does not always do all of the talking. This active learning is transactional—the learner actively engages with the external environment including people and books to learn (Weaver, 1990). Whole language is a teaching approach that requires change—teachers must consider the relationship of the teachers and the students and change the classroom to be more child centered, rather than the teacher being the authority (Yoo, 1998).

Teachers initially loved whole language because good children’s literature was back in the classroom. With whole language, teachers did not give direct instruction for reading or spelling. The teachers read books to the students who were expected to listen and follow along. Teachers observed children as they wrote about whatever they chose, teaching themselves to spell. It wasn’t important that children’s writings couldn’t be deciphered by the teacher or the child who had just written it. There was no teaching of the alphabet. Goodman stated that learning to read was like learning a language, and reading would occur naturally if children were exposed to books in common language—not the language of basal readers. He suggested that children would learn when they read along with the teacher (the teacher with a big book copy and the children with individual
books). When the students read alone, they were to guess unknown words from context clues, grammar, illustrations on the page, and use any knowledge of the alphabet they might have picked up. Children would learn to spell by inventing their own spelling system during creative writing (McGuinness, 2004).

Early research dating back to the 1930s recommended that students could not learn how to read until they acquired specific readiness skills such as certain fine motor skills and the ability to tell right from left. In the late 1990s, phonics was reintroduced. “Emphasis was given to the phonemic level in language, and insisted that early learning of phoneme and grapheme relationships was the key to later success in reading and writing” (Hannon, 2002, p. 70).

Early childhood research today has a different perspective. Researchers and educators know that becoming a reader depends on the child’s knowledge of language and print. In order to become a successful reader a child must be provided with a wide range of experiences with printed and spoken language from infancy through early childhood. Preschool children must have activities they will enjoy and can master without being pushed uncomfortably beyond their current developmental stage. Children who cannot spell learn to write by playing at writing. Children, who cannot read, learn from being read to (Burns et al., 1999).

*Reading Readiness, Emergent Literacy, and Story Conventions*

“The preschool years are a period of rapid language growth and development” (Morrison, 1995, p. 255).

Those who do not understand the concept of reading often think of readiness as the stage when children are ready to recognize and interpret printed materials. Reading

Preschool children should be exposed to early literacy experiences while they have a desire to learn about themselves and the world. The amount of information a child takes in at 2 to 3 years old is enormous—more than at any other time. Children who learn to read while very young tend to read quickly and comprehend better than those who learn later, and it is much easier to teach a young child to read. Young children do not consider reading as a “subject” that is frightening but view it as just another fascinating thing in their world. They absorb more information than children whose early attempts to learn have been frustrating. And, most of all, children love to learn to read at a very early age (Doman & Doman, 1994).

Emergent literacy is the concept that tells what a child knows about reading and writing at a particular developmental stage. Early childhood educators need to monitor what a child knows and choose activities to move the child along to becoming a skilled reader (Brewer, 2004). According to Beatty and Pratt (2007), the earlier adults support young children in literacy, the better they learn to read and write. Kotulak (1996) noted that neurobiologists have discovered that the brain is taking environmental information in during the first 3 years of life. During this time, thinking and language are developed. After that time, much of the fundamental architecture of the brain is complete and the opportunity for gathering certain information is closed.

Age 3 is an important phase of oral language development and is the best time for developing specific readiness skills. A child should be given opportunities to enlarge the speaking vocabulary and chances to use language—both as a means of communication and
as a way of expressing thoughts. Oral language development gains should be the main focus for this age and must precede learning printed symbols (Gould, 1976).

Literacy and learning are connected, and literacy experiences are a source for learning. Preschoolers need a language rich environment with lots of talk and reading. One way to promote language is through reading (Boyer, 1991).

According to Burns et al. (1999), reading is a complex and multifaceted process, and children need an approach to learning that integrates many elements. Children start to accumulate the skills needed for reading early in life, and they need a preschool language and literacy foundation that includes oral language skills; including phonological awareness, motivation to read, appreciation for literate forms, print awareness, and letter knowledge.

Reading to a preschooler is the best way to prepare a 3 or 4 year old to be a good reader in elementary school. A child will develop a love of books when he or she has been exposed to many read aloud sessions. For children exposed to print, print awareness begins around age 3. Children will play at writing, and on their own, they begin to spell their own names, to recognize other letters, and to be aware of print in books. At this stage or later, some children catch on to the fact that you look at words from left to right and from top to bottom. This is a very important part of getting ready to read (Brenner, 1990).

Beginning literacy instruction needs to provide access to books, incorporate reading to the children often and repetitively, giving children the opportunity to tell stories from picture books “playing at reading”, and giving them opportunities to draw and write “playing at writing” (Matteson, 2007).
Views of literacy have changed over the years. In the beginning, the development of literacy was considered a skill that people did or did not master. Today, literacy is viewed as a continuum, beginning when the child learns to use language and continuing through adulthood with no ending point. No one reaches the point where he or she has nothing left to learn about reading and writing (Brewer, 2004).

**Access to Books**

Preschools should provide print rich environments including access to high quality books, writing materials, and learning toys (alphabet blocks, letter magnets, etc.). High quality books are different for young children—they should be picture books with or without words. When selecting children’s books, the book content is very important. Children like books for the same reason adults do—to be entertained or obtain new information—preferably both. Children like adventure stories, fairy tales, and mysteries. Children also enjoy nonfiction books. Books that teach about the lives of famous people or animals are vastly popular with tiny children (Doman & Doman, 1994).

Looking at books and being read to are the best preparations for learning to read to oneself (Gould, 1976). When teachers read, they should demonstrate how print works. Burns et al. (1999), suggest that “before reading a book, look at the cover and read the title and author’s name. While reading the book itself, occasionally run your finger along the text so children can discover that text is read from left to right” (p. 33).

Teachers should choose picture books with simple uncluttered illustrations or with objects and animals to identify. Simple stories take the step from identifying pictures to identifying situations (Gould, 1976).
Preschoolers develop their love of knowledge through experiences. They should own books, have access to books in their preschool classroom, be read to often, and see others reading and writing. Children should develop an understanding of the value of literacy as a way to communicate. They should see shared book reading as a time for emotional closeness. From book experiences, children can and should develop some degree of phonological awareness in the preschool years—it is crucial in understanding the alphabetic principle and ultimately toward learning to read (Burns et al., 1999).

*Playing at Reading*

“The single most important activity for building understandings and skills essential for reading success appear to be reading aloud to children” (NAEYC, 1998, p. 33). If a child has been read to regularly, he or she will be able to enjoy picture books easily. By the age of 2 or 3, he or she will be ready to move to nursery rhymes and story book readings (Gould, 1976).

According to Leonhardt (1993), some children come to school knowing that pictures have a story to tell. This skill is the ability to interpret pictures. Some students are able to interpret the story fluently and with story language. This skill has been developed through their experiences of being read to, watching television, and looking at the family photographs and hearing discussions about them. They have followed the illustrations as stories have been read to them, looked at pictures in magazines, and followed sequences of pictures in comics.

In contrast, beginning readers are the very youngest children who have had the least experience with reading and books. They may not yet realize that words on the page correspond with print or what the reader is saying. They may be able to tell stories and
read pictures, but they do not have the basic concepts about print. These children may not
know the meaning of the words, sound-letter relationships, and sentences. During first
experiences with a book, the teacher will do most of the reading. The child will chime in
on predictable parts or may predict words at the end of the sentence. At this stage, when
they write these children experiment with letters and sounds and may use symbols other
than letters. Their writing may look like random scribbles. Some children come to school
with the habits of looking at pictures in random order. Although this may cause confusion
for the child, opportunities to develop picture reading will correct this. Reading is
possibly the only activity a preschooler will do that requires a left to right and top to
bottom motion (Leonhardt, 1993).

When teachers read stories in an early childhood classroom, they need to display
the accompanying pictures and start discussions with the children. The children will
begin to discuss pictures they have found and pictures they have drawn (Bond & Wagner,
1966). As children grow in their ability to get meaning from pictures, they become able
to tell the story portrayed in a series of pictures. Preschoolers watch teachers read and
“read” that same way. If the teacher pays attention to what is happening in the story, the
child’s interest and sense of humor will be caught. As the child listens to a story, he or
she connects with the characters. A child’s speaking vocabulary is enlarged by making
the connection between words and pictures. Asking questions teaches a child to interpret
a story, identify the characters, describe the sequence of events, or see the cause and
effect relationship between people and events. Teachers should encourage each child to
make up his or her own ending to the story using his or her imagination and reasoning
ability. Book discussions promote oral literacy (Gould, 1976).
In school, stories are a large part of reading instruction. In addition to becoming familiar with characters, young children need to become comfortable with narrative elements such as characters, dialogue, and what happens next. Young children are aware of sequence in directions and should be able to apply that to sequence in events in stories. They are able to learn about narrative by reading and listening to storybooks. Young children need to be exposed to daily reading periods. Children will begin to pretend to read by listening to stories and from comments and questions they overhear (Burns et al., 1999). Children learn to identify words through picture clues rather than word analysis (Chall, 1967).

Young children are able to become characters in books easily during their dramatic play. As a result, they think about the characters’ personalities, intentions, and motives. The story reading experience becomes much more complex and complete while the characters become more realistic to the students. Developing character awareness can be done with any children’s book. Using the funny children’s book, *No David* (Shannon, 1988) becomes more meaningful when we encourage the children to think about Mom’s scolding words and to consider her feelings and David’s feelings. (Clyde, 2003).

Some early reading programs use pictures to relate plot and action of the stories to be read and use picture clues to help with word recognition. Therefore, children must develop the skill of oral interpretation of pictures. Reading comprehension growth begins as students develop the ability to interpret pictures. When students learn to place pictures in proper sequence, they are learning to predict what will happen next. Sequencing also helps students to recall specific information and gain comprehension abilities that will be useful to them throughout their lives (Leonhardt, 1993).
Most modern emergent reading material provides opportunities for students to picture read. By moving this concept developmentally, children will become able to tell the story in sequence and predict outcomes. Then they will be able to organize logical order of events and classify information. “Learning to read is developmental. These lessons in picture story reading are important ones, for they are early learnings in comprehension abilities” (Leonhardt, 1993, p. 37).

Children turn through their picture books before they start reading. They “read” by following the pictures. Preschoolers do this as imitating, and they pretend they’re really reading. But the best part of “playing at reading” is that it makes the child feel good about books and makes him or her feel he or she is part of the literary world (Leonhardt, 1993). According to the New Zealand Ministry of Education (2006), children who play at reading and imitate readers are better prepared to learn to read than children who learn the alphabet first.

Repeated Readings

To develop a “reader”, the first step is sharing the book repeatedly. At the subsequent readings, the child may want to “read” some of the words and let the teacher read others. Sometimes, the younger children just want to follow along. Teachers need to read at a natural speed, like conversation, to develop the child’s oral language fluency. After reading the book two or three times daily for several days, place the book on an accessible bookshelf. The child will “read” it to himself or herself and others many times, bringing pleasure and pride to the child (Doman & Doman, 1994).

In the preschooler’s development of literacy, previous experience with a book is important. When a child has heard a book two or three times, he will memorize
the patterns and be able to recite the text from memory. At this stage of literacy, the student does not have the concept of word to sound established, and will lose their place when finger pointing the words (Hart-Hewins & Wells, 1999, p. 54).

Repetition helps the brain’s circuit-connecting process form the hardware of the brain during early life. Repetitions of the same songs or stories help children have the time to develop those circuitry systems that are essential to intellectual functioning. In addition to stimulating the brain, repetition stimulates interest in the child. When a preschooler memorizes stories or songs that he or she has heard repeatedly, he or she begins to ask for that particular story or song and begins to ask questions about it (Ibuka, 1977). When preschoolers hear a book read, their brain is not thinking about the details of how a word is constructed, but thinking about what story the writer is telling (Doman & Doman, 1994).

Children’s first attempts at reading are “pretending to read”. Emergent readers “read” books from memory, and even though they are not reading the print, they should be encouraged as if they were. “Research finds that children who pretend to read at this early age are more likely to become successful readers later. An emergent reader may know that the words are made of letters that can be named” (Burns et al., 1999, p. 28).

Frequent readings of the same book help to build confidence in the “reader” and develop a habit of reading. It helps children become aware of one-to-one correspondence of print and sound and helps them to see the left to right sweep of the words on the page. Early read aloud experiences model page turning and how a story flows from beginning to end. Even though the child is just memorizing the text, he or she is developing habits to become a reader. After a child is able to tell a story from the pictures or memorization
of the text, “the next step is looking at simple stories together to help the child master more complex reading strategies” (Hart-Hewins & Wells, 1999, p. 54).

A child who hears a story over and over again develops the emergent skills of beginning to show an interest in a picture story, then recognition of the letters of the alphabet, and finally does the reading by himself or herself (Ibuka, 1977). Once a child finds that the book is actually talking to him or her, there will be no limits to the enjoyment of books. He or she will now be a reader. The child realizes that there can be a new conversation anytime he or she picks up a new book (Doman & Doman, 1994).

All of these skills must be developed and practiced orally before a child is able to use them in terms of the written language. This preparation is essential just as speech precedes reading. Full use and comprehension of the spoken language must precede that of written language (Doman & Doman, 1994).

The fact is preschool children love to be read to. As a teacher reads the same book to children, they begin to chime in and “read” with the teacher. Children begin to enjoy “reading” books to others. Preschool children should be encouraged to start these emergent reading events by saying, “now how about you read to me” or “your turn” after a book has been read aloud numerous times (Burns et al., 1999).

Playing at Writing

There is a relationship between early reading and early writing. A writing program must complement a reading program in the meaning of sentences. When a child writes, he or she is using components of written language according to his or her ability (letters, words, sentences). Later a child understands how these can be combined to produce written messages. The child will make up sentences that fit his or her ideas and
oral language skills. Using fluent oral language, the young child will produce sentences with meaning and overlook details of letters and words. As a child’s abilities increase, he or she puts meaning in print by constructing words, letter by letter. He or she develops letter features and letter sequences, particularly for the vocabulary that he or she uses in writing. Familiar words become part of the writing vocabulary, the ones that he or she knows well (Clay, 2000).

When children are between 3 and 5 years old, they realize that people make marks on paper for a purpose. They start to imitate writing and produce scribbles or letter forms. A child’s earliest writing attempts do not contain their thoughts, but soon they begin to communicate their ideas to adults. A preschooler’s early writing can be seen in his or her first attempts at writing stories (Clay, 2000).

Teachers promote early writing by example. The teacher may draw a picture or hang a picture on the wall and ask the children to tell a story from the picture. Children offer the text while the teacher writes the story under the picture. In developmental writing, the student will draw something he or she likes then tell the teacher about it. The teacher acts as a scribe and records what the child says. The amount of text that is written for the child varies according to that particular child and the child’s developmental abilities. Research supports that young children learn faster if they are able to teach themselves how to make letters. As the children write, they develop some letters and learn to modify those letters to make new ones (Clay, 2000).

The skills needed to learn to read and the skills needed to write are linked together. Those skills include attending to print, organizing investigated printed forms, scanning left to right, analyzing letters and words, producing a word, and carrying out
movements needed in writing words and sentences (Clay, 2000). “Children engaged in language and literacy activities, observed at home and preschools, appear mostly playful and exploratory, although in fact they are hard a work as scholars of language and literacy” (Burns et al., 1999, p. 58). According to Beatty and Pratt (2007), teachers should fill the environment with written language and should do a great deal of writing as a model.

**Best Practices in Emergent Literacy**

“The way a child is taught to read has a direct bearing on how efficiently he or she will be able to use their language to read, speak, or write” (Stern, Gould, Stern, & Gartler, 1965, p. 14).

Teachers today know that attaining literacy is not a single simple process. Understandings about how children learn to read and write have changed over the last few years. Teachers once thought children came to school as a blank slate and knew nothing about literacy. Now, they know that children have had varied literacy experiences before they come to school. This section focuses on successful literacy strategies for preschool children.

Preschool teachers are an important resource in promoting early literacy. They promote rich language and beginning literacy concepts and skills. Early childhood experiences should not try to copy formal reading instruction but help children develop the basic knowledge and understandings to allow them to grow when it is time for such instruction (Burns et al., 1999). Teachers are guides for children as they enter into the wonderful world of literature, and they instruct children in phonemic awareness, the alphabet, concepts about print, and oral language (McGee & Morrow, 2005).
“You read to children while they are still young enough to want to imitate what they are seeing and hearing.” (Trelease, 1985, p. 5). There are four important factors that need to be present in an early childhood environment to promote literacy. The child must be read to regularly and frequently. There must be a wide variety of print such as books, magazines, newspapers, etc. There should be pencils and paper available and easily accessible in order to promote scribbling and drawing as the starting point in written language. The teacher should continually stimulate the students’ interests in reading and writing and always praise their writing and reading efforts.

Creating a print rich environment in a preschool classroom enables a teacher to watch children develop literacy. Teachers observe each child’s development as he or she learns about print every day (Brenner, 1990).

The teacher should write stories as the children watch and then display all written work. There should be wordless books in the classroom to provide the students the opportunity to read by interpreting the pictures and developing a story from their own experiences and in their own words. “Playing at reading” is essential later when students begin to read. Preschool reading builds a healthy self-esteem and the child recognizes the accomplishment (Trelease, 1985).

When the child starts to like a particular story, he or she wants to read it by him or herself. The child may not know how to read, but he or she memorizes the pictures in the book and reads the story following the words. During this phase, children start asking the meanings of words (Ibuka, 1977).

Children’s books are written to communicate with children and create stories to delight and please the reader. These books become children’s favorites, being read aloud
frequently and memorized by children. Books for reading in early childhood must be books that have certain characteristics to offer the maximum support to the early reader. These books must have predictable language. “Literature is not simply a means of entertaining and amusing children, it is essential nourishment for their imaginations, their hearts, and their minds. It contributes to their personal growth by giving them experiences (Hart-Hewins & Wells, 1999, p. 29).

The importance of literacy experiences in the classroom is evident, and teachers are continuously working to provide these experiences. Some communities are trying to provide experiences for children who do not have such experiences at home. In a MSNBC news report on March 12, 2007, Rahema Ellis reported on the Reach Out and Read program started by Barry Zuckerman in 1989. Zuckerman saw that the families did not have books in the home and he started providing them. Zuckerman suggests that physical health and early literacy go hand-in-hand. Children who visit Boston Medical Center’s pediatric clinic will receive a book—at every visit from 6 months to 5 years old. Parents are also trained on how to get the most from the book. The Reach Out and Read program operates in every state. After 18 years, 20 million books have been distributed. Zuckerman says he is giving a prescription for early childhood literacy—one book at a time.

Researchers and educators are always searching for what is and is not appropriate for young children. The following strategies have been proven to be effective in early instruction; shared book reading, dialogic reading, repeated readings, comprehension, children’s own text in early reading, and learning about print (Doyle & Bramwell, 2006).
“It is not surprising that children’s success in learning to read is enhanced by having books read to them” (Beaty & Pratt, 2007, p. 22). Shared book reading gives children a chance to participate and stimulates learning. The teacher helps the student interpret text by drawing on the child’s experiences and background. The teacher asks questions and encourages the child to make sense of the book. Shared book reading creates opportunities for emergent literacy development (Doyle & Bramwell, 2006). Read aloud stories provide priceless experiences for preschoolers, particularly those with little experience with books. From this experience, they can learn about the nature of reading and how exciting reading can be. Children learn through hearing stories again and again and become familiar with language used in books. Children learn to listen to see what will happen next, and they enjoy the story as it unfolds (New Zealand Ministry of Education, 2006).

**Dialogic Reading**

Dialogic reading was first described by Whitehurst et al. (1988) as shared book reading that includes questioning and responding to children while reading a book. This strategy incorporates many readings and conversations about books with children in small groups. After a few readings, the children are to become the “readers”. The teacher encourages the students to tell more by questioning. This method was studied with children from 2 to 6 years old, and was found to have a positive effect on oral language development. “The relationship between oral language and code related skills, such as conventions of print, emergent writing, knowledge of graphemes, phoneme
correspondence, and phonological awareness are skills important for later reading, is quite strong during the preschool years” (Doyle & Bramwell, 2006, p. 12).

According to Lonigan and Whitehurst (1998), children whose parents used dialogic reading techniques at home made double the language gains as students who were only read to at school.

Repeated Readings

Repeated reading requires that a book be read more than once. The first reading by the teacher should not be interrupted by too much discussion. It is common for children at the emergent stage to ask for a story to be read again. As they now know how the story works, they will be able to make a greater contribution to the reading in predicting, in saying the refrain, and in many other ways, but their response should be spontaneous (New Zealand Ministry of Education, 1996, p. 2).

When children become more familiar with a book, they engage in more dialog. They ask more questions and interpret more text. On the first readings children ask questions to clarify, but on repeated readings they make inferences and predictions. Children tend to participate more with each additional reading. Repetitive reading can be compared to listening to songs, the more you hear the music the more familiar you become, and you anticipate what is coming next. A familiar book offers children the comfort of retelling a story or trying out new vocabulary words, and conversation from the book leads to vocabulary development. Children who hear repeated readings of stories make the most significant vocabulary gains (Doyle & Bramwell, 2006).
**Comprehension**

Reading with book talks gives teachers a chance to ask meaningful questions about the story. Children will participate in a conversation about what is happening in the story, which helps them comprehend. Sometimes book talks contain more facts than thoughts using higher order thinking. However, young children will answer with complex thoughts and words when asked and challenged (Doyle & Bramwell, 2006).

An emergent reader will learn that a book tells a story and that the words stay the same each time the reader goes back to the book. The child will learn that the pictures will help him or her to understand the story. By the end of the emergent reader stage, the child will show an interest in being able to “read” the text by him or herself, have a discussion about the book, and recognize some words in the text. Preschool experiences with books and print continue each time a new book is shared (New Zealand Ministry of Education, 2006).

**Children’s Own Text in Early Reading**

When children dictate or write a story from their own experiences, they use their familiar language. Their story will make good emergent reading material. What the child has “written”, he or she knows. His or her text will be based on his or her own thoughts and feelings, and the language and vocabulary may be more exciting than what is found in books (Clay, 1972).

**Learning About Print**

Preschoolers should be using books from the start to learn about print, and gradually they will become aware of it. When telling a dictated story, they begin to see that print says what they expect it to when it is read back to them. In sharing storybooks,
the children learn print awareness, functions of print, and listening comprehension. Readings of high quality storybooks should lead discussions. “The teacher must not only read out loud, but develop routine practices that will actively engage the children. In addition to reading books while they listen, it is important to discuss the books with them” (Burns et al., 1999, p. 53).

**Literacy Instruction Used in This Study**

**Literacy Practice 1–Preprogram**

During this year the teachers taught literacy using individual preferences of teaching methods.

**Literacy Practice 2–KLP**

KLP (Kindergarten Literature Program for Preschool and Kindergarten students) was introduced by Sulzby (University of Michigan). “KLP: enriches children’s experiential and language background” (Sulzby, 2005, p. 3). This program uses classic and popular children’s literature already found in many preschool and kindergarten classrooms. The focus is to read a children’s book four times and then ask the child to draw and write about his or her favorite part of the book (Sulzby). KLP has been used in preschool and kindergarten since 1990. “It is designed for all children, not just for those who come to school ready or with rich literacy experiences” (Sulzby, p.1). “Repeated readings of easy texts help children practice and assimilate what they’ve learned” (Burns et al., 1999, p. 64). According to Beatty and Pratt (2007), children who have read along with the teacher using the same book for several readings are able to retell the story from memory or from the pictures.
Four copies of each book title in Appendix I were purchased for each classroom. The procedure was to read one book title four times. Most children need repetition and practice in order for their emerging skills to become automatic. At each reading, the teacher used a different copy of the book. After the reading, each copy was displayed in a special place to allow access to the children. By the end of the readings of the book, all four copies were displayed in the room. At that time, it was time for the students to draw and write about the book in their journals. There was discussion about the characters, setting, and significant event from the story. The students picked their favorite part and discussed what they would draw with a buddy. Each student drew his or her favorite part in his or her journal and told the story for the teacher to pen in the journal. Another critical part of this program was making the books available to the students to “read” the books to themselves, to other children, or to the teacher. “There is no push toward print or decoding. It will develop when the child needs it, particularly if the child is doing emergent writing and is having rich literacy experiences throughout the day” (Sulzby, 2005, p. 3).

*Literacy Practice 3–David Matteson Theory*

David Matteson is a trainer and consultant with a focus on beginning readers and writers—the prekindergarten teachers in this study have received his training. He teaches that “a picture is worth a thousand words”, and “every picture tells a story” (Matteson, 2007). Matteson’s theories focus on “knowing how books work and knowing how stories work” (Matteson & Freeman, 2006, p. 3). According to Matteson, students need opportunities to acquire language. He suggests that the five keys to literacy led by NCLB
(No Child Left Behind) are phonics instruction, phonemic awareness, vocabulary, fluency, and comprehension” (D. M. Matteson, personal communication, June 11, 2007).

A succession of readiness is developed through activities such as handling books, turning pages, pretending to read, looking at pictures, identifying known objects in pictures, and trying to identify letters and words. “When children look at pages in books, they ask what the picture is about, and associate pictures with stories and words with stories” (Burton, 1956, p. 169).

The implementation of the Matteson theory includes different components. Teachers model drawing and writing daily to the students. “The teacher knows that oral language and attending to picture detail need to be important aspects of his or her writing instruction as well” (Matteson & Freeman, 2006, p. 90). The teacher’s modeled drawing and writing focuses on details, picture labeling, and dialogue speech bubbles for the characters. According to Matteson and Freeman (2005), the pictures include the information the “emergent readers and writers use when they begin to read and write” (p. 18). Students are asked to draw their personal story in a journal and tell the story to the teacher who labels the picture and pens the story. The students are expected to read the story back to the teacher (D. M. Matteson, personal conversation, June 11, 2007). The student’s story should remain constant over time.

Students are observed during center play activities to encourage oral language. The play centers are set up with characters and settings—promoting children to develop stories during play. These stories are captured in the children’s journals (D. M. Matteson, personal communication, June 12, 2007).
Wordless books are used in reading instruction. “Children who naturally emerge into reading depend on the pictures in picture books to help them understand the stories” (Beaty & Pratt, 2007, p. 247).

The Matteson focus is to tell a story from the pictures in the books. “Creating meaning through problem solving occurs as students explore books and retell stories using the pictures contained within them” (Matteson & Freeman, 2006, p. 2).

The better a child’s attention to detail within pictures and oral language, the stronger the foundation he or she will have for reading and writing. With this in mind, we believe that it is the child’s ability to comprehend, and not a child’s attention to letters, sounds, and words, that is the foundation for reading. (Matteson & Freeman, 2006, p. 3).

According to Matteson, children should attend to pictures before attending to print. “The picture is where the story is” (D. M. Matteson, personal communication, September 19, 2008).
CHAPTER 3

METHODOLOGY

Introduction

This is a study of the progression of a Northeast Tennessee school system’s preschool literacy program over a 3-year period. It examines the impact of prekindergarten literacy programs on student readiness for kindergarten. This chapter describes the methods and procedures applied in the study. It is divided into seven sections: research methodology and design, population of the study, instrument used, research questions, null hypotheses, data collection process, and data analysis.

Research Methodology and Design

This study uses quantitative methodology and is quasi-experimental in design. Quasi-experimental research designs tend to involve many different but interlocking relationships between variables, and “the experimental group and the control group are selected without random assignment” (Creswell, 2003, p. 169). “Researchers who employ these designs rely instead on other techniques to control threats to internal validity” (Fraenkel & Wallen, 1996, p. 275). This design is also known as “nonequivalent-groups pretest-posttest design” (MacMillan, 2004). The study uses data from five prekindergarten classrooms over a 3-year span. Each year, the five kindergarten classes’ scores were grouped together to create three groups of subjects. Each group had different literacy experiences. In this nonequivalent design, three different treatments were
compared as shown in the following diagram:

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>O</td>
<td>X₁</td>
<td>O</td>
</tr>
<tr>
<td>B</td>
<td>O</td>
<td>X₂</td>
<td>O</td>
</tr>
<tr>
<td>C</td>
<td>O</td>
<td>X₃</td>
<td>O</td>
</tr>
</tbody>
</table>

*Population*

The study was conducted using a population that was economically and ethnically diverse. The students were chosen by entire classroom rosters from Title I prekindergarten students in a northeast Tennessee school system. Five classrooms were used in the study over a 3-year span of time. The students were from the 2004-2005 school year, the 2005-2006 school year, and the 2006-2007 school year. Each classroom size ranged from 16 to 20 students – the five classrooms presenting 255 students for the 3 years of the study.

*Instrument*

The Bracken Basic Concept Scale–Revised was chosen as the instrument to collect student data. The BBCS-R was developed by Bruce A. Bracken in 1998 as a revision of the Bracken Basic Concept Scale of 1984. The BBCS-R is used in clinical and education research programs, in program evaluations, and in comparing two or more groups of children. The BBCS-R can be used for norm-referenced, criterion-referenced, or curriculum-based assessments. According to Bracken (1998), the BBCS-R is especially useful in a pre-posttest paradigm, and is “used to assess content found in most preschool curricula, (e.g., recognition of letters, numbers, colors, shapes, sizes)” (p. 7-8).
The first six subtests compose the School Readiness Composite (SRC). The Bracken is used to assess the basic concept development of children by measuring comprehension in concept categories. “The BBCS-R is a developmentally sensitive measure of children’s basic concept acquisition and receptive language skills” (Bracken, 1998, p. 1). The concepts are presented orally in complete sentences and visually with choices. The teacher begins with the first question of the first subtest. The questions continue in order with each correct answer. A ceiling is reached when the student misses three consecutive items. At that point, the teacher moves to subtest two until the student reaches that ceiling, then continues in the same manner through the remaining subtests. The raw score for the combined subtests range from 0 to 88. The Bracken Examiner’s Manual contains charts (according to the child’s chronological age) that convert the raw score to a scaled score, percentile rank, normative classification, and concept age equivalent. The normative classification ranges from very delayed to very advanced.

The SRC assesses children’s knowledge of the readiness concepts children are taught in preparation for formal education. A child’s mastery of basic concepts is strongly related to his or her overall intellectual development. Basic concepts represent an extremely important building block for consideration in preschool assessment. Although basic concepts are among the simplest of language terms, many children do not master these concepts until after several years of formal education (Bracken, 1998).

Research Questions

The purpose of this study was to examine the association of prekindergarten language and literacy activities with the students’ achievement on basic concepts for kindergarten readiness. The following research questions were posed:
1. Are there differences in Bracken scores (postscore minus prescore) for prekindergarten students in regard to the student’s type of literacy experiences – preprogram (LP1), Kindergarten Literature Program (LP2), or Matteson theory (LP3)?
   
   \[ H_{01} \] There are no differences in the Bracken scores of prekindergarten students among the three literacy programs (LP1, LP2, LP3).

2. Are there differences in Bracken scores (postscore minus prescore) for each of the three literacy programs (LP1, LP2, LP3) between prekindergarten boys and girls?
   
   \[ H_{021} \] There are no differences in the Bracken scores (postscore minus prescore) for students in LP1 between prekindergarten boys and girls.

   \[ H_{022} \] There are no differences in the Bracken scores (postscore minus prescore) for students in LP2 between prekindergarten boys and girls.

   \[ H_{023} \] There are no differences in the Bracken scores (postscore minus prescore) for students in LP3 between prekindergarten boys and girls.

3. Are there differences in Bracken scores (postscore minus prescore) for each of the three literacy groups (LP1, LP2, LP3) among the three age groups at the end of the school year; Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), and Group C (5 yr. 4 mo.–5 yr. 7 mo.)?
   
   \[ H_{031} \] There are no differences in Bracken scores (postscore minus prescore) for students in LP1 among the three age groups; Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), and Group C (5 yr. 4 mo.–5 yr. 7 mo.).
H₀3₂ There are no differences in Bracken scores (postscore minus prescore) for students in LP2 among the three age groups; Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), and Group C (5 yr. 4 mo.–5 yr. 7 mo.).

H₀3₃ There are no differences in Bracken scores (postscore minus prescore) for students in LP3 among the three age groups; Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), and Group C (5 yr. 4 mo.–5 yr. 7 mo.).

Data Collection

The data were on file at the school system. Permission was asked and granted from the school system superintendent to use the data for the research. The data were gathered from each individual prekindergarten teacher and from central office. Form 129 was submitted to the East Tennessee State University Office for the Protection of Human Research Subjects in October 2008. The ETSU IRB chair determined that this project was not human subjects research and did not require IRB approval.

Data Analysis

Descriptive and inferential statistics were used. All students were given a Bracken pretest at the beginning of each school year. At the end of each school year, the students were given a Bracken posttest. The first pretests were administered in the fall of 2004 with a posttest in the spring 2005, using LP1 experiences during year 1. The 2nd year, the group was tested in the fall 2005 and began to participate in the LP2 experience. After daily exposure to LP 2, a posttest was administered in the spring 2006. The 3rd year, the group was tested in the fall 2006 began participation in the LP3 experiences, and after
daily exposure to LP3, a posttest was administered in the spring 2007. These data were entered into SPSS (Statistical Package for the Social Sciences) for Windows for statistical analysis.

The research questions and null hypotheses were tested using the following methods. An independent samples $t$-test was used for research question 2. Research questions 1 and 3 were analyzed using an ANOVA. “The ANOVA $F$ test evaluates whether the group means on the dependent variable differ significantly from each other” (Green & Salkind, 2005, p. 176). The grouping variable was the type of program. When there was a significant difference, a follow-up test (post hoc) was conducted to compare group means.

**Summary**

The methodology for this study has been outlined in this chapter. The study analyzed the value of prekindergarten literacy experiences in preparing students for formal education. The results obtained from the experimental groups were examined to determine whether there was a significant difference in the means at the .05 level of confidence.
CHAPTER 4
RESULTS AND ANALYSIS OF DATA

According to Whitehorn (2007), the emphasis of prekindergarten experiences has shifted more toward literacy instruction. The purpose of this study was to analyze the Bracken readiness scores of prekindergarten students who were provided different literacy experiences at school. This study also examined scores of boys and girls and scores of students in different age brackets when presented the same literacy experiences.

The data for this study were on file at the participating school system. Data retrieved included age, gender, pre- and post-Bracken scores, and type of literacy experience. The study group consisted of 255 prekindergarten students. Data were collected over a 3-year period. During the 1st year, there were 82 students in the study, 88 students in the 2nd year, and 85 students the 3rd year.

The demographic profile of the prekindergarten students of the study is represented in Table 1.
Table 1

Demographic Profile of Prekindergarten Students

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>82</td>
<td>88</td>
<td>85</td>
<td>255</td>
</tr>
<tr>
<td>%</td>
<td>32</td>
<td>35</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>Year 1 Literacy Experience LP1</td>
<td>82</td>
<td>32</td>
<td></td>
<td></td>
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<tr>
<td>Year 2 Literacy Experience LP2</td>
<td>88</td>
<td>35</td>
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<td></td>
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<tr>
<td>Year 3 Literacy Experience LP3</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>255</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Year 1 Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>49</td>
<td>43</td>
<td>41</td>
<td>82</td>
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<tr>
<td>Girls</td>
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<td>45</td>
<td>44</td>
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<td>Total</td>
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<td>85</td>
<td>100</td>
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<tr>
<td>Year 2 Gender</td>
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<tr>
<td>Year 3 Gender</td>
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<td>Boys</td>
<td>41</td>
<td>45</td>
<td>44</td>
<td>85</td>
</tr>
<tr>
<td>Girls</td>
<td>44</td>
<td>52</td>
<td>44</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
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<td>100</td>
<td></td>
</tr>
<tr>
<td>Year 1 Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>29</td>
<td>32</td>
<td>35</td>
<td>82</td>
</tr>
<tr>
<td>Group B</td>
<td>27</td>
<td>31</td>
<td>35</td>
<td>82</td>
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<td>Group C</td>
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<td>82</td>
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<tr>
<td>Total</td>
<td>82</td>
<td>88</td>
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</tr>
<tr>
<td>Year 2 Age</td>
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<td></td>
</tr>
<tr>
<td>Group A</td>
<td>32</td>
<td>32</td>
<td>36</td>
<td>88</td>
</tr>
<tr>
<td>Group B</td>
<td>31</td>
<td>31</td>
<td>35</td>
<td>88</td>
</tr>
<tr>
<td>Group C</td>
<td>25</td>
<td>25</td>
<td>29</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Year 3 Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>35</td>
<td>35</td>
<td>41</td>
<td>85</td>
</tr>
<tr>
<td>Group B</td>
<td>23</td>
<td>23</td>
<td>27</td>
<td>85</td>
</tr>
<tr>
<td>Group C</td>
<td>27</td>
<td>27</td>
<td>32</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Data Analysis

During each of the 3 years of the study, a different method of literacy instruction was used. The scores were analyzed to determine if the type of literacy experience was
related to the students’ readiness scores as measured by the Bracken Basic Concept Scale–revised (BBCS-R).

**Research Question 1: Literacy Instruction**

Are there differences in Bracken scores (postscore minus prescore) for prekindergarten students in regard to the students’ type of literacy experiences—preprogram (LP1), Kindergarten Literature Program (LP2), or Matteson theory (LP3)?

Ho1. There are no differences in the Bracken scores of prekindergarten students among the three literacy programs (LP1, LP2, LP3).

A one-way analysis of variance was conducted to evaluate the relationship between the type of literacy instruction and the difference in Bracken scores of the study. The factor variable the type of literacy instruction included three levels: LP1, LP2, and LP3. The dependent variable was the difference in Bracken scores. The ANOVA was not significant, $F(2,252) = .03, p = .967$. Therefore, Ho1 was retained. The strength of the relationship among the type of literacy instruction and the difference in Bracken scores as assessed by $\eta^2$ was small (<.01). The results indicate that the difference in Bracken scores was not significantly different among the 3 types of literacy instruction. The means, standard deviations, and the 95% confidence intervals for the differences for the three types of literacy instruction are reported in Table 2. Figure 1 represents the differences in scores of the 3 literacy experiences.

**Table 2**

*Means, Standard Deviations, 95% Confidence Intervals of 3 Types of Literacy Instruction*

<table>
<thead>
<tr>
<th>Literacy Experience</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>LP2</th>
<th>LP3</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>82</td>
<td>27.59</td>
<td>11.73</td>
<td>-4.85 to 4.31</td>
<td>-5.13 to 4.11</td>
</tr>
<tr>
<td>LP2</td>
<td>88</td>
<td>27.85</td>
<td>13.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP3</td>
<td>85</td>
<td>28.09</td>
<td>12.94</td>
<td>-4.30 to 4.78</td>
<td></td>
</tr>
</tbody>
</table>
Figure 1. Differences in Bracken scores of LP1, LP2, and LP3.

Research Question 2:

Are there differences in Bracken scores (postscore minus prescore) for each of the three literacy programs (LP1, LP2, LP3) between prekindergarten boys and girls?

Ho2: There are no differences in the Bracken scores (postscore minus prescore) for students in LP1 between prekindergarten boys and girls.

An independent samples t-test was conducted to evaluate whether the difference in Bracken scores for students in LP1 differ between prekindergarten boys and girls. The difference (postscore minus prescore) was the test variable and the grouping variable was
boys and girls (gender). The test was not significant, \( t(2,79) = .69, p = .491 \); therefore, the null hypothesis \( H_{02} \) was retained. The \( \eta^2 \) index was .01 which indicated a small effect size. Girls \((M = 28.72, SD = 12.66)\) tended to score about the same as boys \((M = 26.86, SD = 11.28)\) in LP1. The 95% confidence interval for the differences in the means was -3.49 to 7.22. Figure 2 shows the distributions for the 2 groups in LP1.

![Figure 2. Differences in Scores of Girls and Boys in LP1.](image)

\( H_{02} \) There are no differences in the Bracken scores (postscore minus prescore) for students in LP2 between prekindergarten boys and girls.
An independent samples $t$-test was conducted to evaluate whether the difference in Bracken scores for students in LP2 differ between prekindergarten boys and girls. The difference (postscore minus prescore) was the test variable and the grouping variable was boys and girls (gender). The test was not significant, $t(2,86) = 1.11$, $p = .270$; therefore, the null hypothesis $H_0^2$ was retained. The $\eta^2$ index was .01 which indicated a small effect size. Girls ($M = 29.38$, $SD = 12.99$) tended to score about the same as boys ($M = 26.26$, $SD = 13.38$) in LP2. The 95% confidence interval for the differences in the means was -2.47 to 8.71. Figure 3 shows the distributions for the two groups in LP2.

![Figure 3](image-url)

*Figure 3. Differences in Scores of Girls and Boys in LP2.*
Ho2<sub>3</sub> There are no differences in the Bracken scores (postscore minus prescore) for students in LP3 between prekindergarten boys and girls.

An independent samples $t$-test was conducted to evaluate whether the difference in Bracken scores for students in LP3 differ between prekindergarten boys and girls. The difference (postscore minus prescore) was the test variable and the grouping variable was boys and girls (gender). The test was not significant, $t(2,83) = -.76, p = .452$; therefore, the null hypothesis Ho2\textsubscript{3} was retained. The $\eta^2$ index was <.01 which indicated a small effect size. Girls ($M = 27.07, SD = 13.27$) tended to score about the same as boys ($M = 29.20, SD = 12.64$) in LP3. The 95% confidence interval for the differences in the means was -7.73 to 3.47. Figure 4 shows the distributions for the 2 groups in LP3.

Figure 4: Differences in Scores of Girls and Boys in LP3.
Research Question 3:

Are there differences in Bracken scores (postscore minus prescore) for each of the 3 literacy groups (LP1, LP2, LP3) among the three age groups at the end of the school year-Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), and Group C (5 yr. 4 mo.–5 yr. 7 mo.).

H03

There are no differences in Bracken scores (postscore minus prescore) for students in LP1 among the three age groups Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), and Group C (5 yr. 4 mo-5 yr. 7 mo.).

A one-way analysis of variance was conducted to evaluate the relationship between the age of the students in LP 1 and the difference in Bracken scores of the study. The factor variable age of the students included three levels. The dependent variable was the difference in Bracken scores. The ANOVA was not significant, $F(2,79) = .16, p = .855$. Therefore, Ho1 was retained. The strength of the relationship between the age of the student and the difference in Bracken scores as assessed by $\eta^2$ was small (<.01). The results indicate that the difference in Bracken scores was not significant among the three age groups of the students in LP1. The means, standard deviations, and 95% confidence levels for the three age groups are reported in Table 3. Figure 5 represents the differences in scores of the three age groups in LP1.

Table 3

<table>
<thead>
<tr>
<th>Age Groups in LP1</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Group B</th>
<th>Group C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group A</td>
<td>29</td>
<td>26.86</td>
<td>12.33</td>
<td>-9.40 to 5.89</td>
<td>-8.08 to 7.06</td>
</tr>
<tr>
<td>Age Group B</td>
<td>26</td>
<td>28.62</td>
<td>11.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age Group C</td>
<td>27</td>
<td>27.37</td>
<td>11.57</td>
<td>-9.02 to 6.53</td>
<td></td>
</tr>
</tbody>
</table>
Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), Group C (5 yr. 4 mo.–5 yr. 7 mo.)

Figure 5. Differences in scores in LP1 in Each of the Three Age Groups

Ho₃ There are no differences in Bracken scores (postscore minus prescore) for students in LP2 among the three age groups Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), and Group C (5 yr. 4 mo.–5 yr. 7 mo.).

A one-way analysis of variance was conducted to evaluate the relationship between the age of the students in LP2 and the difference in Bracken scores of the study. The factor variable the age of the students included three levels. The dependent variable was the difference in Bracken scores. The ANOVA was not significant, $F(2,85) = .45$, $p$
= .639. Therefore, Ho32 was retained. The strength of the relationship between the age of
the student and the difference in Bracken scores as assessed by \( \eta^2 \) was small (.01). The
results indicate that the difference in Bracken scores was not significant among the 3 age
groups of the students in LP2. The means, standard deviations, and 95% confidence
intervals for the three age groups are reported in Table 4. Figure 6 represents the
differences in scores of the three age groups in LP2.

Table 4

*Means, Standard Deviations, 95% Confidence Intervals of Three Age Groups in LP2*

<table>
<thead>
<tr>
<th>Age Group in LP2</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Group B</th>
<th>Group C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>32</td>
<td>29.28</td>
<td>11.09</td>
<td>-6.64 to 9.33</td>
<td>-5.1 to 11.82</td>
</tr>
<tr>
<td>Group B</td>
<td>31</td>
<td>27.94</td>
<td>14.34</td>
<td></td>
<td>-6.5 to 10.53</td>
</tr>
<tr>
<td>Group C</td>
<td>25</td>
<td>25.92</td>
<td>14.48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), Group C (5 yr. 4 mo.–5 yr. 7 mo.)

Figure 6. Differences in Scores in LP2 in Each of the Three Age Groups.

Ho3. There are no differences in Bracken scores (postscore minus prescore) for students in LP3 among the three age groups Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), and Group C (5 yr. 4 mo.–5 yr. 7 mo.).

A one-way analysis of variance was conducted to evaluate the relationship between the age of the students in LP3 and the difference in Bracken scores of the study. The factor variable age of the students included three levels. The dependent variable was the difference in Bracken scores. The ANOVA was significant, $F(2,82) = 3.36, p = .040.$
Therefore, Ho3 was rejected. The strength of the relationship between the age groups in LP3 and the difference in Bracken scores as assessed by $\eta^2$ was medium (.07).

Because the overall $F$ test was significant, post hoc multiple comparisons were conducted to evaluate pairwise difference among the means of the three groups. A Tukey procedure was selected for the multiple comparisons because equal variances were assumed. There was a significant difference in the means between age group A and age group C ($p = .033$). However, there was not a significant difference between age group B and age group C ($p = .610$) and between age group A and age group B ($p = .327$). The 95% confidence intervals for the pairwise differences, as well as, the means and standard deviations for the three age groups in LP3, are reported in Table 5. Figure 7 represents the differences in the three age groups in LP3.

Table 5

<table>
<thead>
<tr>
<th>Age Group in LP3</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Group 2</th>
<th>Group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>35</td>
<td>32.03</td>
<td>12.37</td>
<td>-3.21 to 12.92</td>
<td>.55 to 15.95</td>
</tr>
<tr>
<td>Group B</td>
<td>23</td>
<td>27.17</td>
<td>12.09</td>
<td>-5.13 to 11.92</td>
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</tr>
<tr>
<td>Group C</td>
<td>27</td>
<td>23.78</td>
<td>13.28</td>
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</tr>
</tbody>
</table>
Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), Group C (5 yr. 4 mo.–5 yr. 7 mo.)

Figure 7. Differences in Scores in LP3 in Each of the Three Age Groups

Summary

The analyses of the data were presented in Chapter 4. The data were collected from one school system located in Northeast Tennessee, using five classrooms over a 3-year period. The Bracken Basic Concept Scale-R was used as the scoring instrument, using the difference score of posttest minus pretest for each student each year of the study. The scores were analyzed using type of literacy experience, gender, and age of the students. Statistical Package for Social Sciences (SPSS) software was used to analyze the data.
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR PRACTICE AND FUTURE STUDY

According to Anbar (2004), early childhood educators driven by the No Child Left Behind legislation have been under pressure to create standards for early literacy development for “children below kindergarten age” (p. 29). The purpose of this study was to determine if there was a relationship between the type of literacy experience and the readiness scores of prekindergarten students as measured by the Bracken. According to Bracken (1998), this assessment is “useful in a pretest posttest paradigm, and is used to assess content found in most preschool curricula” (p. 78). Bracken scores were calculated for three groups of students over a 3-year period as the literacy instruction evolved in the school district studied.

During the 1st year (LP1) individual teachers independently developed their own literature programs. In the 2nd year (LP2) teachers in the district delivered the Kindergarten Literature Program (KLP) advocated by Sulzby. Based on Sulzby’s research in emergent reading and writing, teachers read the books engagingly and repeatedly, then invite students to discuss the idea of what they want to draw and write from a favorite part of the book. “Teachers and parents are becoming aware that children’s scribbles, drawings, and strings of letters stand for meaningful stories and that children will read from them” (Sulzby, 2004, p.7). According to Anbar (2004), Sulzby is a key contributor to the “emergent literacy camp” (p. 24). Sulzby has defined a difference in emergent literacy and conventional literacy. She refers to emergent literacy as the
relation between a child’s literacy outcomes and the diverse literacy experiences that precede those outcomes.

During the 3rd year (LP3) teachers participated in a program developed by Matteson. This program promotes having children draw pictures about familiar experiences in their own lives. “Teachers use these experiences to develop oral language, letter-sound knowledge, and vocabulary in a meaningful way for the students” (Matteson, 2008, personal communication). Matteson states “every picture tells a story” and promotes comprehension from pictures. The review of the literature provided strategies used in early childhood programs for both the LP2 and LP3 programs.

The Bracken score data were analyzed using the scores of 255 students from five prekindergarten classrooms in a Northeast Tennessee school system. There were 82 students in the 1st year, 88 students in the 2nd year, and 85 students in the 3rd year.

Summary of Findings

With the pressures of No Child Left Behind, school districts are constantly looking for ways to improve. In the school system studied, 3 years of data representing three instructional systems or patterns were used. This study was a quantitative research design study. The means and standard deviations of the groups in the study are reported in Table 6
Table 6

Means and Standard Deviations of the Groups in the Study

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Literacy Experience LP1</td>
<td>82</td>
<td>27.59</td>
<td>11.73</td>
</tr>
<tr>
<td>Year 2 Literacy Experience LP2</td>
<td>88</td>
<td>27.85</td>
<td>13.20</td>
</tr>
<tr>
<td>Year 3 Literacy Experience LP3</td>
<td>85</td>
<td>28.09</td>
<td>12.94</td>
</tr>
<tr>
<td>Year 1 Gender Boys</td>
<td>49</td>
<td>26.86</td>
<td>11.28</td>
</tr>
<tr>
<td>Year 1 Gender Girls</td>
<td>33</td>
<td>28.72</td>
<td>12.66</td>
</tr>
<tr>
<td>Year 2 Gender Boys</td>
<td>43</td>
<td>26.26</td>
<td>13.38</td>
</tr>
<tr>
<td>Year 2 Gender Girls</td>
<td>45</td>
<td>29.38</td>
<td>12.99</td>
</tr>
<tr>
<td>Year 3 Gender Boys</td>
<td>41</td>
<td>29.20</td>
<td>12.64</td>
</tr>
<tr>
<td>Year 3 Gender Girls</td>
<td>44</td>
<td>27.07</td>
<td>13.27</td>
</tr>
<tr>
<td>Year 1 Age Group A</td>
<td>29</td>
<td>26.86</td>
<td>12.33</td>
</tr>
<tr>
<td>Year 1 Age Group B</td>
<td>27</td>
<td>28.62</td>
<td>11.58</td>
</tr>
<tr>
<td>Year 1 Age Group C</td>
<td>26</td>
<td>27.37</td>
<td>11.57</td>
</tr>
<tr>
<td>Year 2 Age Group A</td>
<td>32</td>
<td>29.28</td>
<td>11.09</td>
</tr>
<tr>
<td>Year 2 Age Group B</td>
<td>31</td>
<td>27.94</td>
<td>14.34</td>
</tr>
<tr>
<td>Year 2 Age Group C</td>
<td>25</td>
<td>25.92</td>
<td>14.48</td>
</tr>
<tr>
<td>Year 3 Age Group A</td>
<td>35</td>
<td>32.03</td>
<td>12.37</td>
</tr>
<tr>
<td>Year 3 Age Group B</td>
<td>23</td>
<td>27.17</td>
<td>12.09</td>
</tr>
<tr>
<td>Year 3 Age Group C</td>
<td>27</td>
<td>23.78</td>
<td>13.28</td>
</tr>
</tbody>
</table>

Research Question 1

Are there differences in Bracken scores (postscore minus prescore) for prekindergarten students in regard to the students’ type of literacy experiences—preprogram (LP1), Kindergarten Literature Program (LP2), or Matteson theory (LP3)?

To answer this question, a one-way analysis of variance was conducted to evaluate the relationship between the type of literacy experience and the mean difference Bracken scores of the study. The results revealed there was not a significant difference in...
the scores of the prekindergarten students among the three literacy experiences. However, the mean difference score of the students who participated in LP3 (Matteson theory) was the highest at 28.09. The students who participated in LP2 (Kindergarten Literature program) had a mean difference score of 27.85, and the students of the preprogrammed group LP1 had a mean difference score of 27.59. Sulzby provided information on a study in the South Bronx that improved seven of the lowest performing schools in New York City by using the Kindergarten Literature Program (LP2) (Sulzby, 2004). Matteson and Freeman (2006) devote Chapter 9 to show one district’s preschool program using this theory (LP3). Although a review of the literature for both programs LP2 and LP3 suggest a positive influence, this study did not provide conclusive results. The strength of the relationship among the type of literacy instruction and the mean difference score was small, less than .01.

The results of the ANOVA indicate that there is not a significant difference (posttest minus pretest) in the means of Bracken scores according to the type of literacy experience. The mean difference score of LP 3 was the highest, 28.09. The mean difference score of LP1 was the lowest, 27.59.

Research Question 2

Are there differences in Bracken scores (postscore minus prescore) for each of the 3 literacy programs (LP1, LP2, LP3) between prekindergarten boys and girls?

To analyze this research question, an independent samples $t$-test was used to test the null hypotheses.

An independent samples $t$-test was conducted to evaluate whether the mean difference scores of LP1 differed between prekindergarten boys and girls. The findings
indicated that there was no significant difference between boy and girl difference mean scores. The LP1 mean difference score for girls ($M = 28.72, SD = 12.66$) was about the same as boys ($M = 26.86, SD = 11.28$). In the LP1 group girls mean difference scores were higher than boys by 1.86.

An independent samples $t$-test was conducted to evaluate whether the mean difference scores of LP2 differed between prekindergarten boys and girls. The findings indicated that there was no significant difference between boy and girl difference mean scores. The LP2 mean difference score for girls ($M = 29.38, SD = 12.99$) was about the same as boys ($M = 26.26, SD = 13.38$). In the LP2 group girls mean difference scores were higher than boys by 3.12.

An independent samples $t$-test was conducted to evaluate whether the mean difference scores of LP3 differed between prekindergarten boys and girls. The findings indicated that there was no significant difference between boy and girl difference mean scores. The LP3 mean difference score for girls ($M = 27.07, SD = 13.27$) was about the same as boys ($M = 29.20, SD = 12.64$). However, in the LP3 group boys mean difference scores were higher than girls by 2.13.

The following results were found in the relationship between gender and scores. Of the students participating in the LP1 literacy experience, there was not a significant difference score-girls scored a mean difference score of 28.72; and boys scored a lower mean difference score of 26.86. Of the students participating in the LP2 literacy experience, there was not a significant difference-girls scored a mean difference score 29.38; and boys scored a lower mean difference score 26.26. Of the students participating
in the LP3 literacy experience, there was not a significant difference—boys scored a mean difference score 29.20, and girls scored a lower mean difference score 27.07.

The review of the literature supported differences in language development skills between boys and girls. As cited in Galsworthy (2000), Benbow found girl and boy brain differences with culture playing an important part of development; and as cited in Gurian (2001), Allen, UCLA, discovered structural difference in the brains of girls and boys. Galsworthy conducted a study that found “girls scored significantly higher than boys on verbal and nonverbal cognitive ability” (p. 214). Gurian stated that girls’ brains mature earlier than boys’, and preschool girls speak more fluently than boys because boys’ verbal skills develop a year later than girls. Antropova (2003) states that the development of boys is delayed when compared to girls. The review of the literature supported the idea that the girls’ scores would be higher. This study did not find a significant difference to support this idea.

Research Question 3

Are there differences in Bracken scores (postscore minus prescore) for each of the three literacy groups (LP1, LP2, LP3) among the 3 age groups at the end of the school year; Group A (4 yr. 8 mo.–4 yr. 11 mo.), Group B (5 yr. 0 mo.–5 yr. 3 mo.), Group C (5 yr. 4 mo.–5 yr. 7 mo.)

To analyze this research question, three one-way ANOVAs were used to test the null hypothesis for each literacy program.

A one-way ANOVA was conducted to evaluate the relationship between the age of students in LP1, LP2, and LP3 and the difference in Bracken scores of the study. The findings of the ANOVA were not significant. The difference in Bracken scores was not
affected by the age of the students in LP1. However, based on the Bracken scores, the
middle students in Group B scored higher than the older students in Group C by 1.25.
The findings of the LP2 ANOVA were not significant. The difference in Bracken scores
was not affected by the age of the students in LP2. The youngest students in Group A
scored higher than the older students in Group C by 3.36; however, this difference is not
statistically significant. The findings of the LP3 ANOVA indicated there was a
significant difference. Because the findings are significant, multiple comparisons were
conducted to evaluate the pairwise difference among the means of the three age groups.
There is a significant difference in the means between age Group A (youngest students)
and age Group C (oldest students). The youngest students scored higher than the oldest
students by 8.25. There is not a significant difference between age Group B and Age
Group C. Group B (middle students) scored higher than Group C (oldest students) by
3.39. There was not a significant difference between a Group A (youngest students) and
age Group B (middle students). Group A (youngest students) scored higher than Group B
(middle students) by 4.86.

The following results were found when analyzing the ages of the students in the
different literacy experiences. For the students who experienced LP1, there was not a
significant difference-the children grouped in the middle age range of the classroom had
the highest mean difference score of 28.62, while the youngest children had the lowest
mean difference score of 26.86. For the students who experienced LP2, there was not a
significant difference-the youngest children had the highest mean difference score, 29.28,
while the oldest children had the lowest mean difference score, 25.92. For the students
who experienced LP3, there was a significant difference. The youngest children had the
A significant and surprising finding of this study revealed that the youngest students scored higher than their older peers. However, this finding is in agreement with the literature. Researchers label the timeframe for a child’s brain development during the first 5 years of life the “critical periods”, “prime time”, or “windows of opportunity” (NACCRA, 2008, p.1). According to Insel (2008), a child’s brain is 90% developed by age 5. At that time, the cortex has peaked and starts to decline. Shore (1997) stated that the brains of children at age 3 are 2½ times more active than the brains of adults. Shore also found that by age 2, the number of synapses in a child’s brain is double those in adults. Childhood learning experiences direct the neurons that are used in wiring the brain’s circuits. The neurons that are not used may die.

Conclusions

Prekindergarten programs are expanding but, there are varying opinions and views of prekindergarten experiences among policy makers and opinion leaders regarding their value. For example, in a recent newspaper article in the Kingsport Times News, Tennessee Governor Bredeson’s prek initiative was attacked. The article quoted a Strategic Research Group report that showed inconsistencies for evidence to support higher performance in prekindergarten students. The article suggested that money should not be invested in prekindergarten and should be “invested in other education strategies that might prove more fruitful” (Kingsport Times News, 2008, p. 14A).

Despite the attacks, Gov. Bredeson sought an expansion of $25 million to add 250 to 300 new prekindergarten classrooms for the 2008-2009 school year (Kingsport Times
News, 2008, p.1A). According to Isbell (2008), there are benefits from the prekindergarten programs that can be seen, and the Tennessee classrooms “provide a positive beginning that will last a lifetime” (p.15A).

The focus of this study was to compare three different types of literacy instruction of prekindergarten classrooms using Bracken scores. Data were obtained from one school system to measure the literacy development of young students in relation to the type of literacy program delivered, student gender, and student age. The data collected for this study did not reveal a significant difference in student scores in relation to the type of literacy instruction. Also, there was no evidence that gender was associated with the difference in scores. However, there was strong evidence that the youngest students participating in LP3 had the highest scores. This study supports the following conclusions.

Conclusion #1

Based on the findings of this study, there was not a significant difference in the Bracken scores among the three different literacy programs.

Conclusion #2

The results of this study question the literature regarding earlier acquisition of literacy skills of prekindergarten girls over prekindergarten boys. Boys and girls displayed similar scores on the Bracken readiness test.

Conclusion #3

The findings of this study provide evidence that the youngest students in LP3 scored higher than the other two age groups. The data shows a decrease in scores as the age of children receiving the instructional program increases: Group A = 32.03, Group B
= 27.17, and Group C = 23.78. Although there was not a significant difference in LP1 and LP2, the oldest group of students scored lowest in each literacy group.

This conclusion supports findings in another study of literacy behaviors of 2,759 preschool children reported in the CIERA Report #2-014. This study found that “young children develop preliteracy skills rapidly” (CIERA, 2001, p.1). According to Pre-K Now (2007), high quality prekindergarten classes produce “the most sizeable gains for children” (p.4).

According to a longitudinal study by Magnuson, Meyers, Ruhm, and Waldfogel (2005), children who attended prekindergarten scored significantly higher in reading and math in kindergarten. According to Kauerz (2006), high quality prekindergarten prepares students to succeed in school and in life. The literature sources provide support for Tennessee Governor Bredeson’s prek for all initiative.

**Recommendations for Practice**

The results of this study indicate that the Matteson theory program (LP3) may provide an effective strategy for working with young children. Although there were increases in scores of all ages, the greatest gains were reported with children under age 5. Therefore, the following recommendations are made to practitioners in this school system:

1. The prekindergarten classrooms should continue to use the Matteson theory program.

2. The Matteson theory program should be implemented in the 3-year old classes.
3. Bracken-R scores should be analyzed annually during the Matteson theory program use.

Recommendations for Future Study

According to Jehlen (2009), the No Child Left Behind legislation uses the words scientifically based 115 times to move schools to use “proven methods—not hunches or educated guesses or ideological beliefs” (p. 31). In order to provide quality literacy experiences for prekindergarten students, programs must continually be evaluated and improved. Therefore, the following recommendations are provided.

1. As the teachers of this school system become more familiar with the Matteson program, another study should be conducted to test gains for students of varying ages.

2. As more prekindergarten classrooms are being added in this system, a larger sample may provide significant differences between gender and scores. A review of the literature indicated a difference that was not supported in this study. Another study should be conducted with a larger sample to test gains according to gender.

3. This study should be repeated to include other school systems using the same literacy programs. A larger sample may provide a significant difference among the three types of literacy programs.

4. A study should be conducted with students of different ages to compare groups that have experienced literacy programs and those that have not.
5. Additional studies of prekindergarten programs using a variety of literacy instruction strategies are needed to develop a more comprehensive understanding of early childhood literacy teaching and learning.
REFERENCES


APPENDIX

KLP CHILDREN’S BOOK LIST


## VITA

**BARBARA JEAN GAMBLE**

### Personal Data:
- **Date of Birth:** January 9, 1955
- **Place of Birth:** Bristol, Virginia
- **Marital Status:** Married

### Education:
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- East Tennessee State University, Johnson City, Tennessee, Master of Education, Instructional Technology
  - M.Ed. 2000
- East Tennessee State University, Johnson City, Tennessee, Bachelor of Science in Education, Early Childhood
  - BS.Ed. 1997

### Professional Experience
- **Prekindergarten Teacher, Jackson Elementary,**
  - Kingsport, TN
  - 2008 – Present
- **Prekindergarten Teacher, Roosevelt Elementary,**
  - Kingsport, TN
  - 2005 – 2008
- **3rd Grade Teacher, Roosevelt Elementary,**
  - Kingsport, TN
  - 1998 – 2005
- **Teaching Assistant, Johnson Elementary**
  - Kingsport, TN
- **Teaching Assistant, Washington Elementary**
  - Kingsport, TN
  - 1994 -1995

### Honorary:
- James H. Quillen Scholar 2005
- Kappa Delta Pi
- Who’s Who Among American Teachers 2005
Grants: FEPEK, 2003
Environmental Grant, 2004
Technology Grant, 2005
TEA Space Grant, 2005
Putting Children 1st Grant, 2006
Health Grant, 2007
Putting Children 1st Grant, 2008
Coordinated School Health Grant, 2009