

PRESCHOOL PEDAGOGY AND ITS IMPACT ON PRESCHOOLERS'  
ATTITUDES TOWARD LEARNING

by

Karen Annette Lounsbury

A dissertation submitted to the faculty of  
The University of North Carolina at Charlotte  
in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy in  
Curriculum and Instruction

Charlotte

2014

Approved by:

---

Dr. Kelly Anderson

---

Dr. Chuang Wang

---

Dr. Brian Kissel

---

Dr. Susan Furr

©2014  
Karen Annette Lounsbury  
ALL RIGHTS RESERVED

## ABSTRACT

KAREN ANNETTE LOUNSBURY. Preschool pedagogy and its impact on preschoolers' attitudes toward learning. (Under the direction of DR. KELLY M. ANDERSON)

This qualitative study examined two preschool pedagogical approaches and the impact each had on students' attitudes toward learning. One preschool used A Beka curriculum, which is a direct instruction pedagogy. The other preschool used Creative Curriculum, which is structured for children to learn through exploration and teacher scaffolding. A four year old boy and a four year old girl from each preschool were selected to participate. Four sources of data were collected: (a) observation of each participant, (b) a drawing completed by each participant, (c) an interview with each participant, and (d) the Learning Behavior Scale which was completed by both the participant's parent and teacher. All four students expressed that school was hard, especially drawing and writing. Recommendations are for further research to be conducted on pedagogy and students' attitudes toward learning in kindergarten as the pressures of a more academic curriculum are imposed upon young children, and the study be done at the beginning of the school year, midyear, and end of the school year.

## ACKNOWLEDGMENTS

For Blake, and all of the children who are told to color the sky blue, the leaves green and the flowers red. There are so many colors in the rainbow. It was because of you, this journey began.

For my family, friends and cheerleaders. Because of your support, the journey continued.

For my committee, especially Dr. Kelly Anderson. Your guidance, kind words, and stamina allowed me to see this journey to the end.

## TABLE OF CONTENTS

LIST OF FIGURES	vii
LIST OF TABLES	viii
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: REVIEW OF LITERATURE	10
Early Childhood: Historical Perspectives	10
The Beginnings of Kindergarten	14
Developments in Pedagogy: Dewey and Montessori	16
Pedagogy and Children's Thinking	19
Preschool Developmental Domains	22
Pedagogy	23
Curricular Influences on Children as Learners	27
Studies of Early Childhood Education Pedagogy	32
CHAPTER 3: METHOD	39
CHAPTER 4: FINDINGS	55
CHAPTER 5: DISCUSSION	90
REFERENCES	102
APPENDIX A: LEARNING BEHAVIOR SCALE ITEMS	113
APPENDIX B: LEARNING BEHAVIOR SCALE FOLLOW UP INTERVIEW WITH RESPONSES OF OFTEN FOR ITEMS 2-8, 10, 10-23, 25, 27, 29	115
APPENDIX C: LEARNING BEHAVIOR SCALE FOLLOW UP INTERVIEW WITH RESPONSES OF SELDOM FOR ITEMS 1, 9, 17, 24, 26, 28	118
APPENDIX D: OBSERVATION PROTOCOL	119

APPENDIX E: INTERVIEW QUESTIONS REGARDING STUDENT'S DRAWING	125
APPENDIX F: APPLEWOOD PRESCHOOL DESIGN	126
APPENDIX G: BAILEY PRESCHOOL DESIGN	127
APPENDIX H: MEGAN'S DRAWING	128
APPENDIX I: KEVIN'S DRAWING	129
APPENDIX J: JANE'S DRAWING	130
APPENDIX K: SAM'S DRAWING	131

## LIST OF FIGURES

FIGURE 1:	Student diversity in Applewood Preschool	58
FIGURE 2:	Student diversity in Bailey Preschool	61

## LIST OF TABLES

TABLE 1:	Creative Curriculum LBS parent and teacher responses	65
TABLE 2:	A Beka LBS parent and teacher responses	77
TABLE 3:	Student interview responses	81
TABLE 4:	Crosswalk of students' attitudes	85
TABLE 5:	Crosswalk of students' behaviors	86
TABLE 6:	Emergent themes from observations	88



## CHAPTER ONE: INTRODUCTION

Early childhood educational pedagogy exists along a continuum. At one end of the continuum is direct instruction and at the other end is child initiated pedagogy. Strong supporters for both methods of pedagogy can be found. In the interest of raising academic achievement, especially in children considered at risk for academic success, there are advocates for introducing highly structured academics early in young children's education. On the other side of the argument are advocates who believe that young children are capable of achieving high academic growth, but through a method that allows children to construct knowledge through exploration with the guidance of a well trained teacher. Studies utilizing many pedagogical methods have been conducted, but what is absent from some of the literature is the voice of the child. All decisions regarding the education of young children are made by adults. However, the people who these decisions directly affect, the children, have not had a voice in the matter. Results from this study added the voices of students to the existing body of literature through the examination of two pedagogically different preschool classrooms.

### Background

Studies involving early childhood education programs have shown the importance of reaching children within the first five years. Over the past 50 years, studies have shown that early intervention and education for disadvantaged young children can have a

lasting impact on their cognitive and social development (Campbell et al., 2008; Nores, Belfield, Barnett, & Schweinhart, 2005; Ramey & Campbell, 1984). Young disadvantaged children, who began school with a cognitive deficit, developed a negative view toward their own academic competency and toward school (Stipek & Ryan, 1997). The need for effective instructional strategies to decrease the gap in cognitive competencies was important in keeping a high motivation to learn (Stipek & Ryan, 1997; Valeski & Stipek, 2001).

At best the literature on early childhood education programs and curricula was mixed. What was most apparent was research that supported the use of high-quality preschool education to improve social and academic gains in young children who were the most at-risk for academic failure. However, the pedagogy used to deliver that education has been debated among educators. There are many standardized early childhood curricula used in the United States. The importance of understanding the most effective method of teaching young children, especially children who are at-risk for academic success, has been the focus of studies over the past several decades (Becker & Gersten, 1982; Cambell & Ramey, 1994; Conners, Reynolds, & Ou, 2003; Gray & Klaus, 1970; Reynolds, Temple, & Ou, 2010). In 1999, Marcon examined the pedagogy of three different preschool models for the mastery of basic skills. Marcon's study evaluated data collected from teachers using the Pre-K Survey of Beliefs and Practices and found lower retention rates among students who attended the direct instruction program. Special education placement did not differ among students from the three preschool models. Students who attended the direct instruction model preschool program "earned significantly lower grades compared to children who had attended child-initiated

preschool classes” (Marcon, 2002). Stipek and Ryan (1997) examined cognitive assessment and observation data regarding the motivation of young children to learn. They found that “cognitive competencies at entry are predictive of academic performance much later” (p. 719). Stipek and Ryan found that young disadvantaged children, who began school with a cognitive deficit, developed a negative view toward their own academic competency and toward school. These two studies used data from observation and assessments. What was not examined was the personal story of individual student’s perception of the pedagogy. This study sought to fulfill that missing piece of the literature.

Several longitudinal studies were conducted to study the effects of a high-quality early childhood education, the most prominent of these was the Carolina Abecedarian Project. The participants in the Abecedarian study were provided high quality educational child care for 6 – 8 hours per day for five days each week (Ramey & Campbell, 1984). In addition to the many positive social outcomes that were found, the “preschool treatment was associated with educationally meaningful effect sizes on reading and math skills that persisted into adulthood” (Campbell, Ramey, Pungello, Sparling, & Miller-Johnson, 2002, p. 42). This study highlighted the long-term positive social and academic effects on individuals who received a high quality preschool education.

Walsh (1989) cited concern that as preschools became incorporated into the public schools, the curriculum used would be modeled after the elementary school curriculum, “narrowly focused and externally imposed”. As public interest grew following the positive findings of longitudinal research on early childhood programs such as the High/Scope Perry Preschool Program and the Carolina Abecedarian Project, the

pressure to push down academic curriculum in the schools increased (Marcon, 1999).

With the implementation of the Common Core State Standards, in response to the Race to the Top Fund (U.S. Department of Education, 2013), the emphasis for students to be "Career-and College-Ready" continued to add pressure on teachers of the youngest children to ensure academic success through content based instruction (North Carolina Public Schools, 2012).

After the findings from the High/Scope Perry Preschool Program and the Carolina Abecedarian Project were published and the correlation between receiving a high-quality early childhood education and academic achievement were found, a study was conducted to examine different preschool models. Marcon (1999) studied the impact of three different preschool models on the development and early learning of inner-city children in Washington, D.C. The 721 participants in this study were predominantly African American four year-old preschool students in an urban school district that used three different pedagogical models. The students who were in programs that used a child-initiated pedagogy showed greater mastery of basic skills than students in the direct instruction and the blended programs.

Previous studies (Bloodworth, 2001; Graue, Clements, Reynolds, & Niles, 2004) have examined preschool curriculum and its effects on student achievement, as reported by teachers and parents, but did not consider the students' perspectives. Whereas these studies examined the affects of pedagogy, even taking into account data from adults, the voice of the child was nowhere to be found.

### Statement of the Problem

Many studies have been conducted that show the connection between pedagogy and learning, but what was missing from the literature was the voice of the young child. The questions that this study were designed to address were 1) What were the attitudes of students toward learning within each pedagogy?, and 2) How did students behave and respond to these different pedagogies?

### Purpose of the Study

The purpose of this study was to investigate the student's perception of two distinctly different preschool pedagogies as told through the child's point of view. This study was intended to contribute to the body of literature in the field of early childhood education by examining the connection, if any, of two distinctly different preschool pedagogies and the child's attitude toward learning in preschool. This qualitative study sought to gain insight on students' perceptions of preschool pedagogy, as told through the students' voices.

### Research Questions

The guiding research questions this study focused on was 1) What were the students' attitudes of pedagogy in two distinctly different pedagogical classrooms?, and 2) How did students behave and respond to these different pedagogies?

### Significance of the Study

A study of preschool pedagogy and its impact on children's attitudes toward learning was important for several reasons. First, students who did not develop a positive attitude toward school early in their academic career were at risk for dropping out of school. With an increased technology-based workplace, high school dropouts were less

likely to have the minimum skills necessary to function in the job market. High school dropouts with low education and skill levels had a higher risk of living in poverty and becoming involved in crime (Boisjoly, Harris, & Duncan, 1998; Freeman, 1996; Laird, Lew, Debel, & Chapman, 2001; Lochner & Moretti, 2004; Moore, Gleib, Driscoll, Zaslow, & Redd, 2002). However, the research which studied what influences young children's attitudes toward school during the first years of school was lacking.

Second, one of the four principles guiding the No Child Left Behind Act of 2002 was an emphasis on doing what worked based on scientific research (U.S. Department of Education, 2008). Because qualitative research in the area of children's attitudes toward school was limited, and attitudes could determine success or failure, this study sought to add to the literature that supported scientific research by adding the voice of the student.

#### Assumptions of the Study

The assumption of this study was that children who attended a preschool that was designed around children's interest was more motivated to learn than those children who attended a preschool that employed a more direct instruction approach. This study was conducted using the following three assumptions to guide the research:

1. Children's developmental domains needed to be supported equally for optimum cognitive growth.
2. Curricula in programs for young children needed to be developmentally appropriate, and follow guidelines set by the National Association for the Education of Young Children.
3. Children had innate motivation to learn.

As children grow, each developmental domain progresses at different rates. If one domain, such as cognition was highly supported, but the social/emotional domain was ignored then ultimately the cognitive domain would not develop to the child's potential. "Cognitive, motor, language, emotional, and social skills act together to help the child learn to deal with his world" (Brazelton & Greenspan, 2000).

Theories that supported children's development and learning should be used to develop curricula. The National Association for the Education of Young Children (2002) created guidelines for writers to use when developing curricula for young children. These guidelines were developed using theorists such as Piaget, Montessori, Vygotsky, and Dewey, who support a constructivist, interactive perspective. Although previous studies have been conducted that measure motivation of students (Katz & Assor, 2007; Patrick, Mantzicopoulos, Samarapungavan, & French, 2008), the research which supported the impact a particular curriculum's pedagogy had on a preschool student's attitude to learn as told by the individual student, was lacking in the professional literature. Children, even young children, were able to tell others what they liked and did not like. By using triangulation, this study attempted to narrow the scope of how the participant felt about school based upon the pedagogy of the curriculum. Triangulation, as defined by Hancock and Algozzine (2006), was used as a "strategy for confirming results to demonstrate how findings were based on information acquired from multiple sources" (p.66). The missing piece in the literature regarding student motivation that this study addressed was that of the student's perception and voice.

### Delimitations

The scope of this study was defined by the following: (a) the geographic location in which the study was conducted, (b) the age of the students, (c) the number of students selected for participation in the study, and (d) the number of curricula used in this study. The purpose of geographically limiting this study to the state of North Carolina was due to the investigator's need for accessibility to each case site.

### Definition of Terms

**Blended pedagogy.** The method of teaching that uses both Direct Instruction Pedagogy and Child Initiated Pedagogy (Marcon, 1999).

**Direct instruction pedagogy.** The direct instruction pedagogy is “highly prescriptive in that the lessons are (a) scripted to assure consistency in presentation across teachers, (b) carefully sequenced with task analysis and a comprehensive system for monitoring student progress, and (c) consistently focused on academic instruction with much of the available school day allocated to practice and drill in reading, language, and math” (Marcon, 1999, p.358).

**Child initiated pedagogy.** Marcon (1999) described child-initiated pedagogy as “an approach in which a teacher facilitates learning by (a) providing children with a wide variety of experiences, (b) encouraging children to choose and plan their own learning activities, (c) engaging children in active learning by posing problems and asking questions that stimulate and extend learning, (d) guiding children through skill acquisition activities as needed, and (e) encouraging children to reflect on their learning experiences” (p. 359).



Curriculum. In her text, *The Intentional Teacher*, Ann Epstein, (2007) defined curriculum as “the knowledge and skills teachers are expected to teach and children are expected to learn, and the plans for experiences through which learning will take place” (p. 5).

Developmentally appropriate practice. The approach to teaching where a teacher nurtures all of a child’s developmental domains, basing decisions on knowledge of child development, authentic assessment, and the child’s cultural background (Bredecamp & Copple, 1997).

Pedagogy. Pedagogy, as defined by Bowman, Donovan and Burns (2001), has “three basic components: (1) curriculum, or the content of what is being taught; (2) methodology, or the way in which teaching is done; and (3) techniques for socializing children in the repertoire of cognitive and affective skills required for successful functioning in society that education is designed to promote” (p. 182).

## CHAPTER TWO: REVIEW OF LITERATURE

The focus of this study looked at two different early childhood programs and their influence on the attitudes of young children toward learning. This review of literature explored the history of early childhood education, the developmental domains of young children, pedagogy, and curricular influences on children as learners.

This literature review begins with a history of early childhood education upon which current educational pedagogy built its foundation. Key educators and their philosophies are presented. Next, the developmental domains of young children are presented to show the connection between learning and the domains. Then pedagogy of early childhood curriculum is discussed. Finally, research concerning curricular influences on young children is reviewed. This review focused on four studies, the Early Training Project, the Carolina Abecedarian Project, the High/Scope Perry Preschool Program, and the Chicago Child-Parent Center.

### Early Childhood: Historical Perspectives

#### The Ancients

In ancient Greece, Spartan children were raised and educated at home until they reached seven years old. Then the boys were sent away to schools that were organized much like the Boy Scouts are organized today; older students instructing and guiding the

younger students (Lascarides & Hinitz, 2000). While the boys went off to school, the girls were trained at home by their mothers to be mothers of soldiers, although Plato argued that boys and girls should be trained the same (England, 1921). The traditional method of education was that “the teacher transmits knowledge to their pupils, who are expected to assimilate it on the whole passively” (Hummel, 1994, p. 6).

The educational focus for the students was to develop discipline for battle (Lascarides & Hinitz, 2000). The Spartans acknowledged differentiation between adults and children’s stages of development. As the boys entered school, Spartans viewed boys as passing through three stages before finally reaching adulthood. The ages in each stage of development were grouped much like the breakdown of ages currently in American schools. The boys were called “little boys” from age 8-11 years old, which would cover the elementary school years. Next, between 12-15 years old, the young boys were called “adolescent”, which would equate to the current day middle school grades. The last stage before adulthood, known as “ephebe” lasted between the ages of 16-20 years old (Lascarides & Hinitz, 2000).

Plato believed that education should implement an interactive method, following the Socratic Method, where teacher and pupil seek knowledge through dialogue (Hummel, 1994). When speaking of children under the age of seven years old, Plato expressed his views on education in *The Republic*, where he recognized the need for differences in educating young children.

Plato believed that children, both boys and girls, should learn through play and games, but toys and games needed to “prepare the child for his/her future role in life and skills should be taught with the help of games” (Lascarides & Hinitz, 2000, p. 10). In

*Laws II*, Plato recommended that “those in charge of child rearing must provide each child with toys modeled on real implements and children should have elementary instruction in all subjects” (England, 1921, p. 250).

The 17<sup>th</sup> century: Comenius and Locke

Johann Comenius, a 17<sup>th</sup> century scholar, believed in a universal education system, unlike the practices of his day. He believed that everyone was entitled to formal education, not just the privileged. Comenius developed the concept of individuals passing through educational stages over his/her lifetime, and instruction should follow these stages. He divided human intellectual development into six stages and believed that teachers should know the stage of his or her students and teach them in the appropriate pedagogy. In Comenius’ curriculum, students learned through objects in nature and that instruction began simple and worked up to mastery (Lascarides & Hinitz, 2000).

Another 17<sup>th</sup> century scholar, John Locke, also believed that a change in curriculum and pedagogy was needed. John Locke introduced the concept of *tabula rasa*, or that children were born as an empty slate to be filled with knowledge that should occur through a natural education. This natural education followed in the same vein as Comenius. The educational methods during Locke’s time included rote memorization of text and the study of grammar. Education was provided by private tutors for young boys preparing to enter the priesthood. Locke did not follow the education methods of his time, where students continued to be instructed in the same manner as in Plato’s time. Instead, Locke focused on the interests of the individual child, “for a child will learn three times as much when he is in tune, as he will with double the time and pains, when he goes awkwardly, or is dragged unwillingly to it” (Locke, 1693, p.83).

### The 18<sup>th</sup> century: Rousseau and Pestalozzi

Moving into the 18<sup>th</sup> century, Jean-Jacques Rousseau wrote *Emile*, in 1762, continuing the idea that each child's learning experience should be unique (Rousseau, 1762). Rousseau's writing introduced the idea that "the development of the child was considered a separate stage in life...and the child had a right to the period called *childhood*" (Wortham, 2006, p. 114). This was not a novel concept, as Comenius and Locke were saying the same thing nearly 100 years earlier. Rousseau's focus on young children is what separated him from his predecessors. He believed that at all stages of education, children needed to learn only through experience instead of rhetorical lessons from a tutor. The environment, in his view, should be carefully controlled by the teacher. The "child should be allowed to develop at their own rate and through their own experiences at their own speed" (Lascarides & Hinitz, 2000, p.52). Rousseau's perception of childhood influenced the future education of children. His ideas led to the movement in education known later as Progressive Education (Claydon, 1969).

The Swiss educator, Johann Pestalozzi, was influenced by the writings of Rousseau and recognized that children should be raised and taught in a naturalistic manner. Influenced by his own upbringing, Pestalozzi, "considered the first early childhood teacher" opened schools for poor and orphaned children (Lascarides & Hinitz, 2000, p. 61). He believed that children learned by observation and questioning, using language as the mode of learning. Pestalozzi also believed that education began at birth, with the mother being the first teacher. Pestalozzi's theory of education influenced future educators, such as Friedrich Froebel and Horace Mann, each of whom had a lasting impact on modern education. Each of these early educators understood that the education

of the young child differed from older children in that the younger child's education should be centered on the young child's environment and interests.

### The Beginnings of Kindergarten

Moving into the era of modern education, Friedrich Froebel (Pulliam, 1976) introduced a curriculum developed specifically for young children, known as kindergarten. Froebel was not happy with the current methodology of education, which continued to be rote memorization of text at all grade levels. He observed the difficulty in educating young children because of their lack of experiences, or their "erroneous education" they received before coming to school, and found that he could not offset the deficiencies of the early years of learning" (Lascarides & Hinitz, 2000, p. 97). Froebel recognized that between the ages of 3-7 years old, the child needed an education above what a family could offer in order to enter school prepared to learn. To promote his views on education, Froebel published *The Education of Man* in 1826, where he applied the theory of evolution to education. He viewed education as a "continuous whole, each part related to every other part, each element helping and advancing every other element (Lascarides & Hinitz, 2000, p. 93). Froebel believed "early education should be passive and protective, and follow the child's development and not be prescriptive, categorical and interfering" (Michaelis & Moore, 1908, p.65). He believed that "play needs to be in harmony with the nature and the ability of the child" (Lascarides & Hinitz, 2000, p.95). Today, this concept is known as Developmentally Appropriate Practice (Coppie & Bredecamp, 2009). Froebel developed a curriculum that implemented "gifts and occupations", which he created so children could develop freely using play as a tool (Froebel, 1827). Froebel's "gifts" were specific objects that progress from simple to

more complicated forms, were focused on mathematical principles, and followed the child's development. Another move that Froebel made to push education into the modern era was to train women to be educators, a job previously held only by men (Lascarides & Hinitz, 2000).

Following the teachings of Froebel, Margarethe Schurz, a German immigrant, opened the first kindergarten in the United States (Pulliam, 1976). It was a private kindergarten taught to six children of German immigrants (Schurz' children and family members) in Watertown, Wisconsin. The students were instructed in German, as that was the spoken language in the community. Schurz opened the kindergarten to preserve the German culture and language (Lascarides & Hinitz, 2000). The school was only open for two years from 1856-1858 and closed when the family moved to Milwaukee. In 1859 Elizabeth Peabody met Schurz and her daughter and was impressed with the results of Schurz's kindergarten (Pulliam, 1976). Schurz introduced Peabody to Froebel's book *The Education of Man* and explained his philosophy and methods behind kindergarten (Lascarides & Hinitz, 2000).

Elizabeth Peabody opened the first English speaking private kindergarten to 30 students in Boston, Massachusetts in 1860. Peabody's kindergarten, like Schurz', was based on the concepts and ideals of Froebel. Peabody was an experienced educator before opening the kindergarten. She was opposed to the current practice of teaching academic subjects to very young children (Lascarides & Hinitz, 2000).

While traveling in Germany, Susan Blow became interested in the kindergartens there, and in 1873, in a cooperative effort with William Harris, superintendent of St. Louis, Missouri schools, Blow opened the first public kindergarten in the United States in

St. Louis, Missouri (Morrow, 2009). As the country witnessed the success of the public kindergarten program in the St. Louis public schools, the kindergarten movement began to expand across the country (Lascarides & Hinitz, 2000). As public kindergarten expanded, the need for trained teachers increased and in 1880 the first training school for kindergarten teachers opened at the Oshkosh Normal School in Philadelphia, Pennsylvania.

#### Developments in Pedagogy: Dewey and Montessori

During the latter part of the 19<sup>th</sup> century, changes in pedagogy were occurring at different levels of education (Morrow, 2009). While teaching at the University of Chicago, John Dewey studied current methodology of elementary schools and saw that it was “not consistent with the contemporary psychological principles of normal development” (Lascarides & Hinitz, 2000, p. 217). Dewey wanted to change education from its focus on the teacher and the textbook to focus instead on the individual child’s instincts and activities. Dewey theorized that children learn best by life experiences, and in order to provide an environment to test his theory, he opened the Laboratory School at the University of Chicago in 1896 (Morrison, 1998). During the first year of the school’s operation, Dewey wrote down his pedagogical beliefs and social philosophy in his work *My Pedagogic Creed* (1897). In this work, Dewey provides statements of his beliefs on education, school, curriculum, methodology, and social progress (Dewey, 1897). His belief was that education starts “with a psychological insight into the child’s capacities, interests and habits” (Dewey, 1897, p. 77). Dewey believed that the school served as a social institution where learning occurred through interactions with all individuals in the school community. The curriculum at the Laboratory School was organized around



themes which grew out of activities that the children performed at home and related to human basic needs of shelter, food, and clothing. “Skills in reading, writing, and numbers were developed from the needs and the results of the child’s activities” (Mayhew & Edwards, 1936, p. 58). The pedagogy of the Laboratory School was founded on experimental study by both students and teachers, and the teachers were specialists in specific fields such as carpentry and husbandry, instead of teachers of all subject areas (Lascarides & Hinitz, 2000). The students were grouped by common interest instead of by age as was, and still is, common practice (Mayhew & Edwards, 1936). “The aim of the school was to deepen and broaden the range of social contacts, of cooperative living, so that the students would be better prepared to make their future social relations worthy and fruitful” (Mayhew & Edwards, 1936, p. 466). This new approach to education became known as Progressive Education (Morrow, 2009).

As the education of young children moved into the forefront, theories of how young children learned emerged. While working as an assistant doctor at the Psychiatric Clinic of the University of Rome, Maria Montessori observed “idiot children” who were housed in the city’s insane asylum. As she began working with these children, she “felt that mental deficiency presented chiefly a pedagogical, rather than mainly medical, problem” (Montessori, 1965, p. 31). In 1907, Montessori started Casa dei Bambini (Children’s House) in Italy based on her theory that children learn best in a prepared environment (Montessori, 1965). Montessori’s methods were based on “inherent characteristics of the different ages of the child” and followed the child’s natural interest in his world (Montessori, 1973, p. 3). This approach was not the pedagogical philosophy of her time. Her philosophy stated that “if we are to develop a system of scientific

pedagogy, we must, then, proceed along lines very different from those which have been followed up to the present time” (Montessori, 1965, p. 28). Montessori trained all of her teachers in her pedagogical philosophy, as she “discovered that education is not something which the teacher does, but that it is a natural process which develops spontaneously in the human being. It is not acquired by listening to words but in virtue of experiences in which the child acts on his environment” (Orem & Stevens, 1970, p. 6). Montessori developed lessons and materials, referred to as “learning games and devices (didactic materials)” to be used to prepare children for learning in science, social studies, mathematic, language and the arts (Lascarides & Hinitz, 2000, p. 155). The learning games and devices were categorized into three areas; The Practical Life Exercises, the Sensorial Materials, and the Academic Materials. The first, Practical Life Exercises, focused on fine and gross motor skills needed to perform tasks for everyday living. Activities such as pouring water from a pitcher to a glass and using tools were included in these exercises. The second, Sensorial Materials “were designed to isolate one attribute of an object” (Lascarides & Hinitz, 2000, p. 155). Items used in this area included cylinder blocks and smelling jars. The third area, Academic Materials, helped children develop a particular academic skill. Items developed for use in this area included sandpaper letters and geometric solids. Montessori’s methods and materials were designed so that each child could select the material that he wanted to work with, and the materials were used in such a way that they were self-correcting, such as the stacking blocks. The materials moved from simple to complex and from concrete to abstract. Children in Montessori’s school were grouped heterogeneously by age, which was not a common practice of schools in Rome at that time (Lascarides & Hinitz, 2000). While these learning games

and didactic materials were developed for the children at the asylum, Montessori believed that "...similar methods applied to normal children would develop, or set free their personality" (Montessori, 1965, p. 33).

#### Pedagogy and Children's Thinking: Piaget, Bruner, and Vygotsky

In 1952 Jean Piaget's *The Origins of Intelligence in Children* was published in English (Piaget, 1952). Piaget's studies on children, including his own, led to his theory that children construct knowledge through exploration of their environment. Piaget, a philosopher in the area of epistemology, focused on the process of thinking. His work looked at reasons why children consistently gave incorrect answers to questions on a reading test that he was using. He discovered that when teachers questioned children about how they solved problems, the lessons or programs of study could be designed specifically for the individual student (Lascarides & Hinitz, 2000). "By using critical exploration and questioning children about how they approach a problem, teachers can determine the cognitive level of functioning and design instruction closer to the child's individual level" (Corry, 1996). Piaget believed that children constructed knowledge through their experiences and play and that programmed instruction was not conducive to constructing knowledge.

Piaget's basic law of development states that the child constructs his own intelligence and knowledge through play, and learning is an act of process (Gruber & Voneche, 1977). Piaget studied children's stages of development and categorized development into four stages: Sensorimotor (birth-2 years), Pre-operational (2 years-7 years), Concrete Operational (7 years-11 years), and Formal Operational (adolescence through adulthood). During each of these stages, as information is received the child uses

assimilation and accommodation to process (Driscoll, 1994). Assimilation is when new information is received by a child, and the child creates a schema for that new information. Accommodation is when new information is received and the child connects that information to existing schema and modifies his knowledge of that schema. This study of constructing knowledge led Piaget to develop his Constructivist theory. “The cognitive-developmental viewpoint is exemplified by Piaget’s Constructivist theory. It is based on the work begun by Plato and carried on by Hegel. It was formed into an educational philosophy by John Dewey” (Lascarides & Hinitz, 2000, p. 132).

Considered another key figure in Constructivism and cognitive curriculum theory, American psychologist Jerome Bruner theorized that children could be active problem solvers and were able to explore more challenging subjects of instruction (Bruner, 1960). In his book, *The Process of Education* (1960), Bruner wrote what he saw as four main ideas about children and learning. The first idea that he believed was “the teaching and learning of structure, rather than the simple mastery of facts and techniques, is at the center of the classic problem of transfer” (1960, p. 12). Second, Bruner felt that by postponing the teaching of important subject areas because they were deemed to be too difficult for young children, schools wasted too much of children’s time (1960). Bruner’s third main idea involved a feature of productive thinking, intuition. He believed that intuition, which is just as important as analytical thinking, was often ignored in schools (1960). The fourth idea that Bruner wrote about was that the motivation for ideal learning should come from the child’s interest (1960). Bruner believed that all children were capable of learning what was considered difficult subjects at any age. His idea that children should be presented with material in a spiraling manner, as opposed to a linear

manner, led to a curriculum model known as spiral curriculum (Lascarides & Hinitz, 2000).

Russian psychologist, Lev Vygotsky, studied young children and theorized that children's mental functions are acquired through social relationships and they learn by internalizing the world around them (Vygotsky, 1978). Vygotsky believed in a learning context where the student was an active participant in his learning. This belief was in contrast to the traditional school model where the teacher instructed the knowledge to the student. Vygotsky's theory has three major themes. The first is that "social interaction plays a fundamental role in the process of cognitive development (Vygotsky, 1978, p. 79). First the social learning occurs, then development. Second is the theme of the "More Knowledgeable Other" (Vygotsky, 1978, p. 81). This person is someone in the child's environment that has a better understanding of the concept or a higher ability level of function than the child. This person could be the teacher, an older student, or even a peer. The third theme in Vygotsky's theory is the Zone of Proximal Development (Vygotsky, 1978). Vygotsky explains this as the distance between the student's ability to perform a task with help and the ability to solve the task independently. Vygotsky believed that learning occurred in this zone.

The historical perspective and roadmap of key individuals presented in this literature review are of importance in the fact that the current view of best pedagogical practice is not new. Early educators, from Plato to Montessori, have long seen a disconnect between educational pedagogy and the ways children learn best. For centuries children were taught through rote memorization, as leading educators thought this as the method of instruction in which young children learned best. As psychologists began to

study how young children develop and process information, theories emerged concerning teaching pedagogy. These theories about how children develop led to studies about instructional practices and young children. The next section will discuss young children's developmental domains and why they are important when considering children's overall development.

### Preschool Developmental Domains

Young children's development occurs in four basic domains: physical/motor development, language development, social/emotional development, and cognitive development. Each developmental domain is interdependent on the others for optimal development (Brazelton, 1992). Cognitive, physical/motor, language, emotional, and social skills act together to help the child learn to interact with his or her world starting in infancy and continuing throughout his or her life. However, each developmental stage is mastered at a different pace. In more than 40 years of working with young children, Brazelton and Greenspan (2000) found that as children move through the developmental stages, they build a firm foundation for intelligence, morality, emotional health, and academic skills.

During infancy, young children's physical development allows them to interact socially with others by tracking the person's movements near them, in turn, encouraging the person to interact with the infant (Brazelton, 1992). This positive reinforcement encourages the infant to continue to seek interaction with others. This physical and social development facilitates cognitive development as well. As the infant begins to understand when he or she coos or makes movements with his or her arms, a response is elicited from the person near them. Children playing on the playground with other

children present another example of the integration of the physical, social and cognitive domains in a preschool age child. Another example would be as a child plays with other children he or she develops physical skills and makes common connections (climbing up the slide, building a sandcastle in the sandbox, and riding a tricycle). As the child interacts with other children who may have stronger problem solving abilities, his or her own cognitive development increases (Vygotsky, 1978). As children work together in the classroom to solve a puzzle, the student with stronger problem solving abilities models for the students who are still developing those cognitive skills. As the stronger student explains and demonstrates problem solving strategies for the other students, that student's progression of development is strengthened. This progression of cognitive development is identified by Vygotsky as the Zone of Proximal Development (ZPD) (Vygotsky, 1978). Teachers of preschool children understand this process as their preservice educational training emphasizes knowledge of child development and the importance of the integration of developmental domains. As professional understanding of children's thought process has increased, transferring that knowledge to pedagogy has been slow to change. There have been studies conducted concerning pedagogy designed for young children's learning and academic success that show positive results. Pedagogy should differ, depending on the age of the student, as younger students' learning involves all of the developmental domains.

### Pedagogy

Pedagogy, as defined by Bowman, Donovan and Burns (2001), has "three basic components: (1) curriculum, or the content of what is being taught; (2) methodology, or the way in which teaching is done; and (3) techniques for socializing children in the

repertoire of cognitive and affective skills required for successful functioning in society that education is designed to promote” (p. 182). In her text, *The Intentional Teacher*, Ann Epstein, (2007) defined curriculum as “the knowledge and skills teachers are expected to teach and children are expected to learn, and the plans for experiences through which learning will take place” (p. 5). In the world of educating young children, curriculum was not only presented through lessons and activities, it included the environment, adult-child interactions, and routines, and “provided a framework for developing a coherent set of learning experiences that enabled children to reach the identified goals” (Copple & Bredekamp, 2009, p. 42). A curriculum defines the goals and content that teachers have for children. As teachers guide their students’ learning, the curriculum serves as a roadmap to ensure they incorporate each of the developmental domains as students are exposed to content during the course of the year.

Early childhood professionals debate the best model to use to deliver instruction to young children. In early childhood education, a continuum exists along which curriculum pedagogy falls (Bowman, Donovan & Burns, 2001). At one end of the spectrum is the adult-controlled pedagogy known as direct instruction, where children sit passively and receive information. At the opposite end of the spectrum is the child-initiated pedagogy, where children participate in self-initiated activities for learning. Between the two extreme opposite ends are curricula models that employ a blended pedagogy. The direct instruction pedagogy is “highly prescriptive in that the lessons are (a) scripted to assure consistency in presentation across teachers, (b) carefully sequenced with task analysis and a comprehensive system for monitoring student progress, and (c) consistently focused on academic instruction with much of the available school day



allocated to practice and drill in reading, language, and math” (Marcon, 1999). Marcon described child-initiated pedagogy as “an approach in which a teacher facilitates learning by (a) providing children with a wide variety of experiences, (b) encouraging children to choose and plan their own learning activities, (c) engaging children in active learning by posing problems and asking questions that stimulate and extend learning, (d) guiding children through skill acquisition activities as needed, and (e) encouraging children to reflect on their learning experiences” (p. 359). Child-initiated curriculum is integrated across disciplines and builds on what children already know and are able to do.

Bredenkamp and Copple (1997) found that appropriate early childhood educational practices were best achieved through child-initiated pedagogy. Both direct instruction pedagogy and child-initiated pedagogy were found to have positive results; however the results differed in the areas of outcome and duration of gains. Studies of preschool programs that employed direct instruction pedagogy showed an increase in reading and mathematics scores on standardized assessments in third, fifth, sixth, and ninth grades (Becker & Gersten, 1982; Meyer, 1984; Meyer, Gersten, & Gutkin, 1983). However, these gains decreased when students discontinued a direct instruction approach after preschool (Miller & Dyer, 1975) and third grade (Becker & Gersten, 1982).

Studies of preschool programs that followed a child-initiated pedagogy found positive long-term effects on school achievement and social behavior. Miller and Bizzell (1984) followed the academic achievement of 160 low income African-American youths who participated in one of four preschool programs for one year. Two of the programs employed a didactic approach, the Bereiter Engelmann Curriculum, known as Direct Instruction and DARCEE (the Demonstration and Research Center for Early Education)

curriculum. The other two programs, Montessori and a traditional preschool, used a non-didactic approach. The children were assessed each spring following preschool through second grade. Then a follow up was conducted from seventh through twelfth grades. Initially, Miller and Bizzell (1984) found small positive effects on cognitive skills in the Bereiter Engelmann Curriculum; however the effects faded after kindergarten. The Montessori program, a non-didactic approach, showed positive effects, particularly for boys, which increased over time.

Schweinhart and Weikart (1997) looked at long term effects of three different curriculum models. In this study, young children in poverty attended a preschool using the Direct Instruction Curriculum, the High/Scope Curriculum or a Traditional Nursery curriculum. At the age of 23, the positive effects on measured outcomes were not significantly different between the High/Scope Curriculum and the Traditional Nursery curriculum. The authors pointed out that the High/Scope Curriculum model was easier to replicate because of the research and professional support available (Schweinhart & Weikart, 1997). However, there were significant differences in positive effects between the Direct Instruction Curriculum and the other two programs. The participants, who attended the Direct Instruction Curriculum preschool, at age 23, had higher arrest rates, a lower rate of marriage, a lower rate of plans to attend college, and a lower rate of work retention. Not only did the High/Scope Curriculum and Traditional Nursery curriculum show positive effects over the Direct Instruction Curriculum, the negative effects found in participants who attended the Direct Instruction Curriculum warranted notice. Schweinhart and Weikart (1997) found that 47% of the participants in the Direct Instruction Curriculum were treated for emotional impairment during their school years,

which is significantly higher than the rate reported by the comparative population, which is 17%.

Marcon (1999) studied the impact of three different preschool models on the development and early learning of inner-city children in Washington, D.C. The 721 participants in this study were predominantly African American four year-old preschool students in an urban school district that used three different pedagogical models. The students who were in programs that used a child-initiated pedagogy showed greater mastery of basic skills than students in the direct instruction and the blended programs. As a follow up to the 1999 study (Marcon, 2002), the participants were studied in third and fourth grades. This study focused on special education placement, retention rates and grades on report cards. The findings showed lower retention rates among students who attended the direct instruction program. Special education placement did not differ among students from the three preschool models. Students who attended the direct instruction model preschool program “earned significantly lower grades compared to children who had attended child-initiated preschool classes” (Marcon, 2002, p.16).

#### Curricular Influences on Children as Learners

In the United States, the debate over which curriculum produced greater learning for young children increased in the second half of the twentieth century. Following President Lyndon B. Johnson’s 1964 first State of the Union address, which launched the War on Poverty, a national focus on early intervention programs emerged. The federal program Head Start was created to provide early childhood education to children who lived in low-income families in order for them to enter school better prepared for academic success. Head Start launched a search for an effective early childhood

curriculum that would promote school readiness, and new early childhood education curriculum models emerged. This was a result of the Economic Opportunity Act of 1964, which addressed the effects of poverty on families and children (Morrison, 1998).

#### The Early Training Project

During the 1960's and 1970's, several prominent early childhood intervention studies were conducted, aimed at improving outcomes for children living in poverty. Three of these studies offered a preschool experience and were conducted using samples of predominantly African Americans. The first study which began in the summer of 1962, was conducted in the "upper South" and known as the Early Training Project" (Gray & Klaus, 1970). The purpose of the study was to investigate whether specific interventions could offset progressive retardation in the elementary school years. The 44 participants attended a half-day preschool during the summer months, either as four year-olds for two summers, or as five year-olds for one summer. The participants were provided with "special experiences that were associated with attitudes and aptitudes conducive to school achievement (Gray & Klaus, 1970, p. 909). The Early Training Project followed up with parent home visits during the school year for three years, beginning after each summer preschool experience (Gray & Klaus, 1970). Initial findings showed the participants in the experimental group significantly outperformed the control group in intelligence tests. In the areas of language and achievement, the differences declined, and by fourth grade were no longer significant (Gray & Klaus, 1970).

### High/Scope Perry Preschool Program

During the same year in Ypsilanti, Michigan, a study, known as the High/Scope Perry Preschool Program began (Schweinhart & Weikart, 1997). The High/Scope Study investigated the effects of early intervention practices on young children who were determined to have risk factors for juvenile delinquency (Parks, 2000). This study differed from the Early Training Project in that the half-day preschool experience took place during the school year. The first group of children, ages three and four year-olds, was admitted in the fall of 1962. The study used high-quality, active participatory learning that was child focused. The High/Scope Perry Preschool Program continued its study for the following three years, admitting three year-olds into the half-day preschool program (Schweinhart & Weikart, 1997). The 3 year-olds received two years of the program. As in the Early Training Project, the High/Scope Perry Preschool Program included home visits. The academic outcomes of the study found that only 15% of the treatment group received special education services compared to 34% of the control group. In addition, each year the grade point average of the treatment group was noticeably higher than the control group. The mean achievement test scores were consistently higher in the treatment group, with an average difference of 16% above the control group (Schweinhart & Weikart, 1997). The sample size of each of these studies was relatively small, 88 in the Early Training Project and 123 in the High/Scope Perry Preschool Program.

### Chicago Child-Parent Center Program

A larger study, the Chicago Child-Parent Center program, also offered a half-day intervention preschool program, but this study's intervention continued through

kindergarten. In this study, the parent had access to on-site resources and was expected to participate in both the parent program and in the classroom (Conyers, Reynolds & Ou, 2003). The Chicago Child-Parent Center used a much larger sample size, 1,377 in the original sample compared to the Early Training Project and the High/Scope Perry Preschool program (Clements, Reynolds & Hickey, 2004; Reynolds, 2000). The participants from the Chicago Child-Parent Center study had a lower rate of placement in special education (12.5%) in elementary school compared to the comparison group (18.4%) (Conyers et al., 2003). Each of these three studies followed their participants into adulthood.

#### Carolina Abecedarian Project

Another similar study, which involved a more intensive treatment for the participants, was the Carolina Abecedarian Project. The investigators of the Abecedarian Project hypothesized that “there would be a linear relation between the number of years of early intervention and positive intellectual and academic outcomes through age 12” (Campbell & Ramey, 1994, p. 690). By implementing a multidisciplinary approach using “high-quality, stimulating care from the earliest possible age the children will fare better academically, socially and physically” (Bryant, Ramey, Sparling & Wasik, 1987, p. 57). This study, which began in 1972, consisted of a sample size of 111 predominantly African American infants. The Carolina Abecedarian Project differed from the previous three studies mentioned in that it began its treatment at the average age of four months and continued for five years (Ramey & Campbell, 1984). The participants in this study were provided high quality educational child care for 6 – 8 hours per day for five days each week (Ramey & Campbell, 1984). In addition to the many positive social outcomes

that were found, the “preschool treatment was associated with educationally meaningful effect sizes on reading and math skills that persisted into adulthood” (Campbell et al., 2002, p. 42).

Long-term outcomes, where the participants were up to age 20 years old, from the Early Training Project, the High/Scope Perry Preschool Program and the Chicago Child-Parent Program showed benefits of early childhood educational intervention. Longitudinal data of the participants showed lower drop-out rates, lower rates of crime, reductions in teen pregnancy, higher rates of employment, higher rates of high school graduation and higher rates of college attendance (Campbell et al., 2008). Similar long-term results were shown in the Carolina Abecedarian Project. However, the Carolina Abecedarian Project followed their participants much longer than the previously mentioned studies and found that the benefits of high quality early childhood educational intervention continued into middle adulthood (Campbell et al., 2008).

In addition to the academic benefits associated with early childhood intervention, a cost benefit analyses was conducted for the High/Scope Perry Preschool Program and the Carolina Abecedarian Project. As participants for the High/Scope Perry Preschool Program reached the age of 40 years old, the savings based over their life equaled 17 dollars for every dollar invested in high quality early childhood education (Nores, Belfield, Barnett & Schweinhart, 2005). These savings were based on the reduction in the cost of crime, savings in educational cost, and an increase in tax revenue due to higher earnings (Nores et al., 2005). While the cost of high quality center based child care was expensive, these studies showed that the cost of providing high quality early care and preschool was much less than later, ineffective interventions such as school

remediation services, the cost of welfare services, and the cost of the criminal justice system (Denton, 2001; Masse & Barnett, 2002; Temple & Ou, 2010; Temple & Reynolds, 2007).

Following the positive outcomes from the High/Scope Perry Preschool Program and the Carolina Abecedarian Project the number of public preschool programs for four-year-olds grew (Goffin, 2000). On March 31, 1994, with the enactment of Goals 2000 Educate America Act (PL 103-227), a renewed focus on young children's readiness to learn as they entered school took a front seat in the education arena. As the growth of state-funded preschool programs increased, an interest in early childhood curriculum models emerged. Walsh (1989) cited concern that as preschools became incorporated into the public schools, the curriculum used would be modeled after the elementary school curriculum, "narrowly focused and externally imposed". As public interest grew following the positive findings of longitudinal research on early childhood programs such as the High/Scope Perry Preschool Program and the Carolina Abecedarian Project, the pressure to push down academic curriculum in the schools increased (Marcon, 1999).

#### Studies of Early Childhood Education Pedagogy

During the late 1990's and early 2000's, studies were conducted that looked at early childhood education pedagogy (Marcon, 1999) and also motivation (Stipek & Ryan, 1997; Valeski & Stipek, 2001). Over the past 50 years, studies have shown that early intervention and education for disadvantaged young children can have a lasting impact on their cognitive and social development (Campbell et al., 2008; Nores, Belfield, Barnett, & Schweinhart, 2005; Ramey & Campbell, 1984). Once this importance was established, the fact that all programs were not producing the same results became more of a focus.



Because not all early education programs used the same curriculum, the pedagogy in which children learn best was examined (Marcon, 1999). Marcon's (1999) study used data collected from teachers using the Pre-K Survey of Beliefs and Practices. Stipek and Ryan (1997) examined cognitive assessment and observation data regarding the motivation of young children to learn. They found that "cognitive competencies at kindergarten entry are predictive of academic performance much later" (Stipek & Ryan, 1997, p. 718). Young disadvantaged children, who began school with a cognitive deficit, developed a negative view toward their own academic competency and toward school (Stipek & Ryan, 1997). The need for effective instructional strategies to decrease the gap in cognitive competencies was important to keep the motivation to learn (Stipek & Ryan, 1997; Valeski & Stipek, 2001).

In 1968, Project Follow Through, a study initiated by the federal government, began with the intention of finding the best way to teach at-risk children in kindergarten through third grade. The study began with 200,000 children and covered most demographic variables and socio-economic levels. Twenty-two different instructional models were used. After nine years of study, an evaluation was conducted. The results of the direct instruction models indicated students had higher academic achievement, higher self-esteem, and more self-confidence, as compared to other programs such as Bank Street and High/Scope. The academic achievement items measured included items that were learned by rote memorization, such as "spelling, word identification, math facts and computation, punctuation, capitalization, and word usage" (Engelmann, 2007, p. 226). Today, curricula such as DISTAR, Direct Instruction, Open Court, A Beka, and Reading Mastery, employ direct instruction pedagogy.

Leading organizations in the field of early childhood education and elementary education have each developed position statements in regards to children and learning. The National Education Association in its policy brief, *Early Childhood Education and School Readiness*, stated that all children need a “well-rounded curriculum that enhances the cognitive, physical, social, and emotional domains of each child’s development” (National Education Association, 2012, p.2). The National Association for the Education of Young Children (NAEYC) has written joint position statements with leading educational organizations regarding curriculum. NAEYC and the National Association of Early Childhood Specialists in State Departments of Education (2003) wrote what they considered indicators of an effective curriculum. The position statement describes effective curriculum as one where “valued content is learned through investigation and focused, intentional teaching” (NAEYC & NAECSSDE, 2003, p. 3). NAEYC and the International Reading Association (IRA) also wrote a joint position statement in the publication *Learning to Read and Write: Developmentally Appropriate Practices for Young Children*, which states children need “opportunities to engage in play that incorporates literacy tools, such as writing grocery lists in dramatic play, making signs in block building, and using icons and words in exploring a computer game” (Neuman, Copple & Bredekamp, 2000, p. 16). The National Council of Teachers of English wrote in its position statement *Bedrock Beliefs* (2007) that “students learn through meaningful experiences that honor and build on, as well as expand, their interests, cultural and linguistic knowledge and life experience” (National Council of Teachers of English, 2007, p. 1). Another leading organization, the National Council of Teachers of Mathematics, wrote in its position statement that “mathematics curricula and teaching

practices should rest on a solid understanding of both mathematics and the development of young children” (National Council of Teachers of Mathematics, 2007, p. 1). Each of the leading national organizations, in its position statement, mentioned young children’s development as a consideration to effective curricula methods.

Previous studies (Bloodworth, 2001; Graue, Clements, Reynolds, & Niles, 2004) have examined preschool curriculum and its effects on student achievement, as reported by teachers and parents, but not the students. Through observation and interviews of students who were enrolled in kindergartens that employed direct instruction pedagogy and child initiated pedagogy, this study added the voice of the child to the existing body of literature.

### Summary

Early childhood education and pedagogy has been a topic of discussion dating back to ancient Greece. Plato, Locke, and Rousseau each advocated for a change in the pedagogy for young students. The movement from rote memorization as a method of instruction to a pedagogy that followed a child’s development took a turn when Froebel designed a program specifically for young children called Kindergarten, that followed the pedagogy called for by his predecessors. As early childhood education moved into the 20<sup>th</sup> Century, the focus on young children’s development became prominent. Piaget, Bruner, and Vygotsky each studied how children learn. Their findings led to the creation of early childhood programs designed to match pedagogy to children’s development.

In 1964, under the Economic Opportunity Act, a push to find the best method of teaching young children living in poverty began. Studies such as The Early Training Project, the High/Scope Perry Preschool Program, and the Carolina Abecedarian Project

took place to study the effects of early intervention and preschool on young children living in poverty. The findings from these studies have shown the lasting positive social and academic effects of a high quality preschool education. As results of these studies were published, different curriculum models emerged. Two pedagogical ideologies formed, a direct instruction approach and a child centered approach. Each stressed the success of its methodology. Many different published curriculum programs developed, so to assist preschools in choosing an appropriate curriculum, the National Association for the Education of Young Children developed guidelines for appropriate practices in preschool education (Bredecamp & Copple, 1997). Developmentally Appropriate Practice in Early Childhood Programs (Bredecamp & Copple, 1997) became the guide for classroom pedagogy and curriculum models.

In 2000, No Child Left Behind (NCLB) was enacted and concern over pushed-down academics divided the two pedagogical ideologies further. In 2001, under Governor Mike Easley, the state of North Carolina created the More at Four Preschool program specifically for four-year-old children who are at the highest risk of school failure. In 2011, the More at Four Program was moved to the North Carolina Division of Child Development and Early Learning, where it was renamed the North Carolina Prekindergarten Program (NCPK). To attend a NCPK program a child must turn four years old by August 31 of the program year, plan to enter kindergarten the following year, and be at risk for poor school outcomes, which include low income, limited English proficiency, identified disability, chronic health conditions, and developmental or educational need. Children who have not previously attended preschool are given priority into these More at Four Preschool classrooms (North Carolina Department of

Public Instruction, 2011). NCPK classrooms, which can be found in public and private licensed preschools as well as in Head Start centers, are held to quality standards which are monitored by state evaluators. The standards which each classroom is held to “incorporate the five domains of development and learning fundamental to school readiness; approaches to learning, emotional and social development, health and physical development, language development and communication, and cognitive development” (North Carolina Office of School Readiness, 2009). NCPK classrooms can choose which curriculum they use as long as they meet guidelines set by the NCPK program. The most commonly selected curriculum is the Creative Curriculum for Preschool, which is a child initiated program. This study used the Creative Curriculum as the child-initiated curriculum.

The Creative Curriculum for Preschool (Dodge, Colker, & Heroman, 2002) is not a curriculum in the traditional sense. Thematic units are not planned out for the reader. Instead, the classroom environment is designed so the child’s development is advanced through interest areas. The curriculum was designed using solid theories that built the foundations of early childhood learning. Using the theories of Piaget, Vygotsky, Gardner, Maslow, Erikson, and Smilansky, the Creative Curriculum for Preschool guides the teacher to use the best practices for teaching young children. The Creative Curriculum for Preschool focuses on 10 interest areas inside the classroom and provides guidance for creating an outdoor interest area. Suggestions for exploring literacy, math, science, social studies, the arts, and technology in each interest area are provided. The use of worksheets is not a component of this curriculum. Children are encouraged to explore the environment the teacher purposively constructs. Through the exploration of

the materials and environment, the children become risk-takers and begin to construct their own knowledge with the teacher taking the role of facilitator.

A direct instruction curriculum provides the child with a “well-structured sequence of lessons that transmit what the adult determines the child needs to know” (Bowman, Donovan, & Burns, 2001, p. 45). Units of study are predetermined by the adult and not based on the child’s current interests. An example of direct instruction curriculum is the A Beka Curriculum (Horton, 2010). It is a curriculum with a Christian emphasis implemented in many private and church-based preschool programs. The A Beka Curriculum has a teacher guide that scripts each lesson for the adult to provide for the student. A structured lesson by lesson teacher guide, student workbooks, flashcards, and skill directed games are included in the curriculum kits.

Thirteen years after NCLB was enacted into law, the pressure to push down academic skills into early childhood education had increased. Preschool programs were feeling the pressure to increase structured academic skills, when the foundation for these skills had not been fully developed in the child. The pressure on young children to perform at high academic levels before they were given the chance to build a solid foundation could possibly affect their attitudes toward learning. This study intended to explore students’ perceptions of two pedagogically different preschool classrooms and thus, contribute to the existing body of literature.

## CHAPTER THREE: METHOD

This study was a qualitative case study involving a comparison of two pedagogically different preschool classrooms -- a direct instruction classroom and a child initiated classroom. Case study methodology was selected for this study because of the nature of the research and the theoretical lens in which it was studied. This study was conducted using Constructivist Theory. James Paul (2005) defines Constructivism, as “an interpretive stance which attends to the meaning-making activities of active agents and cognizing human beings” (p. 60). Case study methodology will allow the researcher to explore in greater depth the complexities between a child’s attitude toward learning and pedagogy in a natural context by capturing rich data through the voice of the child. This study used intrinsic case study methodology, as the purpose was to learn about the students’ perceptions of pedagogy. Hancock and Algozzine (2006) define intrinsic case study as a “focus on a particular individual event, situation, program, or activity” (p. 33). This study was bound in time and space by focusing on two preschool classrooms during a two week period. In case study methodology, to be richly descriptive, a variety of data is collected in order to strengthen findings. This study used four data collection sources: observation, student drawing, interview, and the Learning Behavior Scale (LBS) survey, which was created by McDermott, Green, Francis and Stott (1999). Collecting data from three sources helped check the consistency of the student data. In order to reduce bias, the researcher used peer debriefing, a co-observer and self reflection. The researcher

identified a university faculty member with expertise in qualitative research to use for peer debriefing. A co-observer collected observation data, using the time-interval method, during the same times as the researcher. The co-observer had no connection to either preschool program.

This study was designed to examine the attitudes toward learning of preschool students who attended two pedagogically different preschool classrooms. Sub-questions addressed were (a) what were the students' attitudes of pedagogy in two distinctly different pedagogical classrooms, and (b) how did students behave and respond to these different pedagogies?

#### Purpose and Research Questions

The purpose of this study was to add the voice of the young child to the literature regarding the effects of pedagogy and learning. For this study, data collection with each student involved: one teacher interview, one parent interview, one teacher rating of the LBS, one parent rating of the LBS, one student interview, and a review of each student student's work sample. In addition, the researcher provided field notes gathered from observations taken in each classroom.

#### Sample Selection

This study took place in two schools in two counties in the Piedmont region of North Carolina. Selection of school/teacher participation began with the identification of two schools that had the two curricula: A Beka, which is a direct instruction curriculum and Creative Curriculum, which is a child directed curriculum.

The school selection process was limited to schools with preschool classrooms that used the two different pedagogies. Selection of teacher participants was based on



nominations from the school directors. The schools were located within 20 miles of a major city in the Piedmont region. One preschool classroom was in a private school setting, and the other preschool classroom was in a public elementary school setting. Both preschool settings had multiple preschool classrooms, however for the purpose of this study only one classroom in each setting was used. The names of all teachers, parents, students and schools used in this study were given pseudonyms. For example, Ms. Williams at Applewood Preschool was the name given to the teacher/school that used A Beka Curriculum. Ms. Williams was 46 years old, caucasian, married, and did not hold a teaching license. She had a four year degree in accounting. Ms. Williams stayed home with her children after she graduated from college and began teaching at Applewood preschool when her children entered school 12 years ago. Ms. Roberts at Bailey Preschool was the pseudonym given to the teacher/school that used Creative Curriculum. Ms. Roberts was 34 years old, caucasian, married, and held a North Carolina Birth – Kindergarten teaching license. She taught one year of private preschool in a private preschool after graduating from college and had been teaching public preschool for 12 years.

All preschool students in Ms. William's preschool class and students in Ms. Roberts' preschool class were invited to participate in this study. Each student took home a letter that explained the study and a parental consent form. The letter explained that if their child was selected, then the parent would also be a participant by completing the Learning Behavior Scale and possibly answering follow-up questions. All students whose parents returned the consent form were eligible to become participants. Eleven out of 19, or 58 percent of the parents from Applewood Preschool signed and returned the

consent form. Six out of 13, or 46 percent of the parents from Bailey Preschool signed and returned the consent form. From the pool of eligible students, four were randomly selected (two from each classroom).

Jane and Sam were selected from Applewood Preschool to participate. Jane was four-years-three months old. She was African-American and the older of two children. She lived with both of her parents and her younger brother. Jane was a bubbly, talkative girl with dark brown braided hair that hung past her shoulders. This was Jane's first year at Applewood Preschool. She previously attended a child care center near her family's home. Both of Jane's parents, each in their mid 20's, worked outside of the home, and her father was the person who dropped her off in the morning. Jane's mother worked in a medical office and her father worked at a local repair shop. After school, Jane was picked up by the child care center van and remained there until her parents picked her up from work.

Sam was four-years-nine-months old. He was Caucasian and the second of three boys in his family. Sam lived with both of his parents and two brothers. Sam was a friendly, boisterous boy with dark blonde straight short hair and blue eyes. This was Sam's first year at Applewood Preschool. Sam had never been in a child care center or preschool. Sam's mother, who was 29 years old, stayed at home with him and his brothers and Sam's father, who was 34, worked for a local insurance company. Sam's mother dropped him and his brother off at school, and picked them both up after school.

Kevin and Megan were selected from Bailey Preschool to participate. Kevin was four-years-six-months old. He was African-American and an only child. Kevin lived with his grandmother and great-aunt, who were raising him. Neither of Kevin's natural

parents was involved in his life. Kevin was a shy, heavy set boy with close shaved hair and a huge smile. This was Kevin's first year at Bailey Preschool. He attended Head Start the previous year. Kevin's grandmother brought him to school and picked him up from school each day.

Megan was four-years-nine-months old. She was Hispanic and the older of two children. Megan lived with both of her parents and her younger brother. Megan was a friendly, quiet girl with long black hair that hung down to the middle of her back. This was Megan's first year at Bailey Preschool. She had not previously been in child care or preschool. Megan stayed home with her mother, who was 24 years old, while her father, also 24 years old, worked in a local factory. Megan rode the school bus to and from school each day.

The parents of these students completed the Learning Behavior Scale based on their child's behaviors in preschool. The researcher deliberately identified criteria for selecting the sample; therefore, purposive sampling was employed in this study. Because students were selected from preschool, the inclusive criteria to be employed for this study were students between the ages of 4.0 years and 5.8 years old at the time of the initial student selection, and students must have attended one of the preschools selected for the study that used either direct instruction pedagogy or child initiated pedagogy. Exclusive criteria for this study were students who are younger than 4.0 years old or older than 5.9 years at the time of the initial student selection.

#### Data Sources

The Learning Behaviors Scale (LBS) was given to each student's parent and the student's preschool teacher. The LBS was developed by McDermott, Green, Francis and

Stott (1999) with 1500 children 5-7 years old to study learning behaviors of children at risk for poor academic performance. The scale consists of 29 items that are rated by teacher observation on a three-point Likert scale where 1 stands for “seldom”, 2 stands for “occasionally, and 3 stands for “often” (see Appendix A). The items are categorized into four subcategories: Competence Motivation, Attention/Persistence, Attitude Toward Learning, and Strategy Flexibility. Competence Motivation includes those attitudes and behaviors that connect children to learning opportunities in the classroom. Examples of such behaviors are initiation of activities, confidence in approaching difficult activities, and eagerness to try new activities. The Attention/Persistence behaviors include sustained attention to instruction and perseverance during difficult activities. The subcategory of Attitude Toward Learning includes the child’s general attitude during learning activities, and how they respond emotionally to support or correction. The Strategy Flexibility behaviors include following unusual procedures in tackling tasks responds without taking sufficient time to look at a problem, fidgets or squirms in seat unnecessarily.

The test-retest reliability of the LBS was .92 and the inter-rater reliability was .83 (McDermott et al., 1999). Factor Analysis was used to look at structural validity of the LBS instrument. The subcategories were divided into two factors for the analysis. Factor I, labeled Attention Toward Learning, and consisted of 18 items under the subcategories Competence Motivation, Attention/Persistence and Attitude Toward Learning. Factor II labeled Strategy Flexibility, included the items in the subcategory Strategy Flexibility. Reliability estimates for subscale scores were very high for Factor I and moderate for Factor II.

For this study, the 29 items for the LBS were used as a common basis for structuring follow up interview questions in order to obtain a deeper and clearer understanding of the parent's and teacher's answers. Following the completion of the LBS, the teachers and the parents were asked to elaborate on their responses during individual interviews with the researcher. After completion of the LBS the researcher interviewed the preschool teachers and the parents regarding their responses. Responses on the LBS marked "Often" for items 2 – 6, 8, 10 – 23, 25, 27 and 29 were used as semi-structured interview questions, essentially asking the responder to elaborate with examples of the behavior (see Appendix B). These items were worded to illustrate positive behaviors. Responses on the LBS marked "Seldom" for items 1, 9, 17, 24, 26 and 28 were also used as semi-structured interview questions, again asking the responder to elaborate with examples (see Appendix C). These items were worded to illustrate negative behaviors.

To provide triangulation, another data source (classroom observation) was used for each student. In order to control bias a co-observer was used. The researcher and co-observer observed each student during the instructional part of the day. A protocol employing five minute timed-interval data collection was used during the observations (see Appendix D). During the observation the researcher and co-observer took anecdotal notes regarding the same student. A protocol to record field notes was employed in collecting data. In addition, the researcher and co-observer noted any examples of the student's behaviors that were indicated on the LBS. The researcher and co-observer collected data on the student's interactions with the teacher, classmates, and the classroom environment.

## Student Work Samples

The purpose of using a student's drawing of himself in school as a document was that through drawing children "may convey images that reveal their anxiety, despair, and fears as well as more positive aspects such as adaptability and resiliency" (Malchiodi, 1998, p.63). One piece of data generated at the request of the researcher was a drawing by the student. Grue et al. (1998) stated that using hypothetical questions gave the young child a chance to answer questions by an adult in a "pretend play" manner. Pretend play comes naturally to most children and is less threatening as there is no right or wrong answer. The researcher said to the student, "Let's pretend a new boy came to your class today and didn't know what to do in school, what could you tell him so he could be a preschooler like you? I want you to draw a picture of yourself doing something in your classroom." Following the drawing the researcher conducted a semi-structured interview with the student about the picture; eliciting responses regarding the student's attitudes toward school (see Appendix E). Questions that were asked of each student are:

1. Tell me about your drawing.
2. What is the person doing in your picture?
3. How does the person in your picture feel about school?
4. What is your favorite thing about school?
5. Is school easy or hard? Tell me more.

There was also a blank category that the researcher was used if the student chose to express other thoughts.

### Accuracy of the research collection methods

The qualities for pedagogy have been established based on a review of the literature related to the topic of early childhood curriculum. The direct instruction pedagogy is “highly prescriptive in that the lessons are (a) scripted to assure consistency in presentation across teachers, (b) carefully sequenced with task analysis and a comprehensive system for monitoring student progress, and (c) consistently focused on academic instruction with much of the available school day allocated to practice and drill in reading, language, and math” (Marcon, 1999, p.358).

### Child initiated pedagogy

Marcon (1999) described child-initiated pedagogy as “an approach in which a teacher facilitates learning by (a) providing children with a wide variety of experiences, (b) encouraging children to choose and plan their own learning activities, (c) engaging children in active learning by posing problems and asking questions that stimulate and extend learning, (d) guiding children through skill acquisition activities as needed, and (e) encouraging children to reflect on their learning experiences” (p. 359).

The qualities of direct instruction curriculum and child-centered curriculum served several purposes in this study: selection of the curricula; selection of research sites; selection of participants; establishing protocols for interviews; review of artifacts; site observations; and finally, the categorization of data from observations, interviews, and artifacts. The use of additional qualitative research methods (e.g., triangulation, peer debriefing, and self-reflection) and establishing a case study protocol were incorporated in the design of this study as a means of addressing its trustworthiness.

## Data Collection Procedure

Pseudonyms were used to identify all participants: the schools, teachers, parents and students used in this study. All preschool students attending Ms. Williams' class at Applewood Preschool, which used A Beka Curriculum and all preschool students attending Ms. Roberts' class at Bailey Preschool, which used Creative Curriculum, were given a letter of explanation of the study. Included with the letter was an informed consent form for the students' parents to sign if they wished for their child to be considered for participation in the study. The letters were sent home with each preschool student and then returned to the classroom teacher within four days. The students who returned the consent form and who met the inclusion criteria of the study were considered for the study. For participants to meet the inclusion criteria of this study they needed to have a letter of informed consent signed by the parent and attend one of the preschools selected for this study that implemented either direct instruction pedagogy (A Beka Curriculum) or child initiated pedagogy (Creative Curriculum).

The LBS survey was given to each student's parent and teacher to be completed at their convenience. The researcher interviewed the student's teacher and parent as a follow-up to their responses to the Learning Behavior Scale (see Appendices B and C). By using the teacher and the parent responses from the LBS, a more complete description of the student's attitude toward school was revealed. The semi-structured interviews were conducted separately, with questions pertaining specifically to their responses to the LBS and their perceptions of the student's attitudes toward school. To address any issues of the parent's reading level, the researcher used member check by confirming the parent's answers to the LBS. The LBS items were categorized into four subcategories:



Competence Motivation, Attention/Persistence, Attitude Toward Learning, and Strategy Flexibility. The survey responses were grouped into these same categories. The LBS evaluation items were used as a basis for follow up interview questions with each student's teacher and parent regarding their perceptions of the children's attitudes toward learning in school. Each student's parent and teacher surveys were analyzed using content analysis. The analysis was not used across students because the purpose of this study was to discover pedagogical influence on attention/persistence and attitude toward learning of the individual preschool student.

Each student was interviewed by the researcher. In order to try to capture the student's attitudes about school, each student was asked to draw a picture of himself/herself at school. Malchiodi (1998) stated "art is a recognized way to communicate feelings," (p. 101) and there is a benefit when children express themselves through drawing. Emotions, such as anxiety, fear, and even enjoyment that children experience can be conveyed through their drawings. "For example, a child who draws an image of his anger at his sister may gain some relief from communicating conflictual feelings about the situation through art" (Malchiodi, 1998, p. 77). It was important when interpreting the student's drawing that the researcher have the student tell her about the drawing in order to not mistake poor motor control for an implied emotional representation(see Appendix E). Other conversations that occurred between the researcher and each student involved the daily events that took place in the classroom and the student's day. The researcher was listening for occurrences out of the student's normal routine, such as getting in an argument with a friend or having a fire drill during school. These were noted on the protocol under "Additional Comments" (see Appendix E). In

doing this, the researcher achieved a better understanding of other factors that may have influenced that student's emotional state during the self-drawing.

In addition to the interviews, observations of each of the students were conducted. The researcher observed students for a two week period. Using the observation protocol, the researcher collected field notes (see Appendix D). The students were interviewed and audio taped regarding their experiences and feelings about school. The recorded interviews were semi-structured and focused on experiences that the student had in preschool. The researcher employed member check as another method to minimize bias and increase validity.

Using multiple data sources (Learning Behavior Scale, observation, student interview, and teacher and parent interview) increased the trustworthiness of the findings and decreased some of the bias that can occur when using only one data source (Grue et al., 1998).

#### Data Analytical Procedure

The data were transcribed using pseudonyms, therefore; the participants (e.g. schools, teachers, and students) are not identifiable by name. The only person who had access to the data is the researcher. The security of the data was assured by keeping the original tape of the interviews and the transcriptions in a locked filing cabinet in the researcher's residence for one year after the study was completed and then destroyed. The data were evaluated in the researcher's residence. The researcher disaggregated the data to look for emergent themes in the students' interview responses and coded the data by those themes. "Word counts are useful for discovering patterns of ideas in any body of text, from field notes to responses to open-ended questions" (Denzin & Lincoln, 2003, p.

56). The emergent themes found in this study that the researcher initially looked for in the transcriptions focused on motivation and attitude. The researcher used narrative analysis to collect data through observation and interviews. After the data were collected, it was synthesized into narratives. It was expected that subthemes would emerge as the data were disaggregated and then analyzed. Then the researcher looked for connections between the students based on the results of the LBS. Through analysis of data for each student, the data were reported into personal stories, depicting each student's own experiences and feelings toward school.

#### Limitations of This Study

In qualitative research there is always the concern of bias (Creswell, 2007). "Using only one research strategy – for example, only observation, or worse, only one kind of observation – introduces bias into the data record" (Grue et al., 1998, p.101 ). This study collected several types of data in order to give a more complete description of each student's feeling toward school. By implementing triangulation in the research design, the researcher strengthened the findings of this study (Denzin & Lincoln, 2003; Esterberg, 2002; Hancock & Algozzine, 2006; Huberman & Miles, 2002). In addition to observations and interviews, other data that were collected were artifacts such as examples of each student's work. Each student was asked to draw, or paint a picture of something they do in school. Photographs of student work samples were also collected. In order to establish triangulation, the participating students' parents and teachers each completed the LBS. The parents completed the LBS regarding their child's feelings about attending preschool. The preschool teachers completed the LBS regarding the perceived attitude toward learning of each student. Following the collection of the responses to the

LBS the researcher interviewed the parents and teachers individually eliciting more detailed responses based on their responses to the LBS. Member checking occurred with the student, the student's parent and the student's teacher. The nature of this study was descriptive and exploratory, therefore any implications for curriculum content and pedagogy had to take into account the following: the chronological ages of the students, the limited number of cases used to report attitudes toward school, the limited number of curricula used as examples of pedagogy, the nature of self-reported information, the bias of the researcher, the limited experience of the researcher, and the research instruments' accuracy in data collection.

This case study involved three semi-structured interviews per student. One interview with each student's preschool teacher, examining the attitude of the student toward school took place at each school site. One interview with each student's parent examining the student's attitude toward school took place over the phone. Each student drew a picture of how they felt about school during the study. The researcher conducted a semi-structured interview with each student following the collection of the drawing. Therefore, data collected from interviews and drawings were subject to the researcher's interpretations.

#### Trustworthiness

Gay, Mills, and Airasian (2006) state that trustworthiness is essential to the validity of qualitative research. The researcher must establish "credibility, transferability, dependability and confirmability" of the study and findings (p. 403). This study used data based on observations by the researcher and co-observer, which was described in as much context-relevant detail as possible in order to support the interpretive validity. Any

quotations provided by the students were placed with thick description in the narrative. Descriptive validity was addressed by audiotaping the interviews of each student so the researcher had the student's own voice to refer to when the data were transcribed. The researcher collaborated with each student in order to validate the accuracy of the personal story. In order to reduce bias, the researcher used peer debriefing, a co-observer and self reflection. The researcher identified a university faculty member with expertise in qualitative research involving children, to use for peer debriefing. A co-observer collected observation data, using the time-interval method, during the same times as the researcher. The co-observer had no connection to either preschool program. The LBS was completed by the parents and teachers who worked directly with the students.

#### Role of the researcher

Any interpretations I made as a researcher were influenced by my experiences as a preschool, kindergarten and elementary teacher. Having seven years of experience as a Title 1 Preschool teacher, I was aware of the differing curricula and pedagogy available. As a preschool teacher I selected the curriculum that was taught in my classroom. I have experience with teaching the Bright Beginnings Prekindergarten Curriculum, which was written by Charlotte Mecklenburg Schools, and I have experience using the Creative Curriculum. As an elementary teacher I experienced teaching a scripted basal curriculum, as well as teaching using thematic based learning. I preferred to teach using the children's interest as a guide through thematic based learning. My more recent experience teaching first grade, using a mandated basal curriculum made me aware of the effects of pedagogy on students' attitudes toward learning. Finally, my strong belief in using developmentally appropriate practices when teaching children may have

unintentionally impacted my interpretations as the investigator of this study; therefore, the Learning Behavior Scale and a follow up interview with the teachers and each student's parent were used as triangulation to strengthen the findings. The researcher used peer debriefing to monitor subjectivity.

## CHAPTER FOUR: FINDINGS

### Purpose

The purpose of this study was to investigate students' perception of two distinctly different preschool pedagogies as told through the child's point of view. This study was intended to contribute to the body of literature in the field of early childhood education by examining the connection, if any, of two distinctly different preschool pedagogies and the student's attitude toward learning in preschool.

### Questions

The guiding research questions this study focused on were (a) what were the students' attitudes of pedagogy in two distinctly different pedagogical classrooms, and (b) how did students behave and respond to these two different pedagogies?

### Description of Applewood Preschool

Applewood Preschool is located in a rural county approximately 20 miles outside of a large city in the southeastern region of the United States. Applewood Preschool began in 1970 as part of a church sponsored daycare program, serving infants and children through four years of age. In 1976, the church formed an elementary school, which relocated to its current location in 1988. The school serves students in the Preschool (formally the Daycare program) and Kindergarten through 12<sup>th</sup> grade. The church property houses the Applewood Preschool, Elementary School, and Middle

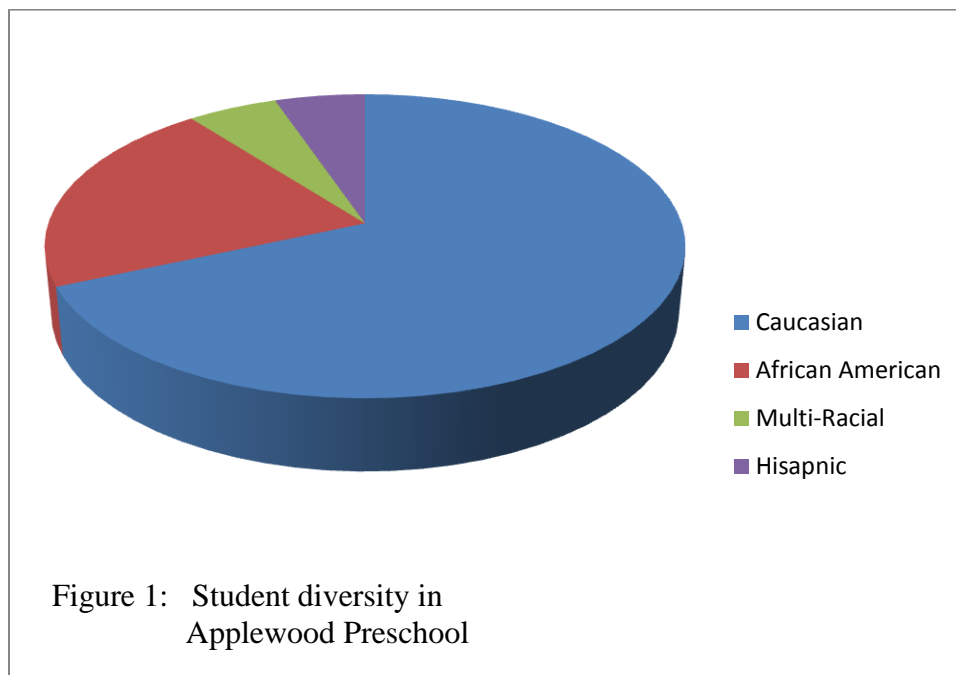
School in one building and a High School in another building. The church that operates the school is located in the same building as Applewood Preschool, Elementary School and Middle School. Applewood Preschool is located on the second floor of the three story building. Over 700 students attend. The school website mentions having a “diversified population”. Diversity is defined as the number of religious affiliations of the student body (120 churches represented).

In early childhood education, the classroom environment can be a “valuable teacher” if it is engaging (Caldwell, 1997). It is important to provide a rich description of the classroom layout and the environment so the two preschools are accurately represented. When students are in school, there are three important factors that influence learning-- the teacher, the curriculum, and the environment (Caldwell, 1997; Stipek, Feiler, Daniels & Milburn, 1995; Zimmerman, 1989). The classroom where Applewood Preschool was located was in the interior section of the building with no windows to the outside. There were four doors in the classroom, one on the north wall and one on the south wall that each opened into hallways. The third door on the west wall led to a small space with a door to a restroom and a door to another preschool classroom. There was also one restroom in the classroom. The classroom had 19 desks, with 16 of the desks arranged in a U shape and three of the desk in a row inside the U (see Appendix F). The desks faced the north wall where a white board was mounted. An alphabet chart was hung above the white board. A television was mounted on the east wall high near the ceiling. The teacher’s desk and a work table were situated at the back of the room. There was one computer at the back of the room on a table behind the teacher’s desk. The students’ desks filled most of the space of the room. Along the east wall of the room



were cubbies for the students' coats and book bags. Also along the east wall were three bookshelves and various storage containers, some with drawers, sitting on the bookshelves. The classroom had carpeting across the entire floor. On the south wall, next to the door was a bookshelf where a sign-in paper was posted so parents could sign their children in as they were brought to school. The walls of the classroom contained teacher-made posters of the schedule, the rules, and the students' birthdays. On the door on the west wall was a behavior chart. The behavior chart had 20 pockets (like those used in library books) with the numbers 1-20 on the pockets, one per pocket. Each student in the class was assigned a number which was also used in the cubby area and storage area. Each pocket held three different colored tongue depressors (red, yellow, green). The green tongue depressor indicated that the student was demonstrating good behavior. The yellow tongue depressor indicated a warning, and the red tongue depressor indicated unacceptable behavior. The teacher moved the tongue depressor. No student work was displayed on the classroom walls. Applewood Preschool used the A Beka Curriculum.

Applewood Preschool had 19 students enrolled, and one teacher. All of the students were 4 years old at the time of the study. There were 10 female students and nine male students. Thirteen students were Caucasian, four of the students were African-American, one student was Hispanic, and one student was Multi-racial (see Figure 1). One student was identified with Special Needs. The teacher was female and Caucasian.



#### Description of Bailey Preschool

Bailey Preschool is located in a rural county approximately 50 miles outside of a large city in the southeastern region of the United States. Bailey Preschool is a public preschool classroom, housed in a Prekindergarten – 5<sup>th</sup> grade Elementary School, in a small school district (five Elementary Schools, two Middle Schools, one High School, and one alternative High School). The campus of the Elementary School has two buildings, connected by a covered walkway. The building where Bailey Preschool is located houses the Third – Fifth Grade classrooms, and the Music classroom. There is one other preschool classroom in this building.

The classroom where Bailey Preschool was held was a large room at the end of the hallway. There were eight windows on the north and east walls. The windows were seven feet tall and were set low so the students could see out of them. On the north wall,

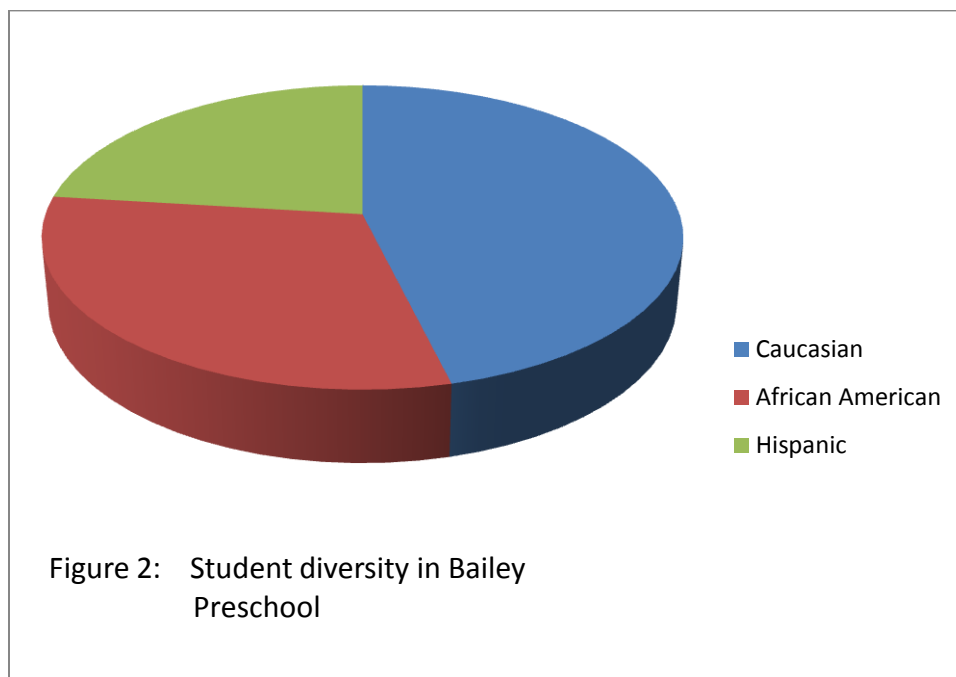
a door led to the outside playground, which contained appropriate sized equipment, mulch, and was fenced in on all sides (see Appendix G).

The classroom design for Bailey Preschool was set up in learning centers. Each learning center area was labeled and an explanation of what children were learning at each center was posted as well. The learning centers in Bailey Preschool followed Creative Curriculum's Learning Centers. Those centers are Block Center, Dramatic Play Center, Creativity Center, Manipulative Center, Sensory Table Center, Library Center, Science Center, and Outdoor Center. The only center not observed, but included in Creative Curriculum Learning Centers was Music and Movement Center. The classroom had tile on half of the floor and carpeting on the other half. In front of a Smart Board, there was a large area rug. The area rug had letters of the alphabet, shapes and colors on it. The rug was large enough for each of the students to sit on a letter that bordered the rug. The computers were set up near the Smart Board so the teacher could easily access it during the different group times. Next to the Smart Board/area rug was a bookshelf that divided the space and held science materials for students to explore. A few feet away another bookshelf divided the Science Center and the Block Center. There were shelves that stored blocks and manipulatives to use in Block Center. These shelves created a divider between Block Center and Dramatic Play Center. The Dramatic Play Center was given a large amount of space in the corner of the room. A play kitchen, couch, table and other props (dolls, clothes, dishes) that students could easily access were in the Dramatic Play Center. There were storage cabinets to hold the materials for the Dramatic Play Center. In the center of the room, a small table with chairs was set up near a bookshelf that held a variety of manipulative materials (Legos, beads and string,

puzzles). Next to the Manipulative Center was the Creativity Center. Three shelving units held a variety of paper, different art supplies, writing materials (crayons, markers, pens, pencils), glue sticks, glue, collage materials, magnetic letters, cards with the students' names printed on them with a picture next to their name. A bookshelf divided the Creativity Center and the Library Center. There was a child-sized couch and chair in the Library Center and two bookshelves with baskets of books. All of these centers were located on the carpeted area of the room. On the tiled section of the classroom were the remaining learning centers. The Sensory Table Center was actually two tables. One table held a mixture of different beans, buckets, funnels, and shovels. The other table held soapy water, sponges, funnels, water wheels, and cups. This table was located between the restroom in the classroom and the hand washing sink area. Near the hand washing sink were two painting easels. The students' cubbies were located next to one of the painting easels. Each cubby was labeled with a student's name and photograph. There were three circular tables that took up most of the remaining tiled floor space. These tables had six chairs each and were used for breakfast and art activities. The students were allowed to choose where they wanted to sit at the table area. Behind the table area was a door that led to the playground.

On the walls in Bailey Preschool were examples of students' artwork and writing. There were photographs of the students around the room, and items were labeled in the room with English and Spanish words and pictures to support understanding. A teacher-created schedule with pictures was located near the Smart Board area rug. Students' birthdays were on a poster on a storage closet.

Bailey Preschool had 13 students enrolled, one student moved the previous week. All of the students were four years old. Eight of the students were male and five students were female. Six of the students were Caucasian, four of the students were African-American, and three of the students were Hispanic (see Figure 2). One of the students had Down's syndrome. There was one female teacher and two female teacher assistants. The teacher was Caucasian. One teacher assistant was African-American and the other teacher assistant was Caucasian.





singing, the children had to stand, clasp their hands together, and bow their heads as the teacher led them in a prayer. “Sam stood and bowed his head for prayer” (Observation notations of Sam). Each day the prayer lasted for 2-3 minutes. After the group prayer, the teacher directed a lesson on a Bible verse.

In one lesson, the teacher held up a poster that showed a drawing of several people. As the teacher led the lesson on the Bible verse, she pointed to the people on the poster. The A Beka Curriculum uses lessons that involve rote memorization. The lesson required the students to echo the teacher as she read the Bible verse aloud. “Sam recites Bible verse with the teacher” (Observation notations of Sam). Interactive questions were not asked of the students, however, several students made comments aloud. “Jane said, ‘Two. They have two eyes’” (Observation notations of Jane). Discussion about Princess Sophia, a character from Disney’s television program *Sophia the First*, began as a student made a comment regarding one of the people drawn on the poster. Several students began talking about Princess Sophia after the teacher asked who she was. The teacher blew a whistle and all talking stopped.

The A Beka Curriculum is structured for whole group instruction. Any indication for differentiation for individual student ability was not evident during observation (Observation notations of Sam and Jane). Lessons were conducted by the teacher while students sat at their desks. Student work samples consisted of worksheets, with all students working at the same time, while sitting at their desks. Students were not encouraged to complete any of the worksheets on their own, but instead listened for the teacher’s questions. Then answers were elicited from the class, the correct answer was given either by a student or the teacher, and students were directed to circle or color the

correct response on the worksheet. There was no evidence of facilitating higher level thinking through additional questioning from the teacher. An example of this was seen during an observation of Sam.

Sitting in chair. Listening to teacher's lesson. Hands in desk. Picks up worksheet teacher gives him. Takes out crayon box. Responds to teacher request to take out red crayon. Rolls crayon on head. Waiting for teacher directions. "Egg" says Sam in response to teacher question. Colors paper. Raises hand. "Elephant" he says to teacher question about the pictures on the worksheet. He puts one foot on the chair, and lays across the desk. "Nnnnnoooooooo" Sam says in response to teacher question. Colors worksheet. Asks question to teacher. "Ee!" he says in response to teacher. Raises hand, stands up and says "Envelope! Envelope!" (Observation notations of Sam)

The Applewood Preschool classroom appeared to follow the structure of the A Beka Curriculum as it was designed. The teacher followed the lessons that were provided to her and the students completed the worksheets that accompanied the lessons. The structure of the daily routine (Prayer, Pledge to the Flag, snack time, etc) was in place and evident by Sam's and Jane's participation.

Sam: Called by teacher to hold flag. Smiles and excitedly walks to front of room. Holds flag. Ran back to chair when finished. (Observation notations of Sam)

Jane: Raised hand and jumps up and down when teacher asked for helper. Teacher says "stand for attention". Jane crouched down. Jane stands and



turns around, her back to the flag. Rocks back and forth with left hand behind back, right hand on her chest. (Observation notations of Jane)

#### Analysis of LBS Data Applewood Preschool

The Learning Behavior Scale responses from both the parent and the teacher revealed insight as to how the child was perceived by each of the respondents. The responses marked “seldom” or “often”, depending on the LBS item, could be perceived as a negative response. Based on the data, there were discrepancies between the teacher’s and the parent’s view of Jane’s learning behaviors. (see Table 1).

Table 1: Creative Curriculum LBS parent and teacher responses

	Often	Seldom
Jane Parent	3	0
Jane Teacher	10	2
Sam Parent	5	0
Sam Teacher	1	1

Sam’s teacher marked a negative response of “often” or “seldom” 80% less than his parent. Jane’s teacher marked a negative response of “often” or “seldom” 40% more than her parent. Jane was the only participant of the four whose teacher marked more negative responses than the parent. Sam and Jane’s teacher, Ms. Williams marked a combined total of 14 negative responses, compared to a combined total of 8 negative responses by parents.

Jane

On several LBS items Jane's parent and teacher marked opposite responses. On item number two "says a task is too hard" Jane's teacher responded "often" yet her parent responded "seldom". During observations of Jane, she did not indicate that a task was too hard, including the time she spent coloring and drawing. In her interview, she said drawing was hard, yet while working on her worksheet, she was very enthusiastic about doing her work. Jane's teacher also responded that Jane "often" "is reluctant to tackle a new task" (Teacher LBS Response) while her parent marked "seldom" (Parent LBS Response). Jane eagerly participated in all class activities (Observation notations of Jane).

Review of Jane's LBS responses, the parent indicated two responses that could be viewed as negative. The parent marked "often" for "follows peculiar or inflexible procedures", and "responds without taking sufficient time" (LBS Parent Response). Jane's teacher, however, indicated 12 responses that could be viewed as negative (LBS Teacher Response). The category of the LBS with the fewest negative responses was Competence Motivation. None of the parent or teacher responses were the same in the categories of Attention/Persistence or Competence Motivation. The categories of Attitude Toward Learning and Strategy/Flexibility each received three negative responses.

The category of the LBS with the most negative responses was Attention/Persistence. The teacher marked five out of six responses, indicating that this was not a strong category for Jane. For two of the responses, the parent and teacher marked the opposite of each other. The teacher marked "seldom" for

“sticks to a task”, while the parent marked “often”. Based on observations and interview, Jane appeared to be a highly energetic four year old who enjoyed being in school. According to the LBS, Jane’s teacher felt that Jane had difficulty sticking with a task. However, observations of Jane’s behavior indicated that she was able to stick with a task, and continue to work on a task after asking the teacher for feedback on her work (Observation notations of Jane). During one observation of Jane, she colored a worksheet for more than ten minutes, showed her teacher the worksheet, and continued to color it for another 10 minutes after the teacher said, “Keep working” (Observation notations of Jane). During the time that Jane was working on the worksheet she also talked with a boy sitting at the desk next to her, sang quietly to herself, paused to count the number of absent students, and showed the principal her worksheet. To a casual observer, this additional activity might have appeared to be off task, but Jane continued to color her worksheet until it was completed, and then drew a new picture of her parents on the back of the worksheet until the teacher told the students to put the paper in their desks. Jane’s parent indicated on the LBS that she often sticks to a task, which classroom observation seemed to support (LBS Parent Response and Observation notations of Jane). The last item that Jane’s parent and teacher had opposite responses was “shows little determination to complete tasks”. Again her teacher marked “often” and her parent marked “seldom”. Observations of Jane during her time spent on worksheets appear to support Jane’s parent’s response. Jane not only wanted to complete each worksheet, but wanted her teacher’s approval of her work (Observation notations of Jane). The difference between the

teacher's response and the parent's response to the items of "sticks to a task" and "shows little determination to complete tasks" were most likely due to the accepted level of activity.

Jane's teacher and parent had opposite responses for the item "bursts into tears" with Jane's teacher responding "often" and her parent responding "seldom". During observations, Jane was not observed crying, however, twice after she was reprimanded for her behavior, she sat in her chair and put her head on her desk. In one incident she sat in her chair and put her head on her desk after the teacher said, "That's a yellow stick and a note home" (Observation notations of Jane). This was prompted by Jane spitting in a student's chair (Observation notations of Jane). Jane had a good understanding of the behavior management system used in the classroom, including how difficult it was to stay on green for good behavior (Interview with Jane). Jane's teacher stated that Jane would cry when she had to move her stick (LBS Teacher Response). During the interview with Jane, she explained about the pocket chart with different colored sticks used to indicate behavior.

Jane: Easy's about hard and getting on red is bad.

Investigator: Getting on red is bad?

Jane: Yeah. And yellow.

Investigator: And yellow and what other colors?

Jane: Green

Investigator: And green?

Jane: Red. Green make me feel better.

Investigator: Green makes you feel better.

Jane: Yeah, yeah.

Investigator: That's good.

Jane: And yellow and yellow and yellow and yellow and yellow and red

Investigator: And you are counting all of the yellow and red sticks. Come here

Jane. Is there anything else you want to tell me about school?

Jane: Yeah

Investigator: What?

Jane: Someone gets green they all get stickers. (Interview with Jane)

Jane was a happy, energetic four year old, who liked school and loved her teacher. She was able to stick with a task, while managing her need to be active. The pedagogy of her classroom, where four year old students sat at desks and were taught through direct instruction methods, did affect Jane's view of school. Jane's movements and actions were stifled by the teacher (ex., teacher putting Jane's hand down). When Jane was told to move her stick to yellow, she put her head down on her desk.. She verbalized that she liked school, but thought that coloring in the lines was hard. Fine motor skills in four year old children are still in the developmental stage so it was understandable that being able to control her coloring was hard for Jane. Four year old children tend to be physically active, and Jane's need to move while working demonstrated this.

Sam

Also at Applewood Preschool, the teacher and parent of Sam completed the Learning Behavior Scale. The parent responded with five negative responses, in only two of the four categories (LBS Parent Response). Three of the responses were in the category of Strategy/Flexibility, and each focused on getting the task

completed independently instead of using a strategy to get out of completing the task. Two of the parent responses were in the category of Attention/Persistence. The parent marked “often” for “bursts into tears easily” and “is distracted too easily”. Sam’s parent responded that he cried when he got frustrated (LBS Parent Response). The teacher response for each of these was “seldom” and this seemed to be supported by observations (LBS Teacher Response and Observation notations of Sam). During observations, Sam did not cry and stayed focused on the lesson that the teacher presented. He was very active during the lesson; however, he was able to respond correctly to the teacher’s questions and directions. While Sam responded to questions the teacher asked during the lesson, he lay across his desk, stood up/sat down, and rolled the crayon on his head and across his desk repeatedly (Observation notations of Sam).

The teacher had only one negative response recorded for Sam. It was in the category of Attitude Toward Learning. She marked “seldom” for “responds in a manner that shows attention”. Sam’s teacher responded that his work was messy and he did not take his time (LBS Teacher Response). Sam’s parent marked “often” for this item. The pedagogy of Sam’s classroom, where four year old students sat at desks and were taught through direct instruction methods, did not seem to give Sam a negative view of school. Sam quickly caught on to the lesson being taught and responded with correct answers during the lesson (Observation notations of Sam). Sam was able to complete the worksheets during the lesson, often finishing before most of the class. He liked school, but thought that drawing was hard. Fine motor skills in four year old children are still in the



learning through best practices based on the National Association for the Education of Young Children (NAEYC). Learning environments that use Creative Curriculum are arranged in learning centers, where students choose the activities they participate in.

Upon the investigator's arrival each morning of the observations, the students were involved in learning centers. As students arrived at school over a 30 minute period, they began their day by selecting a learning center to play in. The students were free to change centers, after they put away the materials they were using before leaving the center. The following was an observation of Kevin upon the investigator's arrival. The teacher had given a signal that it was time to meet at the area rug.

Cleaning up at dramatic play area. TA helping/showing him where items go. Working together. TA says "Go sit down. Thanks for the help." He runs to carpet. Sits cross-legged. (Observation notations of Kevin)

When the school bell signaled the start of the day, the students in Bailey Preschool met each morning on the carpet area in front of the Smart Board. The teacher had established a morning routine that was evident by Megan and Kevin's participation on different days.

Megan: Sitting at carpet watching student check weather. Watched teacher write on calendar on board. Counted with class. (Observation notations of Megan)

Kevin: Sitting on carpet. Counts with teacher as she touches Smartboard. Watches teacher and counts with class on calendar. Signing "Tuesday" song. Claps. Sitting at circle time. Watches child (weather helper). Claps



for weather helper. Listens as class sings “Sunny” song. (Observation notations of Kevin)

Following the calendar/weather routine, students were dismissed two at a time to the hand washing sink to wash their hands in preparation for breakfast, which was served in the classroom. While students were waiting to be called to wash their hands, the teacher played songs on the iPod, keeping the students on the rug engaged.

Kevin: Raises hand. Moves aside to let two students walk past. Teacher puts on music (Color Song). Teacher says “you’ve got on green, stand up.” Kevin stands. Sits. Following directions on song. Teacher says “You’ve got black! Stand up. Shake your bottom!” Kevin follows directions. Sits down. He shows teacher his shirt. Teacher responds “No that’s not pink”. Stands up. (new song, follows teacher direction). Hops on two feet. Spins and hops. Freezes. Smiles. Jumps. Walking in circle. Freeze. Marching. Laughs. Freeze! Hops on two feet. Hop-skipping in circle. Sits. Stands. Smiles. Wiggles. Laughs. Runs around teacher. Dancing to wiggle song. Stops. Wiggles. Stomping feet. Copies teacher’s steps. Jumping. Walking in circle. Falls to carpet. Teacher asks “Are you tired?” “Yeah,” he says. Walks to sink. Washes hands. (Observation notations of Kevin)

Megan: Sitting at carpet watching student check weather. Watched teacher write on calendar on board. Counted with class. Watches students go wash hands for breakfast. Megan says, “Ms. Roberts, agua?” Stands. Dinosaur song playing. Megan trying to sing along. Marching in circle.

Pretends to sleep with song. “RRRAAAHHH!” rocket ship song. Jumps. Yawns. Spins. Following song. Watching helpers set up breakfast. Hand motions. Singing along counting 10 to one with fingers with song. Sits down. Teacher reads book. Megan looking at book. Sitting on rug between two girls. Yawns. Washes hands at sink for breakfast. (Observation notations of Megan)

Students had many opportunities to make choices during the day. Each morning, in addition to which center they would like to play in before the school bell rang, each student was allowed to sit where they wanted on the carpet area in front of the Smart Board during group time. Students also chose at which table they wanted to sit for breakfast. There were no assigned seats. Students were offered all of the breakfast choices for the day, but were not required to take them if they did not want them.

Megan: Walks over to table and sits. Pulls yogurt lid off. Asks TA for help. Teacher prompts Megan to ask for help in Spanish. Eating breakfast. Yogurt, graham cracker cookie, milk and juice. (Observation notations of Megan)

Kevin: Walks to table. Looks for empty seat. Sits down. Opens string cheese. Asks teacher for help, “You open my thing?”. Sits while TA opens cheese. Gets up and throws away trash. Sits down and eats cheese. Drinks milk. Pushes muffin to center of table. (Observation notations of Kevin)

Creative Curriculum was designed for children to learn through exploring their environment and through play. The teacher and/or teacher assistant provided support

during the students' play by facilitating interactions and asking questions, during both whole group time and during center time.

Megan at Dramatic Play Center: TA joins the play and asks questions.

Megan nods. Opens drawer takes out gloves. Putting on gloves TA guides. Megan allows her to help put gloves on. (Observation notations of Megan)

Megan at Writing Center: Standing in front of Art supply cabinet. Looks at supplies. Walks to other side which is the writing center. Takes out ruler. Looks in the other tubs. "Come on," student says and she goes with her. Brings student over to writing center. Takes out tub with magnetic letters. Student gives her purple paper. Both press letters on paper. Return paper to tub. Teacher demonstrates that letters go on Whiteboard, but they won't stick. Teacher takes both girls to the board at the carpet. Teacher demonstrates magnetic letters on magnetic board. (Observation notations of Megan)

Kevin at Manipulative Center: Lego center by himself. Building tower. No interaction when student enters area. Puts tower on dinosaur on table. Teacher asks, "What are you making?" Kevin says, "Dinosaur." Teacher asks, "Big dinosaur or little?" Kevin nods. He looks at student playing at table. Puts Legos in tub. Crawls under table to get Legos. Puts all Legos away. Leaves center. Walks over to snack tables. TA asks "What do you need?" Kevin points. TA says, "Paint?" Both walk to easel. "Where you

want to paint at?” TA asks. Kevin points to easel. Puts on smock and begins to paint with yellow paint. (Observation notations of Kevin)

Kevin cleaning up: TA says “Kevin, come wash your hands. Walks over to sink and washes hands. Kevin says “Me did it.” TA says “No, I did it. Not me did it.” Kevin says “I did it.” (Observation notations of Kevin).

The Bailey Preschool classroom appeared to follow the structure of Creative Curriculum as it was designed. The teacher designed the learning environment using the centers listed in the curriculum and provided support through interactions with the students during whole group instruction and during center time. The structure of the daily routine (weather chart, breakfast, center work) was in place and evident by Kevin’s and Megan’s participation (Observation notations of Kevin and Megan)

#### Analysis of LBS Data Bailey Preschool

In both students’ parent and teacher responses, the parent had many more negative responses than the teacher. Kevin’s teacher marked a negative response of “often” or “seldom” 78% less than his parent. Megan’s teacher marked a negative response of “often” or “seldom” 80% less than her parent. Kevin and Megan’s teacher had more positive or neutral responses on the LBS compared to the parent responses. Megan and Kevin’s teacher, Ms. Roberts marked a combined total of 3 negative responses, compared to a combined total of 14 negative responses by parents. (see Table 2). This could be a result of Ms. Roberts’ background in early childhood education and her knowledge of realistic expectations for four year old children.

Table 2: A Beka LBS parent and teacher responses

	Often	Seldom
Megan Parent	5	0
Megan Teacher	1	0
Kevin Parent	8	1
Kevin Teacher	2	0

### Kevin

Kevin's parent responded negatively to eight of the 29 items, while his teacher only gave one negative response. Four of the parent responses were in the category of Attitude Toward Learning. The parent responded that Kevin "often" "is reluctant to tackle a new task", "adopts a don't care attitude" and "is unwilling to accept help" (LBS Parent Response). Ms. Roberts', Kevin's teacher, marked "seldom" for these same items (LBS Teacher Response). Ms. Roberts responded that she was working with Kevin's parent to build independence in Kevin (LBS Teacher Response). The categories of Attention/Persistence and Competence Motivation each received two negative responses from the parent. Kevin's teacher had only one negative response, and it was "is distracted too easily" in the category of Attention/Persistence (LBS Teacher Response). This was evident during observations of Kevin during center time, when he stopped his play to watch other students (Observation notations of Kevin). However, it was not the same item, as the parent had marked "often" for "fidgets, squirms, leaves seat" and "tries hard but concentration soon fades" (LBS Parent Response). Ms.

Roberts reported that Kevin's parent did almost everything for him, which did not allow Kevin to develop skills for independency. Ms. Roberts was working with the parent to help Kevin develop these skills (LBS Teacher Response). The pedagogy of Kevin's classroom, where four year old students learned by playing at learning centers that were designed by the teacher and where learning was scaffolded by adults in the room, did not seem to give Kevin a negative view of school. He liked school, but thought that writing was hard. Fine motor skills in four year old children are still in the developmental stage, so it was understandable that being able to control a crayon or pencil was hard for Kevin.

Megan

Megan's parent responded negatively to four of the 29 LBS items, while her teacher gave no negative responses. One of the parent responses was in the category of Attitude Toward Learning. The parent responded "often" for "shows little desire to please you".

Megan's parent marked two negative responses in the category Strategy/Flexibility. Megan's parent responded "often" for the items "responds without taking sufficient time" and "has enterprising ideas which don't work out" (LBS Parent Response). The one negative response in the category Competence Motivation that the parent responded to, was "often" for "shows little determination to complete task" (LBS Parent Response). The lack of any negative responses by the teacher and only four negative responses from the parent may have been due to a difference in family expectations and the teacher's expectations of typical four year old behaviors. The pedagogy of Megan's

classroom, where four year old students learned by playing at learning centers that were designed by the teacher and where learning was scaffolded by adults in the room, did not seem to give Megan a negative view of school. She liked school, but thought that writing was hard. Fine motor skills in four year old children are still in the developmental stage, so it was understandable that being able to control a crayon or pencil was hard for Megan, even though her drawing appeared to be very controlled (See Appendix H).

#### Analysis of Student Drawing and Interview

The purpose of using a student's drawing of himself in school as a document was that through drawing, children "may convey images that reveal their anxiety, despair, and fears as well as more positive aspects such as adaptability and resiliency" (Malchiodi, 1998, p.63). Due to still developing fine motor skills the age of the students (4 years old) limited their drawing abilities. After each student was observed by the researcher and co-observer, the researcher said to the student, "Let's pretend a new boy came to your class today and didn't know what to do in school. I want you to draw a picture of yourself doing something in your classroom." Kevin's and Jane's drawings were at the scribbling stage (Brookes, 1986), each drawing had circles and lines or scribbles (See Appendices I and J). Megan's and Sam's drawings were in the preschematic stage (Brookes, 1986), each having a person with arms, legs, eyes, and a mouth (See Appendices H and K).

Kevin's drawing had one center circle with six other circles encompassing one another, much like a target (See Appendix I). His drawing also had six straight lines to the right of the center circle. Kevin nodded when asked if he drew someone doing

something in school (Interview with Kevin). When the researcher asked Kevin what the person was doing in school, Kevin answered, “Writing,” (Interview with Kevin).

Jane’s drawing was of three separate circles, with scribbling inside each circle and two lines inside one of the circles (See Appendix J). In the interview with Jane, she pointed to each circle to represent her mother and her father and her house as she described her drawing. Jane said, “I was gonna, mmm, draw something nicer with momma gonna and took and took me to school. Now daddy took me at home right over there,” (Interview with Jane).

Sam’s drawing was of a head, two legs and two arms protruding from the head, two eyes and a line (mouth) below the eyes (See Appendix K). When the researcher asked Sam what the person in his drawing was doing in school, he answered, “Standing. Like I was a while ago,” (Interview with Sam). Sam and his class were standing in line waiting to use the restroom, waiting to have his picture taken, and waiting in line to have snack (Observation notations of Sam).

Megan’s drawing was of a person with a head with hair, a body, two legs, two arms, two eyes with pupils, a nose, and a smiling mouth. There was also a sun, a rainbow, and three flowers with petals and stems and smiley faces on each flower (See Appendix H). Megan described her drawing as a girl “playing outside in the rainbow and sun” (Interview with Megan).

Following the drawing the researcher conducted a semi-structured interview with the student about the picture; eliciting responses regarding the student’s attitudes toward school (see Appendix E). Questions that were asked of each student were 1) how does the



person in your picture feel about school, 2) what is your favorite thing about school, and 3) is school easy or hard? (see Table 3).

Table 3: Student interview responses

Student	How does the person in your drawing feel about school?	What is your favorite thing about school?	Is school easy or hard?
Sam (A Beka)	“They like school.”	“Drawing, using scissors and glue.”	“Hard.” “Drawing is hard.”
Jane (A Beka)	“Yeah. They like it.”	“I like to do.... dance!”	“Hard.” “Because I don’t know where all the lines. I do like fast!”
Kevin (Creative Curriculum)	Nods, indicating they like school.	“Write. Playing.”	“Hard.” “When I write.”
Megan (Creative Curriculum)	“Like school.”	“Play with friend.”	“Hard.” “Write my name.”

In the three questions asked, each of the students had similar answers. Each of the four interviews was held out of earshot of the other students, so one student’s answer did not influence another student’s response. All four students stated that they liked school, yet they each felt that school was hard. When asked what it was about school that was hard, each student’s answer was related to an activity involving fine motor skills, drawing or writing (Interviews with students).

During the interview with Jane, the investigator asked her if school was easy or hard. Jane replied that it was hard. Upon further questioning, Jane said, “B-because I don’t know where all (are) the lines. I do like fast!” Jane motioned

with her arms quickly back and forth. The investigator said, “Oh, okay. Well, so school is hard because of drawing in the lines?” Jane nodded and quietly said, “Yes” (Interview with Jane). Jane’s teacher indicated on the LBS that Jane often says that a task is too hard; however Jane’s parent indicated that she “seldom” says a task is too hard.

During the interview with Sam the investigator asked if school was easy or hard. Sam immediately said, “Hard!” When asked why it was hard, Sam answered, “Drawing pictures is hard.” He then proceeded to show the investigator the worksheet he had been working on (Interview with Sam). Sam’s teacher and parent both indicated on the LBS that he “seldom” said that a task was too hard (LBS Responses of Teacher and Parent).

At Bailey Preschool, Kevin was asked if school was easy or hard, and his response was, “Hard.” Upon further questioning from the investigator, Kevin said school is hard “when I write”. (Interview with Kevin). Both, Kevin’s parent and teacher, indicated on the LBS that Kevin “occasionally” said a task was too hard (LBS Responses of Teacher and Parent).

Despite drawing or writing being considered hard, Sam and Kevin each said that his favorite thing about school was drawing or writing (Interviews with students). Neither Megan nor Jane said that their favorite thing about school involved drawing or writing, but instead their favorite activities involved gross motor activities, dancing and playing with friends (Interview with students).

Alignment of Analyses to Conceptual Framework

Constructivism was the conceptual framework upon which this study was based. Lincoln (2005) defined Constructivism as “an interpretive stance which attends to the meaning-making activities of active agents and cognizing human beings”. The investigator believed it was the “meaning-making activities” that students were involved in that would answer the questions of this study. The two curricula selected for this study were pedagogically different in each design of delivery. The A Beka Curriculum was designed as a direct instruction model, with structured lessons and worksheets. The Creative Curriculum was designed as a classroom environment structured in a way for student exploration with adult support. Based on observations, each of the curricula provided “meaning-making activities” as described in Lincoln’s (2005) definition of Constructivism, however the data collected from each preschool were pedagogically different.

The students looked to the teacher for direction or to affirm his or her work or actions during class activities.

Kevin at circle time: He shows teacher his shirt. Teacher responds “No that’s not pink.” (Observation notations of Kevin).

Megan at circle time: Megan sits on carpet with back against wall.

Teacher says “Megan go get Smurf.” It is show and tell time. Megan walks to cubby. Teacher assistant hands her Smurf. Walks back to carpet. (Observation notations of Megan).

Sam at desk: Raises hand. Listens and watches teacher. “Ms. Walters can I go to the bathroom?” (He asks 3 times) Opens crayon box. Takes out red crayon. Stands at desk. Sits. Rests head directly on desk. Looks at

worksheet. Begins to color. Stands while coloring. Holds up worksheet toward teacher. Puts worksheet in desk. (Observation notations of Sam).  
Jane at desk: “Look look look” holding up paper to teacher. Teacher redirects Jane to finish. “I done now?” Jane asks teacher. Teacher asks, “What?” needing clarification of what Jane needs. “Keep working” says teacher. (Observation notations of Jane).

The teacher and teacher assistants at Bailey Preschool were available to students and joined the students at the learning centers in order to scaffold student learning. This was demonstrated when Megan was at the writing center. She was exploring the magnetic letters. Megan appeared to be using the letters as stamps and the teacher was there to show Megan how the letters were actually magnetic (Observation notations of Megan).

Megan at Writing Center: Standing in front of Art supply cabinet. Looks at supplies. Walks to other side which is the writing center. Takes out ruler. Looks in the other tubs. “Come on,” student says and she goes with her. Brings student over to writing center. Takes out tub with magnetic letters. Student gives her purple paper. Both press letters on paper. Return paper to tub. Teacher demonstrates that letters go on Whiteboard, but they won't stick. Teacher takes both girls to the board at the carpet. Teacher demonstrates magnetic letters on magnetic board (Observation notations of Megan).

The teacher furthered Megan's learning by having her find letters in her name and place them on the board.

### Summary of Research Questions

Two questions were asked to frame the work of this study. The first question asked what the students' attitudes of pedagogy were in two distinctly different pedagogical classrooms. The second question asked how did students behave and respond to these different pedagogies?

What were the students' attitudes of pedagogy in two distinctly different pedagogical classrooms?

All four students indicated that participation in the A Beka Curriculum and the Creative Curriculum was hard (Interview notations of students). Each student at Applewood Preschool, which used A Beka Curriculum, expressed the feeling that school was hard, especially during the drawing, or worksheet time (Interview notations of Jane and Sam). Each student at Bailey Preschool, which used Creative Curriculum, expressed the feeling that school was hard, especially writing (Interview notations of Megan and Kevin). (See Table 4)

Table 4: Crosswalk of students' attitudes

	Observation	Student Drawing and Interview	Parent LBS/Follow Up Interview	Teacher LBS/Follow Up Interview
Students like school	X	X	X	X
School is hard, specifically drawing and writing		X	X	X

How did students behave and respond to these different pedagogies?

The second question in this study asked how did students behave and respond to these different pedagogies. The students in both, the Applewood Preschool and the Bailey Preschool, had many of the same behaviors (Observation notations). (See Table 5)

Table 5: Crosswalk of students' behaviors

	Observation	Student Drawing and Interview	Parent LBS/Follow Up Interview	Teacher LBS/Follow Up Interview
Behaviors did not vary between pedagogies	X		X	X
Students were compliant	X	X	X	X
Students looked to teachers for affirmation of work	X		X	X

Through analysis of observation notations, three themes emerged (a) off task behaviors, (b) compliant behaviors and (c) non-autonomous behaviors. (See Table 6). The researcher defined “off task behaviors” as behaviors that were not directly related to the task set forth by the teacher. “Compliant behaviors” were defined by the researcher as behaviors that followed the directives set forth by the teacher, either verbally or by the classroom rules. Finally, “non-autonomous behaviors” were defined as behaviors that the students did, without independent choice, and as a result of teacher directive. In both settings, the students were compliant to adult direction. In both preschool settings, the students recognized the teachers' authority, and that the classroom had rules to be followed (Observation notations of students). In Applewood Preschool there were ten

classroom rules that were written on a posterboard and mounted to the door that led to the restroom between the two preschool bathrooms. Bailey Preschool had another posterboard below the rule chart that had library pockets glued to it, one with each student's name written on it. In each pocket were three wooden craft sticks (green, yellow, red). These sticks were used to display the student's behavior. Each student started the day with the green stick showing in the pocket, with the yellow and red sticks behind the green. If the student broke a rule, the teacher had the student move the green stick behind the yellow and red sticks, so the yellow stick was visible. If the student broke another rule, then the yellow stick would be moved to the back and the red stick would be visible. Consequences were written at the bottom of the posterboard with the library pockets. A green stick equaled a sticker to take home. A yellow stick equaled a warning. A red stick equaled a note home and/or time out. In Bailey Preschool, the two classroom rules were handwritten on sentence strips and posted above the whiteboard that was mounted to the wall. There was not a consequence chart posted in the classroom at Bailey Preschool.

Table 6: Emergent themes from observations

		Off Task Behavior	Compliant Behavior	Non-autonomous Behavior
A Beka Curriculum	Jane	69	57	43
	Sam	74	55	58
Creative Curriculum	Megan	6	68	20
	Kevin	7	69	18

In summary, while each setting was pedagogically different from one another, the themes of students' behaviors were much the same. In each classroom students were compliant to adult direction, and looked to the teacher for direction or to affirm his or her work or actions.

### Conclusions

This study was designed to gain insight of preschoolers' attitudes toward learning who attended preschools with pedagogically different curricula. Each preschool's structure followed the particular curriculum which it implemented. The students, who were selected to participate in the study, were a diverse representation of each classroom. There appeared to be no differences in the attitudes toward learning by the preschool pedagogy used. Students in each preschool stated that school was hard, specifically when



writing or drawing was involved. There were differences in the two of the three behaviors of the students in the different preschools. Jane and Sam, in the A Beka program, had behaviors that were off task at the rate of 11 times more than Megan and Kevin, who were in the Creative Curriculum program. Jane and Sam were also involved in non-autonomous behavior more than two and a half times more than Megan and Sam. These significant differences could be attributed to the amount of direct instruction involved in each classroom. In both preschools, the students exhibited typical four-year-old behaviors, were compliant to adult direction, and looked to adults for assistance or approval.

## CHAPTER 5 DISCUSSION

### Review/Significance

A study of preschool pedagogy and its impact on children's attitudes toward learning was important for several reasons. First, students who do not develop a positive attitude toward school early in their academic career are at risk for dropping out of school. With an increased technology-based workplace, high school dropouts are less likely to have the minimum skills necessary to function in the job market. High school dropouts with low education and skill levels have a higher risk of living in poverty and becoming involved in crime (Boisjoly, Harris, & Duncan, 1998; Freeman, 1996; Laird, Lew, Debel, & Chapman, 2001; Lochner & Moretti, 2004; Moore, Gleib, Driscoll, Zaslow, & Redd, 2002). However, research which studies what influences young children's attitudes toward school during the first years of school is lacking.

Second, one of the four principles guiding the No Child Left Behind Act of 2002 is an emphasis on doing what works based on scientific research (U.S. Department of Education, 2008). Because qualitative research in the area of children's attitudes toward school is limited, and attitudes could determine success or failure, this study sought to add to the literature that supported scientific research by adding the voice of the student.

## Purpose of Study

The purpose of this study was to investigate students' perceptions of two distinctly different preschool pedagogies as told through the child's point of view. This study was intended to contribute to the body of literature in the field of early childhood education by examining the connection, if any, of two distinctly different preschool pedagogies and the child's attitude toward learning in preschool. This qualitative study sought to gain insight on students' perceptions of preschool pedagogy, as told through the students' voices.

## Questions

The guiding research questions this study focused on were (a) what the students' attitudes of pedagogy were in two distinctly different pedagogical classrooms, and (b) how did students behave and respond to these different pedagogies?

## Summary of Findings

Both the A Beka Curriculum and the Creative Curriculum followed the particular pedagogy for which each was designed. The teacher in each preschool followed the guidelines for the particular curriculum she taught. The students who were selected to participate in the study represented the diverse population of each classroom. There appeared to be no differences in the attitudes toward learning by the preschool curricula used. Students in each preschool stated that school was hard, specifically when writing or drawing was involved. There also appeared to be no differences in the behaviors of students by the preschool curricula used.

*What were the students' attitudes of pedagogy in two distinctly different pedagogical classrooms?*

The first question of this study asked what the students' attitudes of pedagogy were in two distinctly different pedagogical classrooms. The students in each classroom stated that school was hard, but it was unclear by the students' comments whether or not the difficulty was due to the structure of the classroom. In both preschools, all of the students felt that drawing was difficult. At Applewood Preschool, the students were given worksheets to color, or circle pictures in response to oral questions from the teacher. At Bailey Preschool, the students were able to choose the learning centers they wanted to play in and writing materials were readily available. The manner in which the drawing/coloring was presented differed at each preschool, yet all four students stated that drawing/coloring was hard. Fine motor skills in young children are still developing, so the comment made by all four students could have been due to their level of fine motor development. Jane was the only student who indicated that the other part of school that was hard was keeping her behavior stick on green (Interview notations of Jane). The students were four years old at the time of the study and limited in their school experience, therefore, their attitude of the pedagogy being used in their classrooms could not be deemed favorable or unfavorable, due to limited exposure to either curriculum.

In the findings of this study, observations and interviews uncovered no notable differences in preschoolers' attitudes toward learning by the preschool curricula used (Observation and interview notations). In each interview, the question was asked if school was easy or hard. Each student responded that school was hard. Sam and Jane, who attended Applewood Preschool, immediately answered that they liked school (Interviews with Sam and Jane). Megan, at Bailey Preschool, also answered quickly that she liked school, but Kevin, who was not quick to answer, finally answered that he liked

school as well (Interviews with Megan and Kevin). When asked what about school was hard, each student was able to give an answer. These responses were not prompted by examples, yet each student replied with the same relative answer. Sam, Jane, Kevin and Megan each responded with activities that involved fine motor skills. Sam and Jane answered that drawing was hard (Interviews with Sam and Jane). Kevin and Megan responded that writing was hard (Interviews with Kevin and Megan). Interestingly the two respondents that answered “drawing” to the follow up question “What is hard about school?” attended Applewood Preschool, and the two respondents that answered “writing” to the same question attended Bailey Preschool. This could be the result of several influences of child development. At four years old, children’s fine motor skills are not fully developed, which could make the task of writing or drawing difficult (Copple & Bredecamp, 2009). This was an unexpected finding because the task of writing was not structured in the Bailey Preschool but was in the Applewood Preschool. This finding that drawing or writing was difficult across gender was also unexpected, as girls typically develop fine motor skills earlier than boys. Megan’s drawing skills were rather advanced for her chronological age, yet she still responded that writing was hard (Interview with Megan).

The results from this study suggest that preschool students, despite the pedagogy employed, felt that school was difficult, particularly in the area of coloring or writing. Although this study did not measure the cognitive ability of the students, and each classroom contained at least one identified student with exceptional needs, neither classroom was identified as a classroom designed specifically for students with exceptional needs. Stipek and Ryan (1997) found that young disadvantaged children,

who began school with a cognitive deficit, developed a negative view toward their own academic competency and toward school. The students who attended Bailey Preschool had to meet criteria to attend. One of the criteria was that they were eligible to receive free, or reduced, school lunch. This is determined by the family's income level. The students, who attended Applewood Preschool, did not have to meet any at-risk criteria. The students who attended Applewood Preschool paid tuition to attend; the students at Bailey Preschool received free preschool.

How did students behave and respond to these different pedagogies?

The second question in this study asked how did students behave and respond to these different pedagogies. In each preschool the students were compliant and looked to the teacher for direction, or to affirm his or her work. Four year olds are active learners (Copple & Bredecamp, 2009). The need for effective instructional strategies to decrease the gap in cognitive competencies is important to keep the motivation to learn (Stipek & Ryan, 1997; Valeski & Stipek, 2001). The National Education Association in its policy brief, *Early Childhood Education and School Readiness*, stated that all children need a “well-rounded curriculum that enhances the cognitive, physical, social, and emotional domains of each child’s development” (National Education Association, 2012, p.2). The position statement describes effective curriculum as one where “valued content is learned through investigation and focused, intentional teaching” (NAEYC & NAECCSSDE, 2003, p. 3).

At Bailey Preschool, students had freedom to move around the classroom for the majority of the day. There were times during the day when the teacher instructed the students in whole group, however, that time was limited and movement activities were

part of the lesson. Even with the built in movement activities, the students were fidgety while sitting in the circle. The students had autonomy during the learning center portion of the day and were able to stay engaged in play at each learning center. As the student's interest changed, he or she was allowed to leave one learning center and go to another. With adult support, the student's construction of knowledge was enhanced.

The teacher in Bailey Preschool intentionally planned the learning centers in the classroom so the students were encouraged to investigate the materials. NAEYC and the International Reading Association (IRA) also wrote a joint position statement in the publication *Learning to Read and Write: Developmentally Appropriate Practices for Young Children*, which states children need “opportunities to engage in play that incorporates literacy tools, such as writing grocery lists in dramatic play, making signs in block building, and using icons and words in exploring a computer game” (Neuman, Copple & Bredekamp, 2000, p. 16).

At Applewood Preschool, the students were required to stay at their desks and seated in their chairs during the lessons. While each student was supposed to remain in his or her chair, the teacher made allowances for the student's need to move. Jane and Sam were allowed to stand behind their desks with their chairs pushed in while they worked. When students completed the worksheet, they were expected to wait on the other students to finish. There were no alternative activities for the student to engage in. During the whole group story time, the students were called to an area of the room and sat in a large group in front of the teacher. The students did not have defined spaces to sit in and moved around as the teacher read the story.

Constructivism was the conceptual framework upon which this study was based. Piaget discovered that when teachers questioned children about how they solved problems, the lessons or programs of study could be designed specifically for the individual student (Lascarides & Hinitz, 2000). “By using critical exploration and questioning children about how they approach a problem, teachers can determine the cognitive level of functioning and design instruction closer to the child’s individual level” (Corry, 1996). Piaget believed that children constructed knowledge through their experiences and play and that programmed instruction was not conducive to constructing knowledge. Bruner (1960) wrote that the child’s interest was the motivation for learning. In the two preschool curricula used in this study, only the Bailey Preschool seemed to apply the framework of Constructivism. Children were free to construct knowledge through exploration; however the teacher’s use of questioning students about how they approach a problem was observed only a few times (Observation notations of Kevin and Megan). At the Applewood Preschool, students were instructed in a didactic manner and an example of the teacher questioning students about how they approached a problem was nonexistent.

Piaget’s basic law of development states that the child constructs his own intelligence and knowledge through play and learning is an act of process (Gruber & Voneche, 1977). Play was very evident in the Bailey Preschool, as the curriculum was designed using play and exploration of the learning centers. By contrast, the Applewood Preschool did not have any centers in the room for students. Students were stationed at their desks for the majority of the day and instructed in whole group. Applewood Preschool used the A Beka Curriculum, a direct instruction model. It followed Marcon’s



(1999) definition of direct instruction pedagogy as “highly prescriptive in that the lessons are (a) scripted to assure consistency in presentation across teachers, (b) carefully sequenced with task analysis and a comprehensive system for monitoring student progress, and (c) consistently focused on academic instruction with much of the available school day allocated to practice and drill in reading, language, and math”.

#### Limitations

This qualitative study has several limitations which must be addressed. The first is the sample size. By using only four students in the sample, two from each preschool, the generalization of the results to other preschool students would be difficult. The second limitation of this study is the age of the student. Four year old children have limited school experience, with few, or no other, pedagogy exposure with which to compare their current preschool. The ability of four year old children to express feelings based on cause and effect is just beginning to emerge. Young children may not be able to separate their feelings regarding pedagogy from their feelings about their teacher. The impact of the teacher’s relationship with her students can also be considered a limitation of this study, as there was not a way to isolate that factor from the pedagogy. A third limitation of this study involved the limited time of data collection. This study occurred during a two week period at the beginning of a school year and the students had only been in school for three weeks. Perhaps collecting data at the beginning of the school year and then again at the end of the school year would give students more time to experience the curriculum.

## Future Research

This study only begins to uncover what preschool students think about school, some of their preferences, and some of their challenges. Future research regarding a particular pedagogy and students' attitudes toward learning in kindergarten may give insight into the pressures of a more academic curriculum imposed upon young children. This study was limited in the number of student participant's, and future research that includes a larger sample size could provide a broader picture of the curriculum, pedagogy, and students' attitudes. The amount of time spent observing each student was limited as well. Future research design that observes preschoolers at the beginning of the school year, and then again toward the end of that same school year, may yield additional findings in preschoolers' attitudes toward learning. Future research on additional aspects of the curricula, such as the students' preferred method of learning, may lend significant information that could inform teachers of early childhood education. Another area for future research arrived from the students' comments regarding school (drawing and/or coloring) being hard. When students view a task as difficult, is it considered a negative in the student's mind, or is it just that, difficult? The diversity of the student body in Applewood Preschool that used the A Beka Curriculum, was primarily white middle class, which was the same as the teacher. [The diversity of the student body in Bailey Preschool, that used Creative Curriculum, had a larger racial and socio-economic mix. Selecting two schools with more similar demographics may yield a deeper understanding of how the pedagogy of A Beka Curriculum influences preschoolers' attitudes toward learning.]

## Implications

The pedagogy used in each of the two preschool classroom involved in this study differed greatly from one another. Both preschool teachers provided instructional experiences for their students, one used the direct instruction pedagogy and the other used child initiated pedagogy. Applewood Preschool used a very structured pedagogy where the teacher used a direct teaching method and learning through exploration and play was not part of the daily routine (Observation notations of Jane and Sam).

In the Applewood Preschool, the teacher led each activity but appeared without much intention to the learning outcome for the student. Based on observations, the teacher taught the scripted lesson but did not gather feedback from students to check their level of understanding (Observation notations of Jane and Sam). Jane was coloring a worksheet with a nest and eggs on it, and while she colored, she sang repeatedly “I coloring ‘skettie and meatballs. I coloring ‘skettie and meatballs.” (Observation notations of Jane). However the lesson that went with the worksheet was about the letter Ee and had nothing to do with “skettie and meatballs” but was focused on the eggs in the nest. The students at the highly structured Applewood Preschool both said they liked school, even though most of the day was spent coloring worksheets, waiting in line to use the restroom, or sitting at a desk (Observation and interview notations with Jane and Sam). The findings from this pedagogy were surprising, due to the nature of the activity level of typical four year old children.

Bailey Preschool created a structured environment where the students selected an area of learning that interested them and were free to explore and play while learning (Observation notations). Despite the students’ freedom to select activities and the

nurturing environment of Bailey Preschool, both Kevin and Megan felt that school was hard, or specifically, writing was hard (Interview notations with Kevin and Megan). In the Bailey Preschool, the students selected the majority of the learning activities that they participated in, but the teacher support for learning appeared sporadic, based on observations (Observation notations of Kevin and Megan). Teachers' understanding of what students consider to be difficult in school may not always be apparent. This study brings to light the need for teachers to talk with their students about how they feel about school and understand the different proficiencies taught in schools.

### Conclusions

This qualitative study explored preschool pedagogy and its impact on students' attitudes toward learning. The theoretical framework used in this study was Constructivism, or that children build knowledge through meaning-making activities. The review of the literature suggested that young children learn best when they are actively engaged in activities that promote learning and have adults that are intentional in their teaching. According to the four student participants observed and interviewed in this study, it does seem that the pedagogy used in preschool may impact some students' attitudes toward learning. Students from both preschool pedagogies stated that school was hard and they liked school, yet the actions of Jane gave a different message.

Chapter 5 concludes this qualitative research study. The findings of this study produced three themes that revealed students' attitudes toward learning in preschool: a) coloring in the lines, writing, and drawing are hard, b) students are compliant to adult direction, and c) students look to the teacher for direction or to affirm his or her work or actions. Recommendations are for further research to be conducted on pedagogy and

students' attitudes toward learning in kindergarten as the pressures of a more academic curriculum are imposed upon young children, and the study be done at the beginning of the school year, midyear, and end of the school year. Implications from this study may lead future research regarding national standards for early childhood curricula to consider the importance of young children's beliefs as to what makes school challenging, and a focus on teachers' awareness and incorporation of supporting the five developmental domains during daily instruction.

## REFERENCES

- Aldrich, R. (1994). John Locke. *Prospects: the quarterly review of education*, 24(1/2), 61-78.
- Ashiabi, G. S. (2000). Promoting the emotional development of preschoolers. *Early Childhood Education Journal*, 28(2), 79-84.
- Barnett, W., Robin, K., Husted, J., and Schulman, K., (2003). *The state of preschool: 2003 state preschool yearbook*. New Brunswick, NJ: The National Institute for Early Education Research.
- Becker, W. & Gersten, R. (1982). A follow- up of Follow Through: The later effects of the direct instruction model on children in fifth and sixth grades. *American Educational Research Journal*, 19, 75-92.
- Bergen, D. (2002). The role of pretend play in children's cognitive development. *Early Childhood Research and Practice*. Downloaded on 4/27/2011  
<http://ercp.uiuc.edu.v4n1/bergen.html>
- Bloodworth, B.D. (2001). A study of the formulation and development of a pre-kindergarten program in a public school. *Dissertation Abstracts International*, 62 (06), 2022. (UMI No. 3017476)
- Boisjoly, J., Harris, K., and Duncan, G. (1998). Initial welfare spells: Trends, events, and duration. *Social Service Review*, 72(4), 466 – 492.
- Bowman, B., Donovan, S., & Burns, M. S.(Eds.). (Committee on Early Childhood Pedagogy). (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.
- Bracey, G. (2006). The 16<sup>th</sup> report on the condition of the public education. *Phi Delta Kappan*, 88(2), 151-166.
- Brazelton, T.B. (1992). *Touchpoints*. New York, NY: Persues Publishing.
- Brazelton, T. B., & Greenspan, S. (2000). *The irreducible needs of children: What every child must have to grow, learn, and flourish*. New York, NY: Persues Publishing.
- Bredenkamp, S., & Copple, C. (Eds.) (1997). *Developmentally appropriate practice in early childhood programs* (Rev. ed.). Washington, D.C.: National Association for the Education of Young Children.

- Brofenbrenner, U. (1994). Ecological models of human development. *International Encyclopedia of Education*, vol. 3, 2<sup>nd</sup> Ed. Oxford: Elsevier.
- Bruner, J. (1960). *The process of education*. Cambridge, MA: Harvard University Press.
- Bryant, Donna M., Ramey, Craig T., Sparling, Joseph J., Wasik, Barbara H. (1987). The Carolina approach to responsive education: A model for day care. *Topics in Early Childhood Special Education*, 7, (1), 48-60.
- Byrne, B., & Fielding-Barnsley, R. (1993). Evaluation of a program to teach phonemic awareness to young children: A 1-year follow-up. *Journal of Educational Psychology*, 85, 104-111.
- Campbell, F. & Ramey, C. (1994). Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development*, 65, 684-698.
- Campbell, F. A., Ramey, C. T., Pungello, E., Sparling, J., & Miller-Johnson, S. (2002). Early childhood education: Young adult outcomes from the Abecedarian Project. *Applied Developmental Science*, 6, 42-57.
- Campbell, F., Wasik, B., Pungello, E., Burchinal, M., Barbarin, O., Kainz, K., Sparling, J., and Ramey, C. (2008). Young adult outcomes of the Abecedarian and CARE early childhood educational interventions. *Early childhood research quarterly*, 23, 452-466.
- Campbell, J. (1995). *Understanding John Dewey: Nature and cooperative intelligence*. Peru, IL: Open Court Publishing Co.
- Clay, M.(2007). *An observation survey of early literacy achievement*, 2<sup>nd</sup> edition. Portsmouth, NH: Heinemann.
- Claydon, L. (ed.). (1969). *Rousseau on education*. London, England: Collier-MacMillan.
- Clements, M., Reynolds, A., and Hickey, E., (2004). Site-level predictors of children's school and social competence in the Chicago child-parent centers. *Early childhood research quarterly*, 19, 273-296.
- Coleman, P., & Collinge, J. (1991). In the web: Internal and external influences affecting school improvement. *School Effectiveness and School Improvement*, 2, 262-285.

- Colwell, M. J., & Lindsey, E. W. (2003). Teacher—child interactions and preschool children's perceptions of self and peers. *Early Child Development and Care, 173*(2-3), 249-258.
- Conyers, L. M. Reynolds, A. J. & Ou, S. (2003). The effect of early childhood intervention on subsequent special education services: Findings from the Chicago Child-Parent Centers. *Educational Evaluation and Policy Analysis, 25*(1), 75-95.
- Copple, C. & Bredekamp, S. (Eds.). (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8 (third edition)*. Washington, D.C.: National Association for the Education of Young Children.
- Corry, M. (1996). *Jean Piaget epistemology*. Retrieved from <http://home.gwu.edu/~mccorry/corry2.htm>
- Creswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches (2nd ed)*. Thousand Oaks, CA: Sage Publications.
- Dai, D., & Sternberg, R. (Eds.) (2004). *Motivation, emotion, and cognition: Integrative perspectives on intellectual functioning and development*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Denton, D. (2001). *Improving children's readiness for school: Preschool programs make a difference, but quality counts!* (Report No. 01H02). Atlanta, GA: Southern regional Education Board.
- Denzin, N., & Lincoln, Y. (Eds.)(2003). *Collecting and interpreting qualitative materials (Second edition)*. Thousand Oaks, CA: Sage Publications.
- Department of Education and Early Childhood Development (DEECD). Retrieved from [http://www.education.vic.gov.au/studentlearning/teachinresources/english/literacy/concepts/2L3\\_zpd.htm](http://www.education.vic.gov.au/studentlearning/teachinresources/english/literacy/concepts/2L3_zpd.htm) on May 24, 2009.
- Dewey, J. (1897). My pedagogic creed. *School Journal, 54*, 77-80.
- Diamond, M., & Hopson, J. (1998). *Magic trees of the mind: How to nurture your child's intelligence, creativity, and healthy emotions from birth through adolescence*. New York, NY: Penguin Group.
- Dodge, D. T., Colker, L. J., & Heroman, C. (2002). *The creative curriculum for preschool, fourth edition*. Washington, D.C.: Teaching Strategies, Inc.
- Driscoll, M.P. (1994). *Psychology of learning for instruction*. Boston, MA: Allyn and Bacon.



- Durkin, D. (1978). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly*, 14, 481-533.
- Dykhuizen, G. (1973). *The life and mind of John Dewey*. Carbondale, IL: Southern Illinois Univ. Press.
- Engelmann, S. (2007). *Teaching needy kids in our backward system*. Eugene, OR: ADI Press.
- England, E.B. (1921). *The laws of Plato: The text edited with introduction, notes, etc.* London: Manchester at the University Press.
- Epstein, A. (2007). *The intentional teacher: Choosing the best strategies for young children's learning*. Washington, D.C.: National Association for the Education of Young Children.
- Esterberg, K. (2002). *Qualitative methods in social research*. Boston, MA: McGraw-Hill.
- Freeman, R. (1996). Why do so many young American men commit crimes and what might we do about it? *Journal of Economic Perspectives*, 10(1), 25 - 42.
- Froebel, F. (trans. By Hailmann, W.N.). (1826/2005). *The education of man*. Mineola, NY: Dover Publications, Inc.
- Froebel Web Margarethe Schurz downloaded from <http://www.froebelweb.org/> on March 27, 2011.
- Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational research: Competencies for analysis and applications*. Columbus, OH: Pearson, Merrill Prentice Hall.
- Geertz, C. (1977). *The interpretation of cultures*. New York, NY: Basic Books Group.
- Gilliam, W. & Zigler, E. (2000). A critical meta-analysis of all evaluations of state-funded preschool from 1977 to 1998: Implications for policy, service delivery and program evaluation. *Early Childhood Research Quarterly*, 15(4), 441-473.
- Goffin, S. (2000). *The role of curriculum models in early childhood education*. ERIC Clearinghouse on Elementary and Early Childhood Education, Champaign, IL.

- Graue, E., Clements, M. A., Reynolds, A. J., & Niles, M. D. (2004). More than teacher directed or child initiated: Preschool curriculum type, parent involvement, and children's outcomes in the child-parent centers. *Education Policy Analysis Archives, 12*(72), 1-38.
- Gray, S.W., & Klaus, R.A. (1970). The early training project: A seventh-year report. *Child Development, 41*, 909-924.
- Gruber, H. and Voneche, J. (eds). (1977). *The essential Piaget*. New York, NY: Basic Books, Inc.
- Grue, E., Walsh, D., Ceglowski, D., Dyson, A., Fernie, D., Kantor, R., et al. (1998). *Studying children in context: Theories, methods, and ethics*. Thousand Oaks, CA: Sage Publications.
- Hancock, D., & Algozzine, B. (2006). *Doing case study research*. New York, NY: Teachers College Press.
- Horton, B. (2010). *A Beka Book*. Pensacola, FL: Pensacola Christian Academy.
- Huberman, A., & Miles, M. (2002). *The qualitative researcher's companion*. Thousand Oaks, CA: Sage Publications.
- Hudley, C., & Gottfried, A. (Eds.) (2008). *Academic motivation and the culture of schooling in childhood and adolescence*. New York, NY: Oxford University Press.
- Hummel, C. (1994). Plato. *Prospects: the quarterly review of education, 24*(1/2), 329-342.
- International Reading Association. (1999). *Using multiple methods of beginning reading instruction: A position statement of the International Reading Association*. Newark, DE: International Reading Association.
- Isenberg, J. P., & Jalongo, M. R.(Eds.) (1997). *Major trends and issues in early childhood education: Challenges, controversies, and insights*. New York, NY: Teachers College Press.
- Jeffreys, M.(1967). *John Locke: Prophet of common sense*. London, England: Methuen & Co., Ltd.
- Katz, I., & Assor, A. (2007). When choice motivates. *Educational Psychology Review, 19*, 429-442.

- Laird, L., Lew, S., Debell, M., and Chapman, C.D. (2001). Dropout rates in the United States: 2002,2003. NCES 2006-062. U.S. Department of Education, National Center for Education Statistics.  
<http://nces.ed.gov/pubs2006/2006062.pdf>
- Lascarides, V.C. and Hinitz, B. (2000). The history of early childhood education. New York, NY: Falmer Press.
- Lincoln, Y. (2005). Nine perspectives of research: Perspective three: Constructivism as a theoretical and interpretive stance. In J. Paul, (Ed.). *Introduction to the philosophies of research and criticism in education and the social sciences* (pp.60-65). Upper Saddle River, NJ: Pearson Education, Inc.
- Lochner, L., and Moretti, E. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self reports. *The American Economic Review*, 94 (1), 155-189.
- Locke, J. (1693). Some thoughts concerning education. London, England: A. and J. Churchill.
- Malchiodi, C. (1998). *Understanding children's drawings*. New York, NY: The Guilford Press.
- Marcon, R. (1999). Differential impact of preschool models on development and early learning of inner-city children: A three-cohort study. *Developmental Psychology*, 35(2), 358-375.
- Marcon, R. (2002). Moving up the grades: Relationship between preschool model and later school success. *Early Childhood Research and Practice*, 4(1), 2-26.
- Masse, L. & Barnett, W. (2002). *A benefit cost analysis of the Abecedarian Early Childhood Intervention*. New Brunswick, NJ: The National Institute for Early Education Research.
- Mayhew, K.C., and Edwards, A.C. (1936/2009). *The dewey school*. Redwood City, CA: Atherton Press.
- McDermott, P., Green, L., Francis, J., & Stott, D. (1999). *Learning behaviors scale*. Philadelphia, PA: Edumetric and Clinical Science.
- McGill-Franzen, A., Lanford, C., & Adams, E. (2002). Learning to be literate: A comparison of five urban early childhood programs. *Journal of Educational Psychology*, 94(3), 443-464.
- Meyer, L. (1984). Long term academic effects of the Direct Instruction Project Follow Through. *Elementary School Journal*, 84, 380-394.

- Meyer, L., Gersten, R. & Gutkin, J. (1983). Direct instruction: A Project Follow Through success story in an inner-city school. *Elementary School Journal*, 84, 241-252.
- Michaelis, E., and Moore, H.K.. (1908). Autobiography of Friedrich Froebel translated and annotated. Syracuse, NY: C.W. Bardeen.
- Miller, L., & Dyer, J. (1975). Four preschool programs: Their dimensions and effects. *Monographs of the Society for Research in Child Development*, 40(5-6, Serial No. 162).
- Miller, L., & Bizzell, R. (1984). Long-term effects of four preschool programs: Ninth- and-tenth-grader results. *Child Development*, 55, 1570-1587.
- Montessori, M. (1973). *From childhood to adolescence*. New York, NY: Schocken Books.
- Montessori, M. (trans. By George, A.). (1965). *The Montessori method*. Cambridge, MA: Robert Bentley, Inc.
- Moore, K., Gleib, D., Driscoll, A., Zaslow, M., and Redd, Z. (2002). Poverty and welfare patterns: Implications for children. *Journal of Social Policy*, 31(2), 207-227.
- Morrison, G.S. (1998). *Early childhood today*. NJ: Merrill
- Morrow, L. (2009). *Literacy development in the early years, sixth edition*. Boston, MA: Pearson Publishing.
- National Association for the Education of Young Children and National Association of Early Childhood Specialists in State Departments of Education. (2003). Early learning standards position statement. Retrieved from [http://www.naeyc.org/about/positions/early\\_learning\\_standards.asp](http://www.naeyc.org/about/positions/early_learning_standards.asp)
- National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.
- Nichols, S., Berliner, D. (2008). Testing the joy out of learning. *Educational Leadership*, 65(6), 14-18.
- National Council of Teachers of Mathematics. (2010). Retrieved from <http://www.nctm.org/standards/default.aspx?id=58>

- National Education Association. (2012). *Policy brief: Early childhood education and school readiness*. Retrieved from [http://www.nea.org/assets/doc/HE/mf\\_PB03\\_EarlyChildhood.pdf](http://www.nea.org/assets/doc/HE/mf_PB03_EarlyChildhood.pdf)
- National Science Teachers Association. (2010). Retrieved from <http://www.nsta.org/>
- Nores, M., Belfield, C., Barnett, W., and Schweinhart, L. (2005). Updating the economic impacts of the High/Scope Perry Preschool Program. *Educational Evaluation and Policy Analysis*, 27(3), 245-261.
- North Carolina Department of Public Instruction. (2012). *ACT and WorkKeys benchmarks*. Retrieved from <http://www.ncpublicschools.org/docs/acre/redesign/2012/201207.pdf>
- North Carolina Department of Public Instruction. (2011). *More at Four Pre-Kindergarten Program*. Retrieved from <https://www.nctreasurer.com/slg/State%20Compliance%20Supplements/DHHS-50-2011.pdf>
- North Carolina Department of Public Instruction. (2003). *The Balanced Curriculum: A Guiding Document for scheduling and implementation of the North Carolina Standard Course of Study at the elementary level*. Retrieved from <http://www.ncpublicschools.org/docs/curriculum/balancedcurriculum.pdf>
- North Carolina Office of School Readiness. (2009). More at Four Pre-Kindergarten. Retrieved from <http://www.osr.nc.gov/MoreFour/index.asp>
- North Central Regional Laboratory. Retrieved from <http://www.ncrel.org/sdrs/areas/issues/students/learning/lr1zpda/htm>
- Orem, R.C., and Stevens, G.L. (1970). *American Montessori manual*. College Park, MD: Mafex Associates, Inc. Pub.
- Parks, G. (2000). The High/Scope Perry Preschool Project. *Juvenile Justice Bulletin*. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Patrick, H., Mantzicopoulos, P., Samarapungavan, A., & French, B. (2008). Patterns of young children's motivation for science and teacher-child relationships. *The journal of experimental education*, 76(2), 121-144.
- Paul, J. (2005). *Introduction to the philosophies of research and criticism in education and the social sciences*. Upper Saddle River, NJ: Pearson Education, Inc.

- Piaget, J. (trans. Cook, M.). (1952). *The origins of intelligence in children*. New York, NY: International Universities Press, Inc.
- Plato. (Translated by Francis Macdonald ).(trans. 1941) *The Republic of Plato*. Cornford. NY: Oxford University Press.
- Pulliam, J. (1976). *History of education in America, second edition*. Columbus, OH: Merrill Publishing.
- Raikes, H. A., Raikes, H., & Wilcox, B. (2005). Regulation, subsidy receipt and provider characteristics: What predicts quality in child care homes? *Early Childhood Research Quarterly*, 20(2), 164-184.
- Ramey, C. & Campbell F. (1984). Preventative education for high-risk children: Cognitive consequences of the Carolina Abecedarian Project. *American Journal of Mental Deficiency*, 88, 515-523.
- Raver, C., Gershoff, E. & Aber, J. (2007). Testing equivalence of mediating models of income, parenting, and school readiness for white, black, and Hispanic children in a national sample. *Child Development*, 78(1), 96-115.
- Reynolds, A. (2000). *Success in early intervention: the Chicago child-parent centers*. Lincoln, NE: University of Nebraska Press.
- Reynolds, A., Temple, J., & Ou, S. (2010). Preschool education, educational attainment, and crime prevention: Contributions of cognitive and non-cognitive skills. *Children and Youth Services Review*, 32, 1054-1063.
- Riley, D., San Juan, R., Klinkner, J., & Ramminger, A. (2008). *Social & emotional development: Connecting science and practice in early childhood settings*. St. Paul, MN: Redleaf Press.
- Rousseau, J. (1762). *Emile*. Downloaded from <http://www.gutenberg.org/ebooks/30433/>
- Ryan, A. (1995). *John Dewey and the high tide of American liberalism*. New York: W.W. Norton & Co.
- Samdal, O., Wold, B., & Bronis, M. (1999). Relationship between students' perceptions of school environment, their satisfaction with school and perceived academic achievement: An international study. *School Effectiveness and School Improvement*, 10(3), 296-320.
- Schweinhart, L., Barnes, H., & Weikart, D. (1993). *Significant benefits: The High/Scope Perry preschool study through age 27*. Ypsilanti, MI: High/Scope Educational Research Foundation.

- Schweinhart, L. J., & Weikart, D. P. (1997). *Lasting differences: The High/Scope Preschool Curriculum Comparison Study through age 23*. (Monographs of the High/Scope Educational Research Foundation, 10). Ypsilanti, MI: High/Scope Press.
- Schweinhart, L., Weikart, D., & Larner, M. (1986). Consequences of three preschool curriculum models through age 15. *Early Childhood Research Quarterly, 1*, 15-45.
- Seefeldt, C. (Ed.) (1999). *The early childhood curriculum: Current findings in theory and practice*. New York, NY: Teachers College Press.
- Shonkoff, J. P., & Phillips, D. A. (Eds). (Committee on Integrating the Science of Early Childhood Development). (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- Sidorsky, D. (1977). *John Dewey: The essential writings*. New York: Harper & Row.
- Silverman, D. (2001). *Interpreting qualitative data* (2<sup>nd</sup> ed.). London: Sage Publications.
- Stipek, D., Feiler, R., Daniels, D. & Milburn, S. (1995). Effects of different instructional approaches on young children's achievement and motivation. *Child Development, 66*, 209-223. Doi: 10.1111/j.1467-8624.1995.tb00866.x
- Stipek, D., & Ryan, R. (1997). Economically disadvantaged preschoolers: Ready to learn but further to go. *Developmental Psychology, 33*(4), 711-723.
- Teaching Strategies. (2013). *Creative curriculum for preschool*. Retrieved from <http://www.teachingstrategies.com>
- Temple, J., & Reynolds, A. (2007). Benefits and costs of investments in preschool education: Evidence from the Child-Parent Centers and related programs. *Economics of Education Review, 26*, 126-144.
- Thomas, R. M. (2000). *Comparing theories of child development* (5th ed.). Belmont, CA: Wadsworth/Thompson Learning.
- U.S. Department of Education. (2008). *No child left behind*. Retrieved from <http://answers.ed.gov/cgi-bin/education.cfg/php/enduser/>
- U.S. Department of Education. (2013). *Race to the top fund*. Retrieved from <http://www.2.ed.gov/programs/racetothetop/index.html>

- Valeski, T. N., & Stipek, D. J. (2001). Young children's feelings about school. *Child Development, 72*(4), 1198-1213.
- Vygotsky, L.S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Walsh, D. (1989). Changes in kindergarten: Why here? Why now? *Early Childhood Research Quarterly, 4*, 377-391.
- Wortham, S. (2006). *Early childhood curriculum: Developmental bases for learning and teaching (4<sup>th</sup> ed.)*. Upper Saddle River, NJ: Pearson Education, Ltd.
- Zimmerman, B.J. (1989). *Self regulated learning and academic achievement*. New York, NY: Springer New York. doi: 10.1007/978-1-4612-3618-4\_1



## APPENDIX A: LEARNING BEHAVIOR SCALE ITEMS

ATTITUDE TOWARD LEARNING Often   Occasionally   Seldom

1. Responds in a manner that shows attention.
2. Says task is too hard.
3. Is reluctant to tackle a new task.
4. Adopts a don't care attitude to success.
5. Shows little desire to please you.
6. Is unwilling to accept help.
7. Is very hesitant about giving an answer.
8. Invents silly ways of going about tasks.
9. Shows a lively interest in learning.

## STRATEGY/FLEXIBILITY

10. Follows peculiar or inflexible procedures.
11. Responds without taking sufficient time.
12. Has enterprising ideas which don't work out.
13. Gets aggressive or hostile.
14. Uses headaches or other pains as an excuse.
15. Relies on personal charm.
16. Carries out tasks according to own ideas.

## ATTENTION/PERSISTENCE

17. Sticks to a task.
18. Bursts into tears.
19. Is distracted too easily.
20. Fidgets, squirms, leaves seat.
21. Doesn't work well if in a bad mood.
22. Tries hard but concentration soon fades.

## APPENDIX A: (CONTINUED)

COMPETENCE MOTIVATION	Often	Occasionally	Seldom
23. Seems to take refuge in incompetence.			
24. Cooperates in class activities.			
25. Shows little determination to complete tasks.			
26. Is willing to be helped.			
27. Is too lacking in energy to be interested.			
28. Accepts new tasks without fear.			
29. Delays answering.			

APPENDIX B: LEARNING BEHAVIOR SCALE FOLLOW UP INTERVIEW  
WITH RESPONSES OF OFTEN FOR ITEMS 2 – 8, 10 – 23, 25, 27, 29

LBS Item	Follow Up Question	Respondent's Comments
2. Says task is too hard.	Can you give any examples?	
3. Is reluctant to tackle a new task.	Can you give any examples?	
4. Adopts a don't care attitude to success.	Can you give any examples?	
5. Shows little desire to please you.	Can you give any examples?	
6. Is unwilling to accept help.	Can you give any examples?	
7. Is very hesitant about giving an answer.	Can you give any examples?	
8. Invents silly ways of going about tasks.	Can you give any examples?	
10. Follows peculiar or inflexible procedures.	Can you give any examples?	

## APPENDIX B: (CONTINUED)

LBS Item	Follow Up Question	Respondent's Comments
11. Responds without taking sufficient time.	Can you give any examples?	
12. Has enterprising ideas which don't work out.	Can you give any examples?	
13. Gets aggressive or hostile.	Can you give any examples?	
14. Uses headaches or other pains as an excuse.	Can you give any examples?	
15. Relies on personal charm.	Can you give any examples?	
16. Carries out tasks according to own ideas.	Can you give any examples?	
18. Bursts into tears.	Can you give any examples?	
19. Is distracted too easily.	Can you give any examples?	
20. Fidgets, squirms, leaves seat.	Can you give any examples?	

## APPENDIX B: (CONTINUED)

LBS Item	Follow Up Question	Respondent's Comments
21. Doesn't work well if in a bad mood.	Can you give any examples?	
22. Tries hard but concentration soon fades.	Can you give any examples?	
23. Seems to take refuge in incompetence.	Can you give any examples?	
25. Shows little determination to complete tasks.	Can you give any examples?	
27. Is too lacking in energy to be interested.	Can you give any examples?	
29. Delays answering.	Can you give any examples?	
How do you think your child feels about school?	Can you give any examples?	
What do you think is happening during your child's school day?	Can you give any examples?	

APPENDIX C: LEARNING BEHAVIOR SCALE FOLLOW UP INTERVIEW WITH  
RESPONSES OF SELDOM FOR ITEMS 1, 9, 17, 24, 26, 28

LBS Item	Follow Up Question	Respondent's Comments
1. Responds in a manner that shows attention.	Can you give any examples?	
9. Shows a lively interest in learning.	Can you give any examples?	
17. Sticks to a task.	Can you give any examples?	
24. Cooperates in class activities.	Can you give any examples?	
26. Is willing to be helped.	Can you give any examples?	
28. Accepts new tasks without fear.	Can you give any examples?	
(Additional comments)	Can you give any examples?	
(Additional comments)	Can you give any examples?	

## APPENDIX D: OBSERVATION PROTOCOL

Jane                      Investigator                      9/9/13

8:15    Sitting at desk at back of room, facing the board. Working on worksheet (Ee—a nest with eggs). Says “He is doing scribble scrabble”. Talking with boy sitting to her left. Talking with teacher about going to bed last night.

8:20    Boy talking, J put her hand over his mouth and says “shhh”. Talking with teacher. “I gots lots of colors”. Coloring with left hand with purple crayon. Yawned. Talking out loud while coloring worksheet. Talking with girl across room. Talking with boy to her left. “Are you okay? I’ll help you.” (boy had fallen out of chair).

8:25    “Look look look” holding up paper to teacher. Teacher redirects J to finish. “I done now?” J asks teacher. Teacher asks “what?” needing clarification of what J needs. “Keep working” says teacher. Counts number of absent students 1-7 in order. Singing while working on worksheet. Brought worksheet to observers “Look!”. Observer asks “what color?” “Purple!” J says jumping up and down. Shows teacher the paper. Asks if she can now draw on the back of paper.

8:30    Coloring on back of worksheet. Sitting at desk. “See I just draw my perfect momma! She will love it!” showing observers paper. Walked back to desk. Talking with parent and girl that just arrived. Showing principal her paper. Jumping up and down. Back at desk. Out of seat. Chair pushed in and leaning over desk. Sliding paper across desk onto desk to left. Rolling paper. Hands on desk and jumping.

8:35    Standing . Talking with student to left. Pup paper in desk. Moving desk to even line with other desks. Climbing across chair. Not interacting with others. Watching

## APPENDIX D: (CONTINUED)

student to right. Took out 2 crayons from case and used them to beat on crayon box (copying student to right). Coloring on crayon case. Beat case like drum with crayons.

8:40 Teacher tells students to put crayons in box, put crayons in desk, put papers in desk. J followed directions. Sitting at desk. Turns to student on left. Taps student on shoulder. Kneels on chair. Turned backwards in chair. Out of chair. J moved student to left chair. Student to left yells "I have to use bathroom". J says "No you don't". Standing behind chair at desk. Sits backward in chair. Raised hand and jumps up and down when teacher asked for helper. Teacher says "stand for attention". J crouched down. J stands and turns around, her back to the flag. Rocks back and forth with left hand behind back, right hand on her chest.

8:45 J sings loudly B-I-B-L-E song with teacher. Jumps up and down when asked about Days of the Week. Walking back and forth from desk to teacher at calendar. Teacher guides J to desk. Prayer time. J puts head down on desk. Teacher says "everybody have a seat". J sits down. Picks nose and wipes it under desk. Teacher reads Bible verse. J says "Two. They have two eyes". Bathroom door opens and J stands up and looks at student coming out of bathroom. Teacher says to J "That's a yellow stick and a note home". J sits down sideways in chair and puts head down.

8:50 Echoes teacher reading Bible verse. Teacher pats J on shoulder. Talking about Princess Sophia. Teacher blows whistle and class and J stop talking. J stands up. Teacher walks to J's desk. J sits down and puts down head briefly.

8:55 Sitting at desk. Teacher ask question. J sitting with elbows propped on cheeks. "Lalalalalalala" while teacher talking. Pulled hair out of twist/ponytail. Chewing nails.



## APPENDIX D: (CONTINUED)

“Rain!” J calls out. Raised hand and yelled out answer (unintelligible). Teacher walks over and puts her hand on J’s and moves it down. J untwisting hair while teacher talks.

9:00 Sitting at desk swinging legs. Untwisting hair. Listens to teacher give directions for Intruder Drill.

9:05 Laying on desk. Puts knee in chair. Looking at teacher talking. Rubbing eye. “I know!” raises hand. Holding hair. Looks at animal worksheet teacher places in front of J on desk. “I’m gonna color lots and lots of colors”. Takes out crayon box. Talks with student to left. Colors with brown crayon. “Ms. Z, I gonna color a lot”. Turns to student to left. Says “You have to color a lot”.

9:10 Holding 2 crayons in right hand. Worksheet fell under desk to other side. J stands. Teacher says “J I need you to stay in your seat.” J sits down in chair. J says “I only use one color”. Picks up 3 crayons. Begins to color. Looks at student to left who is talking. “Look at my turtle” J says in a loud voice. Coloring. Holds up paper “Ms Z look!” J watches teacher demonstrate how to make gray by coloring lightly with black crayon.

9:15 Sitting at desk coloring worksheet. Teacher asks J question. J doesn’t answer. Continues to color. Singing to self quietly. J brings worksheet to observers. “Look at my picture. Daddy gonna love it. So will momma!” J sits after teacher says “J stay at your seat”. Gets out of seat and starts to walk to observers. Sits after teacher tells her to sit in her seat.

9:20 Stands at desk. Pushes in chair and puts paper away after teacher tells class to do this. Hands above head. Stands at desk while teacher hands out worksheet. Sits after teacher tells J to sit down. Raises hand. Says “Ms. Z? I need to go pee. I need to go pee.”

## APPENDIX D: (CONTINUED)

(Announcement for Code 2 Lockdown drill). Stands at desk with chair pushed in. Stays back while rest of class walks to front of room and sits. Walks to front of room after teacher says “J, move your toes.”

9:50 Walks to front of line but does not get in line. Jumps up and down, looking at shelf. Moves over to line and finds assigned spot in line.

9:55 Walks to cafeteria, hopping and jumping in line. Walks down stairs holding onto railing. (Restroom break)

10:00 Waiting in line in hallway for other student to finish using restroom. Puts 1 foot on wall (copies student next to J in line). Puts foot down after teacher says “Feet down”. Waits without talking. Crouches. Singing quietly to self. Stands up. Counts people in line.

10:05 Talks with student to right. Holds up hand and has student count her fingers. “That’s five.” J says. Waves to student from other class walking past. Swinging feet out. Stops when teacher says “J, you’re going to end up kicking someone”. Counts children waiting in line. Picks nose. Hops on one foot. Bows head and puts hands together when teacher begins to pray aloud. J does not recite prayer. Walks into cafeteria.

10:10 Sitting on cafeteria stool. Playing with spoon. J says “yes!” when asked if she wants milk on her cereal. J holds up spoon when teacher asked where the spoon was. Places spoon on napkin.

10:15 Eating cereal. Sitting on cafeteria stool. No interaction with peers or adults.

10:20 Sitting. Eating cereal. Stands between stool and table. Continues to eat. Finishes cereal and drinks milk from bowl.

## APPENDIX D: (CONTINUED)

10:25 Finished cereal. Standing. Moves both hands in circular motion on table. Sits on stool. Turns around on stool. Spins. Sliding back and forth on stool. Wiggles side to side. Looks at students in other class sitting at other table. Turns back to table.

10:30 Sitting on stool. Swinging 1 leg. Turns around on stool. Spins. Wiggles back and forth.

10:35 Sitting on stool. Copying behavior of student sitting on her left. Covers ears, covers mouth and makes sound bwah bwah bwah as she moves hand on and off mouth. Plays Pat-a-cake with student sitting to her left. (whistle blows) J stands up. Gets in line with class. Jumps.

10:40 Walking in hallway. Line stops. J repeats "Do not push" after teacher tells her to say it. Walks up stairs.

10:45 Sitting at desk in classroom, arms crossed, head down. Recites poem with class (short I sound). J sitting in chair, hands under desk. Mimics students who are calling out answers. Raises hand to answer question. Rocking side to side.

10:50 "Apple!" J calls out. Tries to sing vowel song along with teacher. Watching teacher at front of room.

10:55 Takes out papers from desk (follows teacher direction). Leans over chair to look at other student's paper that fell in front of desk. Sits on chair. Puts head on desk. Says "you didn't call me" to teacher. Stands on chair. Puts leg over back of chair. Kneels on chair. Stands next to chair. Talks to student next to her.

## APPENDIX D: (CONTINUED)

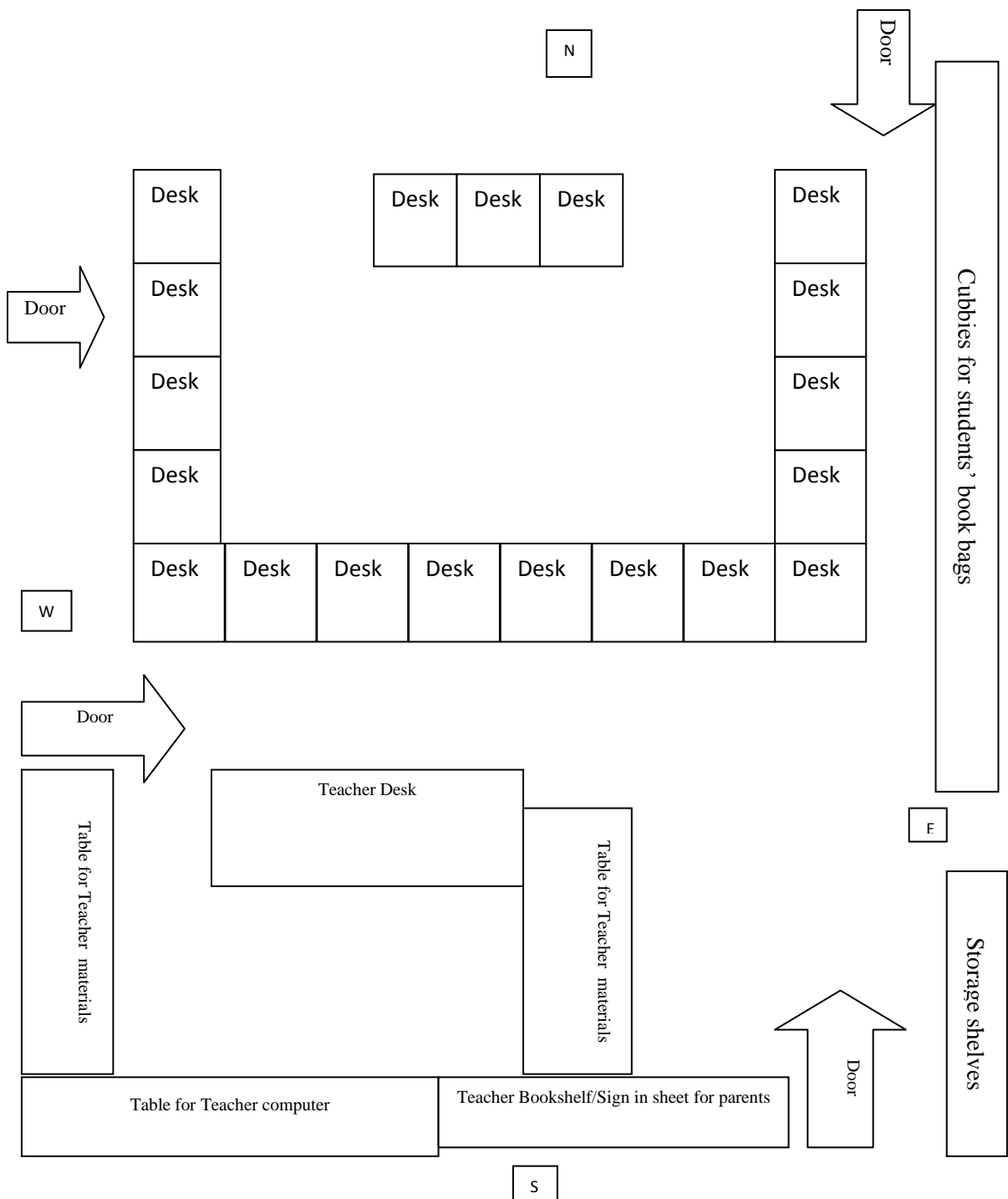
11:00 J's name is called and she hops to her cubbie and gets her bookbag and takes it to her desk. Then walks to her covers and brings them to her desk. Unzips bookbag.

Standing. Zips bag back up. Lines up.

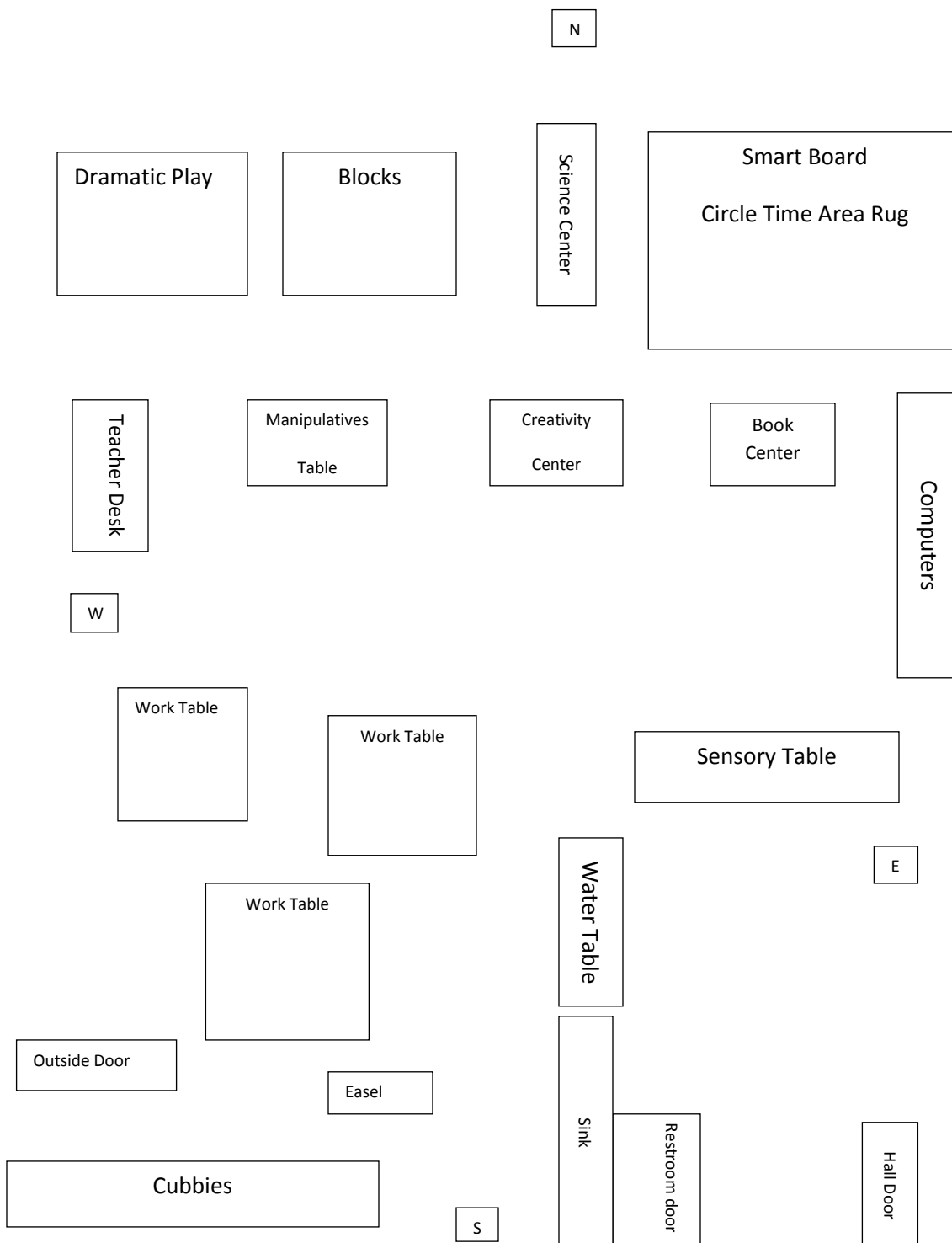
## APPENDIX E: INTERVIEW QUESTIONS REGARDING STUDENT'S DRAWING

Question	Student Response
Tell me about your drawing.	
What is the person doing in your picture?	
How does the person in your picture feel about school?	
What is your favorite thing about school?	
Is school easy or hard? Tell me more.	
(Additional comments from student)	

APPENDIX F: APPLEWOOD PRESCHOOL DESIGN



APPENDIX G: BAILEY PRESCHOOL DESIGN



APPENDIX H: MEGAN'S DRAWING

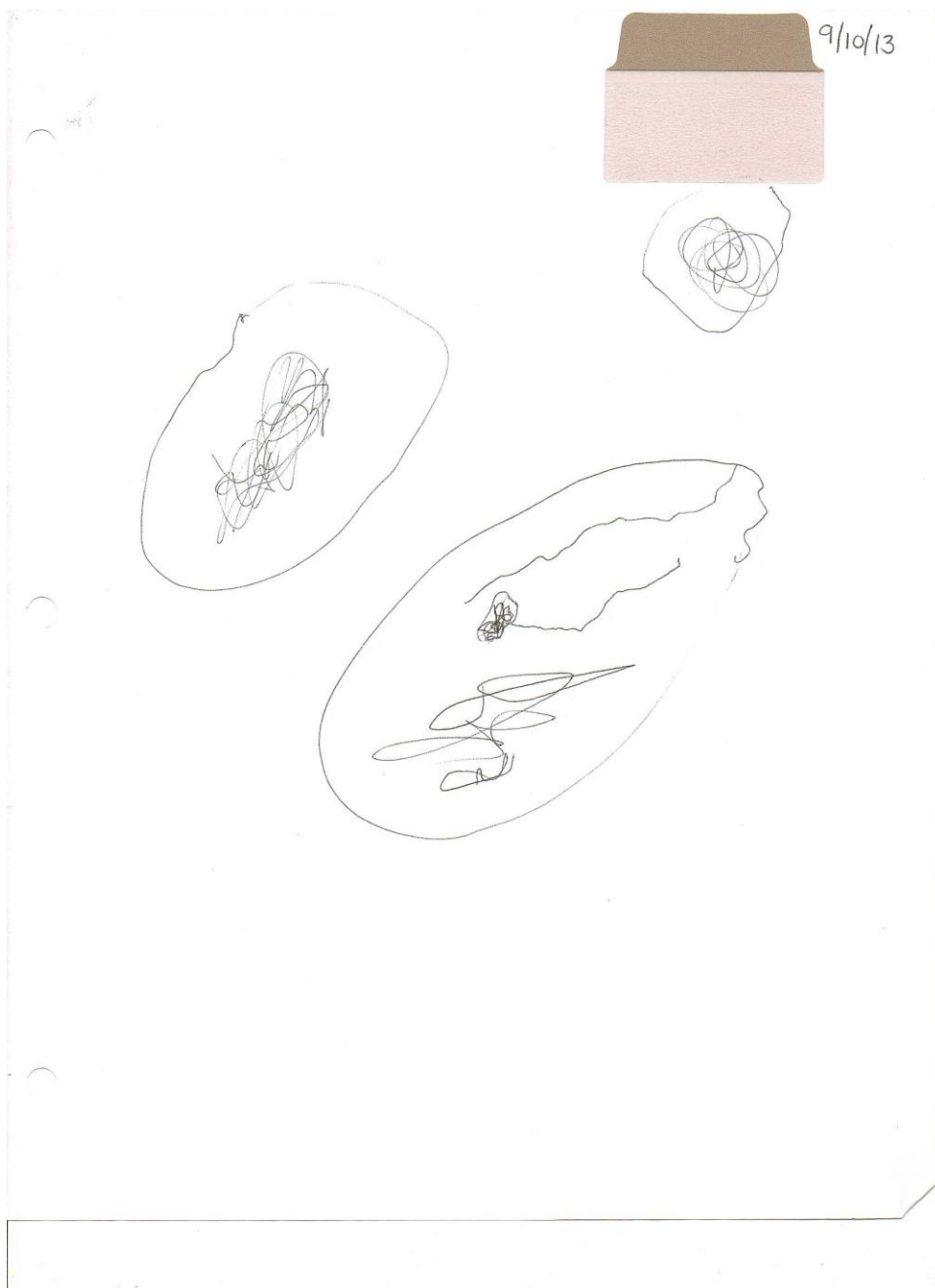




APPENDIX I: KEVIN'S DRAWING



APPENDIX J: JANE'S DRAWING



APPENDIX K: SAM'S DRAWING

