

TEACHERS' PERCEPTIONS OF DEVELOPMENTALLY
APPROPRIATE PRACTICE IN EARLY LEARNING PROGRAMS

A Thesis
by
ANDREA WATSON ANDERSON

Submitted to the Graduate School
Appalachian State University
In partial fulfillment for the requirements for the degree of
MASTER OF ARTS

August 2010
Department of Family and Consumer Sciences

TEACHERS' PERCEPTIONS OF DEVELOPMENTALLY
APPROPRIATE PRACTICE IN EARLY LEARNING PROGRAMS

A Thesis
by
ANDREA WATSON ANDERSON
August 2010

APPROVED BY:

Dr. Cindy McGaha
Chairperson, Thesis Committee

Dr. Denise Brewer
Member, Thesis Committee

Dr. Ellen Carpenter
Member, Thesis Committee

Darlene Shumate
Member, Thesis Committee

Dr. Ellen Carpenter
Chair, Family and Consumer Sciences

Dr. Edelma D. Huntley
Dean, Research and Graduate Studies

Copyright by Andrea W. Anderson 2010
All Rights Reserved

Permission is hereby granted to the Appalachian State University Belk Library and to the Department of Family and Consumer Sciences to display and provide access to this thesis for appropriate academic and research purposes.

FOREWORD

This thesis is written in accordance with the style of the *Publication Manual of the American Psychological Association* as required by the Department of Family and Consumer Sciences at Appalachian State University

ABSTRACT

TEACHERS' PERCEPTIONS OF DEVELOPMENTALLY APPROPRIATE PRACTICE IN EARLY LEARNING PROGRAMS (August 2010)

Andrea Watson Anderson, B.S., Appalachian State University

Birth – Kindergarten Teacher Licensure, Western Carolina University

M.A., Appalachian State University

Chairperson: Dr. Cindy McGaha

Teachers' perceptions of Developmentally Appropriate Practice (DAP) were investigated to determine factors that affect teachers' ability to implement DAP. Pre-k and kindergarten teachers completed The Beliefs and Intentions Questionnaire which measured teachers self reported beliefs and practices. Results indicated that pre-k teachers' beliefs were more strongly related to their teaching intentions than for kindergarten teachers. Differences in pre-k and kindergarten classrooms were identified as well as pre-service training between pre-k and kindergarten teachers. Data analysis revealed a significant difference in Early Childhood Education (ECE) trained teachers and Elementary Education (EE) trained teachers' perceptions of DAP. Teachers who completed pre-service course work in ECE and taught in pre-k classrooms were more likely to demonstrate a Constructivist view of development. Teachers were asked to report perceived barriers to the implementation of DAP. State and local mandates and administrative support were identified as barriers to DAP. Implications for policy and practice are included.

DEDICATION

Thank you to my parents, Gary and Vertie, whose names should be included on my diploma! Truly, I could not have juggled the logistics of home, career, and graduate school without your willingness to move heaven and earth for my family. Especially to you Momma, my journey was yours as well.

Thank you to my husband, Patrick, whose patience and understanding allowed me many hours in the library. As my constant supporter, his consideration and fortitude gave him the ability to achieve an affinity for cereal for dinner. And finally, thank you to Jackson whose arrival prompted my adventure in academia. Your childhood has been and will always be the one I care most about. This is all for you.

ACKNOWLEDGMENTS

A special thank you to Dr. Ellen Carpenter, Dr. Denise Brewer, and Dr. Patricia Hearron who helped cultivate a profound passion for developmentally appropriate practice in early learning programs. Through their instruction and guidance, I learned about myself as a practitioner. This work serves to honor Dr. Carol Harding, whose confidence in my ability provided me confidence to write about my experiences.

Thank you to Dr. Cindy McGaha for her guidance during my graduate studies and her encouragement during the research and writing process. It would have been more than appropriate to suggest an alternative to writing a thesis, but she supported my need to stretch my academic muscles. I so appreciate the numerous hours of review and suggestions on this paper to expand my thinking about DAP. Thank you for understanding my need to be focused on being a wife and mother as well as a researcher.

Thank you to Janet Sink, Anna Lankford, and Kaye Lamb for their support and guidance during the research phase of this project. A million thanks to Robin Stanley for her support and willingness to assist in this project.

Thank you to Kathy Hardin and Janet Mears who served as mentors, collaborators, and cheerleaders. Surely there is joy to be found in adversity. After a professional storm, I found a providential calm, happiness, a new course, and unconditional support as a teacher in the preschool program.

TABLE OF CONTENTS

Abstract.....	v
Dedication	vi
Acknowledgments.....	vii
Chapter 1: Introduction	1
Developmentally Appropriate Practice in Early Learning Programs	3
Problem Statement.....	5
Research Questions.....	7
Chapter 2: Review of the Literature.....	8
Ecological Systems Theory.....	8
Macrosystem of Ecological Theory	10
Exosystems of Ecological Theory	14
Mesosystems of Ecological Theory	16
Microsystems of Ecology Theory	17
Conclusion	20
Developmentally Appropriate Practice.....	20
Guidelines for Developmentally Appropriate Practice.....	20
Creating a Community Learners.....	20
Teaching to Enhance Development and Learning	21
Planning Curriculum to Achieve Important Goals	22
Assessing Children's Development and Learning.....	23

Establishing Reciprocal Relationships.....	24
The Application of Developmentally Appropriate Practice	25
Barriers to the Implementation of Developmentally Appropriate Practice	29
Teacher Characteristics.....	30
Teacher Dispositions.....	31
Pre-Service Training	32
Professional Development	33
Teacher Perceptions of Developmentally Appropriate Practice and their Impact on Practice.....	34
Chapter 3: Methodology	37
Research Context	37
Participants.....	38
Procedures.....	42
Instrumentation	44
Summary	45
Chapter 4: Results	46
Relationship between Beliefs and Intentions	48
Early Educators' Scores with Removal of Reversal Items	48
Pre-K and Kindergarten Teachers' Scores.....	50

Differences in Teachers' Perceptions of Developmentally Appropriate Practice	55
Scores with Removal of Reversal Items	56
Teachers' Perceptions of Barriers to Developmentally Appropriate Practices	57
Planning Curriculum to Achieve Important Goals	57
Teaching to Enhance Development and Learning	59
Administrative Support.....	61
Teacher as Decision Maker.....	62
Summary	64
Chapter 5: Discussion	65
Summary of Major Findings.....	65
Differences Based on Setting.....	66
Administrative Support.....	66
State and Local Mandates	69
Differences Based upon Pre-Service Training.....	73
Limitations to the Present Study	76
Sample Size.....	76
Characteristics of the Sample.....	76
Curriculum Specialist as Researcher	77
Measures that Assess Developmentally Appropriate Practice.....	78
Implications.....	79
Setting	79

Pre-Service Training	82
Future Research Directions.....	84
Conclusion	88
References.....	89
Appendix A.....	95
Appendix B	97
Appendix C	102
Appendix D.....	104
Vita.....	121

Running head: TEACHERS' PERCEPTIONS OF DAP

CHAPTER 1: INTRODUCTION

Developmentally Appropriate Practice (DAP) is a teaching perspective in which early learning educators make informed decisions about how to teach young children (Bredekamp & Copple, 2009). DAP is a set of guidelines educators employ to inform their teaching practices and make appropriate decisions for all children. DAP is based in the belief that teachers gather information about and have an understanding of children's individual needs, children's development within the context of a family, and children's development within the context of culture and society (Bredekamp & Copple, 2009). Teachers who employ DAP successfully have knowledge of age related development that facilitates common predictions about children's learning and development (Bredekamp & Copple, 2009). DAP is defined by the National Association for the Education of Young Children (NAEYC) as practices that promote and facilitate a child's optimal development (Bredekamp & Copple, 2009). These practices can be informed by family dynamics, interactions within the learning environment, by policymakers, societal, and cultural norms (Bredekamp & Copple, 2009).

As represented in Table 1, DAP is based on the foundation that principles of child development inform practice and curriculum differentiation (Bredekamp & Copple, 2009).

Table 1. Principles of Child Development and Learning that Inform Practice

National Association for the Education of Young Children Position Statement on Developmentally Appropriate Practice (Bredekamp & Copple, 2009, p.10)

Domains of children's development -- physical, social, emotional, and cognitive are closely related. Development in one domain influences and is influenced by development in other domains.

Development occurs in a relatively orderly sequence, with later abilities, skills, and knowledge building on those already acquired.

Development and learning proceed at varying rates from child to child as well as unevenly within different areas of each child's functioning.

Early experiences have both cumulative and delayed effects on individual children's development; optimal periods exist for certain types of development and learning.

Development proceeds in predictable directions toward greater complexity, organization, and internalization.

Children are active learners, drawing on direct physical and social experience as well as culturally transmitted knowledge to construct their own understandings of the world around them.

Development and learning result from interaction of biological maturation and the environment, which includes both the physical and social worlds in which children live.

Play is an important vehicle for children's social, emotional, and cognitive development, as well as a reflection of their development.

Development advances when children have opportunities to practice newly acquired skills as well as when they experience a challenge just beyond the level of their present mastery.

Children demonstrate different modes of knowing and learning and different ways of representing what they know.

Children develop and learn best in the context of a community where they are safe and valued, their physical needs are met, and they feel psychologically secure.

In order for early educators to make informed decisions to promote children's optimal development, teachers must consider and incorporate the following practices in their everyday teaching routines (Bredekamp & Copple, 2009):

1. Creating a caring community of learners (p.16).
2. Teaching to enhance development and learning (p.17).
3. Planning curriculum to achieve important goals (p.18).
4. Assessing children's development and learning (p.21).
5. Establishing reciprocal relationships with families (p.22).

Teachers' implement strategies to enhance the children's learning by considering all areas of child development and best practice that support positive outcomes.

Developmentally Appropriate Practice in Early Learning Programs

Many teachers in the field of early education know the importance of positive relationships for building children's social and educational competence. Before children can be academically successful, it is paramount for children to be socially and emotionally successful. However, a disturbing trend concerning public policy and what schools believe academic success to be is now evident. Policy and administrators' perceived notions of school readiness, definitions of how children learn best, and philosophies concerning behavior management directly affect classroom practices. State, local, and administrative policy influence how teachers interact with children.

In a climate of high stakes testing and No Child Left Behind (NCLB), the notion exists that children should be introduced to more concepts related to academic performance at an earlier age. Thus, social and emotional experiences are absent in early learning environments causing a lag in development (Blaustein, 2005). Therefore,

teachers who focus on academic performance may be more likely to be viewed as successful by administrators and teaching peers. Teachers in the foundational grades may feel pressure to have children ready for the process of test taking. Inasmuch, attention to children's ability to navigate social relationships is neglected (Schmidt, Burts, Durham, Charlesworth, & Hart, 2007).

As more and more public schools incorporate pre-kindergarten (pre-k) classrooms in the school environment, kindergarten and pre-k teachers may feel an increased pressure to implement a “push down” curriculum in early learning programs (Schmidt, et al., 2007). Long time kindergarten teachers suggest that kindergarten in today’s educational environment is now the first grade of decades past (Katz, 1999b). Pre-k teachers also suggest they too, feel the pressure of their higher grade peers to teach children in a more didactic manner in which academic skills are highlighted as opposed to intellectual interests in which a love of learning can be cultivated (Katz, 1999a).

Early learning program teachers may feel embattled for adhering to developmentally appropriate curricula. They may have to justify their teaching methods to administrators and their upper grade peers who believe that all teachers in a pre-k or kindergarten program do is play (Vartuli, 1999). DAP is not simply playing with children, but is a complex and highly structured curriculum framework. DAP is grounded in an in-depth knowledge of developmental Theory, and child development.

DAP is based in the knowledge that children learn best when children initiate the learning. Research supports the effectiveness of DAP to facilitate long range positive outcomes for young children (Schweinhart & Weikart, 1997). In a didactic or teacher directed environment that facilitates the acquisition of academic skills that support short

term gains, it may be easy for teachers to lose their zeal for DAP. Also, teachers' beliefs and understanding of DAP may not be consistent with NAEYC's guidelines. For DAP to facilitate positive outcomes it is important to investigate teachers' perceptions and beliefs about how children learn best. It is, too, important to identify how teachers' perceptions are impacted by their educational histories, professional development opportunities, and identify barriers to the successful implementation of DAP.

Problem Statement

Research speaks clearly concerning the efficacy of developmentally appropriate practice as a predictor of school success (Dunn & Kontos, 1997). However, more and more practitioners report pressure to implement curriculum that is based on high stakes testing (Vartuli, 1999). While many pre-k programs implement a play based curriculum combining child directed and teacher directed activities, many kindergarten programs highlight the use of direct instruction (Schmidt, et al., 2007). Numerous professionals in the early learning arena report pressure to prepare children for high stakes testing that will determine whether or not a child is promoted to the next grade level (Blaustein, 2005).

Undoubtedly, teachers bring their beliefs and perceptions into the classroom. DAP is based in the notion children are capable and intrinsic learners who thrive in the context of positive relationships. How teachers perceive children as learners, how they perceive relationships with families, and how they see themselves in the learning process affect their beliefs and intentions in the classroom. It could be argued that many teachers lose their zeal to implement DAP when the educational setting they find themselves in does not share their belief of how children learn best. Teachers' beliefs and intentions

are impacted by mandated curricula, administrators' perceptions of DAP, professional development activities, and the acquisition of higher level teaching degrees (Wein, 1995).

Teachers who have an understanding of the DAP framework may feel pressure from other teachers and administrators to abandon the Constructivist view that children are the primary catalyst for teaching (Goldstein, 2007). Relationships in a developmentally appropriate curriculum framework are paramount to children's intellectual successes. These relationships with families and children may be compromised when teachers feel pressure to adopt teaching beliefs and practices that are contrary to their beliefs about how children learn best (Schmidt, et al., 2007).

This purpose of this research was to investigate pre-k and kindergarten teachers' perceptions of DAP. DAP is highly regarded as the cornerstone of high quality learning programs and is proven to facilitate positive learning outcomes for children (Dunn & Kontos, 1997). However, many public school teachers may have trouble implementing a developmentally appropriate early learning program because of perceived barriers, both real and imagined (Goldstein, 2007). To better serve children this research examined teachers' perceptions of DAP as well as barriers that prevent full implementation of DAP. The impact of teaching context and pre-service training on teachers' perceptions of DAP was examined.

Research Questions

This research serves to identify teachers' perceptions of DAP by clarifying some answers to the following questions:

Question 1: Do early educators' perceived teaching beliefs relate to their teaching intentions?

- Hypothesis: Early Educators' teaching beliefs will be positively related to their teaching intentions.

Question 2: Are the teaching beliefs of pre-k teachers more strongly related to their teaching intentions than those of kindergarten teachers?

- Hypothesis: Pre-k teachers' beliefs will be more strongly related to their teaching intentions.

Question 3: Is there a difference in perceptions of DAP between teachers who have degrees in Early Childhood Education (ECE) programs (BS, MA) and Elementary Education (EE) programs (BS, MA)?

- Hypothesis: Teachers who hold degrees in ECE will have higher scores on the Beliefs and Intentions Questionnaire than teachers who hold degrees in EE.

Question 4: What are the perceived barriers teachers identify that hinder the full implementation of DAP learning experiences?

- Hypothesis: Teachers will identify administrative support as a barrier to the implementation of DAP.

CHAPTER 2: REVIEW OF THE LITERATURE

A large body of research concerning DAP and the implications for early learning curricula provides the basis for this study of teachers' perceptions of DAP. This chapter will examine the context of child development within relationships using Bronfenbrenner's Ecological Systems Theory. This chapter will also give an overview of DAP as well as research concerning teachers' perceptions and the implementation of DAP in early learning programs. DAP is based in the premise that relationships are the primary mechanism for children's acquisition of knowledge and skills (Bredekamp & Copple, 2009). Bronfenbrenner's Ecological Systems provides the theoretical context for the current study of DAP.

Ecological Systems Theory

Urie Bronfenbrenner's Ecological Systems Theory suggests that children develop within complex systems of relationships affected by multiple levels of a child's environment (Berk, 2002). Bronfenbrenner's Ecological Theory is represented by a nested structure that encompasses not only the child's immediate environment, but societal conventions and public policy that inform teaching practice (Berk, 2002). The nested structure that Bronfenbrenner proposes is composed of Macrosystems, Exosystems, Mesosystems, and Microsystems. The child is at the center of the model and Bronfenbrenner theorizes that every action and interaction within the environment, either

directly or indirectly, affects a child's development (Berk, 2002). See figure 1 for a model of Bronfenbrenner's Ecological Theory in relation to children, families, early education programs, and public policy.

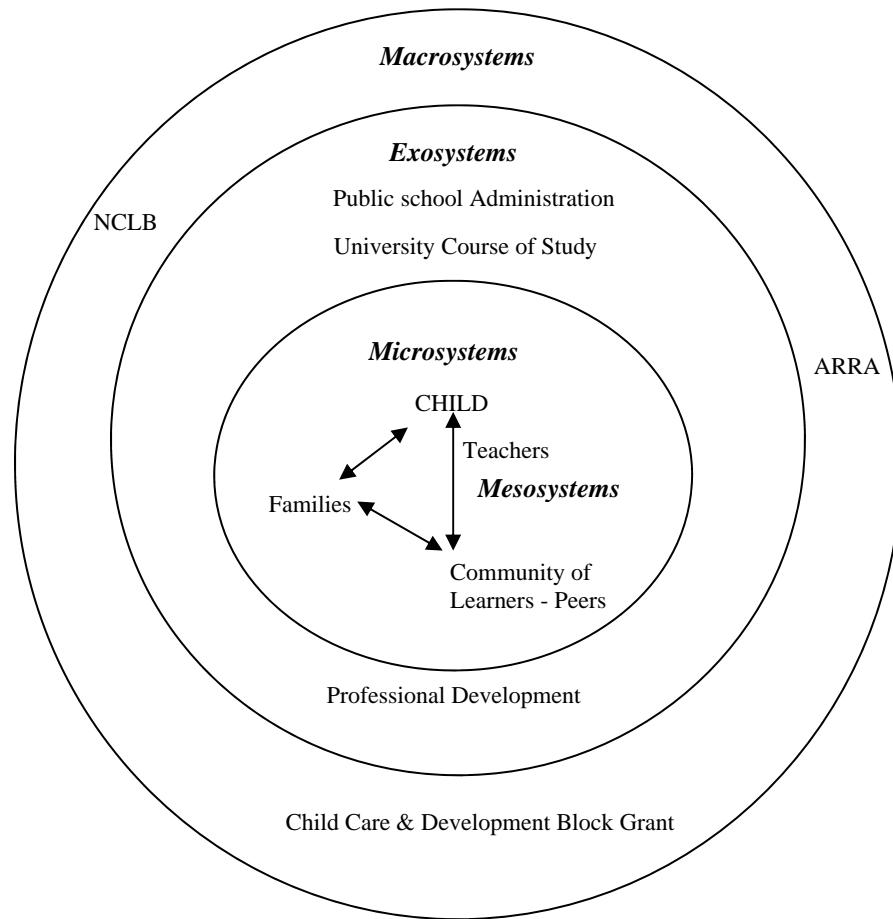


Figure 1. Model of Bronfenbrenner's Ecological Systems Theory (Crain, 2005).

In Bronfenbrenner's Ecological Theory, the child's environment is widely defined and goes beyond the immediate family and is broken into systems that play a direct role in the child's development (Berk, 2002). Because children do not develop within the context of a family only, there are other factors that affect a child's development. Bronfenbrenner (1979, p.16) says "behavior evolves as a function of the interplay between person and environment." Bronfenbrenner (1979) also theorized that

relationships have a level of reciprocity or are bidirectional. He believed this was an important element in a child's cognitive development because, "joint activity produces the most powerful developmental effects" (p. 57). The more support a child and family feels from the different systems, the more likely the child's development will benefit in a positive way.

Macrosystem of Ecological Theory. In the Macrosystem of Ecological Theory, cultural values, norms and public policy affect how early learning environments are structured and support or hinder optimal teaching practices. The supports, or lack thereof, that public policy provides affect the relationships within the child's immediate environment (Berk, 2002). This history of such policy considerations has been documented by the Center for the Study of Child Care Employment at the University of California Berkley. During the Great Depression, the Works Progress Administration created child care programs that served as educational experiences, provided social services for young children, and provided an income for unemployed teachers (Bellm & Whitebook, 2006). For the creation of these programs, the federal government relied on higher learning institutions as a source of information concerning early learning programs (Bellm & Whitebook, 2006).

During World War II, the federal government once again relied on early learning programs to care for children while mothers worked and fathers were on the battlefield. The Lanham Act served as a source of funding to support programs that promoted the connection between early education and highly qualified teachers (Bellm & Whitebook, 2006). The US Department of Education was instrumental in advocating for and recruiting teachers with degrees in early education as well as developing standards of

quality by which Lanham Centers were measured (Bellm & Whitebook, 2006).

However, as soon as WWII ended, these programs were dismantled by Congress. The premise for this legislation to be repealed was women's return to the home from the workforce so they could care for their own children (Bellm & Whitebook, 2006).

Consequently, teacher education requirements highlighted by Lanham Centers were negatively affected by public policy that did not recognize early learning centers as valuable educational institutions (Bellm & Whitebook, 2006).

Yet again in the 1960's there was a focus to provide child care services to support families who were low income or on welfare. To promote welfare to work programs, most early learning programs were seen as institutions that offered custodial care to meet the basic needs of children while families worked (Bellm & Whitebook, 2006). Head Start was designed to provide comprehensive services to children and facilitated economic gains for many low income families (Bellm & Whitebook, 2006). However, for families who did not qualify for Head Start services, there were limited options for child care. In response to the demand for out of home care, many child care programs were created for the purpose of custodial care (Bellm & Whitebook, 2006).

The dilemma facing families between choosing custodial care and educational programming holds true in the current state of public policy. Parental choice is at the heart of many state policies concerning early learning programs. For families who are in low income situations there may be no choice but to choose custodial care. In addition, there is little incentive to support high quality early learning programs nor are there federal sanctions against states that do nothing to support effective educational programs (Bellm & Whitebook, 2006). This public policy trend further undermines the educational

philosophy that affirms early learning programs as valuable academic services and vital for school success. Instead many early education programs are a custodial care industry that has facilitated lower standards for teacher education and whose sole purpose is to keep children safe while parents work (Bellm & Whitebook, 2006).

High quality early learning programs are imperative for children who have been placed at high risk for school success (Bowman, Donovan, & Burns, 2000; Schweinhart & Weickert, 1997). In President Obama's administration, high quality early learning programs are recognized as valuable assets to educational systems (ARRA, 2009). In the American Recovery and Reinvestment Act of 2009, there are provisions for the implementation of high quality early learning programs to aid in the economic stimulus (ARRA, 2009). The federally funded Head Start program will receive one billion dollars to expand early learning services as well as Early Head Start programs (ARRA, 2009). Included in this funding stream are provisions for professional development, technical assistance and program monitoring for Head Start programs (ARRA, 2009). The Child Care and Development Block Grant will receive two billion dollars to aid states in the distribution of child care subsidies for low income families (ARRA, 2009). This act makes provisions for states to increase funding streams to families who are placed at low income status and need child care. In addition, another 4% of federally mandated funding is set aside for quality enhancement, another 255.2 million dollars is mandated to increase the quality of child development programs (ARRA, 2009).

There are many states that have made the commitment to high quality early learning environments. North Carolina has implemented two programs to increase quality and access to early education services. Smart Start is administered by the North

Carolina Partnership for Children (NCPC) and has been in operation since 1993. The program seeks to “Advance a high quality, comprehensive, accountable system of care and education for every child beginning with a healthy birth” (NCPC, 2010, p.3).

Since its inception, Smart Start has increased access to high quality early learning programs for children birth to five. Smart Start has helped families’ accessibility to health care through grass roots advocacy and community outreach. North Carolina also, has created the Office of School Readiness under the umbrella of the North Carolina Department of Instruction. This initiative funds early education programs in the form of direct services to North Carolina’s children who have a special need or who have been placed at risk for school failure

In addition to the highlighted need for high quality early learning programs, the current notion of school readiness has been reviewed by educational institutions. The trend in this movement is the belief that schools need to be ready for children instead of children being ready for school. In fact, there is a faction of advocates touting the need for communities to be ready to support children to succeed in school and help schools meet all children at their developmental level (Pianta, Steinberg, & Rollins, 1995). Indeed, many schools systems are beginning to undertake school readiness projects and have highlighted the importance of relationships in school success.

Phillips, Mekos, Scarr, McCartney, & Abbott-Shim (2000) state school readiness must include a child’s ability to form and sustain relationships. The North Carolina Ready Schools initiative advocates for early learning programs in the context of building a foundation for school readiness. This initiative was born out of a taskforce convened to study school readiness in North Carolina in 2000. Out of this effort, North Carolina

defined a ready school as an “elementary school that provides an inviting atmosphere, values and respects all children and their families, and is a place where children succeed. It is committed to high quality in all domains of learning and teaching and has deep connections with parents and its community. It prepares children for success in work and life in the 21st century” (NCPC, 2010, p.8).

State and federal policy concerning early learning issues affect how teachers interact with children in the learning environment. When policy is in place that supports teachers as they implement high quality learning experiences then children are more likely to experience positive outcomes. For children to be successful, public policy needs to support families and educational systems as they work together to educate young children. When policy supports and advocates best practice, then children are better served.

Exosystems of Ecological Theory. Exosystems are children's surroundings that do not include them directly, but affect children's experiences in their immediate surroundings (Berk, 2002). Exosystems include school boards, school administrators, and professional development activities because they influence teacher practices which in turn affect children. School boards and school administrators decide upon policy that directly affects classroom practices in turn which directly affect children. Administrators interpret state mandates then implement policies that affect teachers' interactions with children. School administrators and principals create pacing guides and promotion standards that impact children's ability to navigate curriculum at their own pace and developmental level. These policies are also used as a determinant of children's school success (Spidell-Rusher, McGrevin, & Lambiotte, 1992).

The levels of professional development teachers are exposed to affect classroom experiences as well as teaching beliefs and experiences. Bowman et al. (2001) highlight the importance of professional development in that, teachers who have more complex and developmentally appropriate relationships with children have higher levels of training and education. Children's developmental outcomes are affected by teacher preparation programs and professional development experience (Bowman et al., 2001).

Karp (2005) identifies a paradox regarding child development research and the implementation of professional development. The United States has an extensive research base regarding child development, but there is a gap between research regarding best practices and their implementation and policy consideration. There too, is a gap between what research defines as practices that facilitate positive child outcomes for children, especially those who are placed "at risk" for school failure, and what actually happens in learning environments (Karp, 2005).

Because of the fragmented system of service delivery of professional development for early learning programs (for profit child care centers, elementary schools, college based programs, and community based programs) there is, too, a fragmented system of professional development (Karp, 2005). The early learning workforce receives professional development concerning developmental outcomes, assessment, and early learning standards in various forms and fashions from a variety of agencies (Vartuli, 1999). This produces teachers who are poorly prepared to understand effective curricula, assessment, and early learning standards. They do not know how to plan for children's individual needs and facilitate their development, which is the foundation of developmentally appropriate practice (Karp, 2005).

In the age of accountability and the inception of NCLB, for some educational organizations professional development places an emphasis on high stakes testing and children's successful navigation of levels of accomplishment. Because of the fragmented system of professional development service delivery and the lacking research base, professional development systems can be grounded in current policies or notions of what makes children successful instead of effective research- based practices. Broken service delivery and training based in administrators' inaccurate notions of school success diminish teachers' ability to implement developmentally appropriate curricula (Goldstein, 2007).

Mesosystems of Ecological Theory. Mesosystems are the connections between Microsystems, such as families and early learning programs, that support and foster children's development. Relationships that promote partnerships between home and school are a critical part of children's optimal development (Bronfenbrenner, 2005). Relationships are the foundation of a developmentally appropriate program (Bredekamp & Copple, 2009).

Positive relationships between schools and families have long been identified as a predictor of school success in and beyond the early learning years (McIntyre, Eckert, Fiese, DiGennaro, & Wildenger, 2007). All children benefit from parental involvement in school, but children who are placed at risk for school failure are more likely to experience positive outcomes when parents take an active role in their children's education (McIntyre et al., 2007). Teachers in the early learning field are especially important in the facilitation of positive relationships between home and school (Sandall, Hemmeter, Smith, & McLean, 2005).

There are potential problems in the facilitation of relationships when teachers view themselves as the experts on early education and child development (Gonzalez-Mena, 2001; Wilgus, 2005). Positive relationships are threatened when parents are not welcomed and recognized as partners in the leaning process or even instructed as to what children need to know. Gonzalez-Mena (2001) highlights the need for teachers to understand and support families. Parents, most in general, "love their children and are doing the best they can with what they know, who they are, and the circumstances they find themselves in" (p.38). The goal of any education program should be to facilitate children's success and positive relationships that promote reciprocity between home and school. Reciprocity of relationships between home and school are crucial for children's success in a developmentally appropriate curriculum framework (Bredekamp & Copple, 2009).

Microsystems of Ecological Theory. Microsystems are the intimate levels of children's interactions within the context of relationships with families and early education programs (Berk, 2002). Activities and interactions with the environment need to be positive and progressively more complex for children's optimal development (Bronfenbrenner, 2005).

Bronfenbrenner (2005) states that human development unfolds in the process of reciprocal interactions, in the form of interactions with people and objects in the environment, that progressively becomes more complex over time. Bronfenbrenner (2005) also theorized that for children to develop to their optimum, the positive content of interactions must occur on a regular basis over an extended period of time. He called

these interactions with the immediate environment proximal processes (Bronfenbrenner, 2005).

In Ecological Theory, these proximal processes are the primary drive for development (Bronfenbrenner, 2005). Bronfenbrenner (2005) theorized that proximal processes cannot maintain or structure themselves. The interactions of the child with the environment whether it is people, objects or symbols, are determinants of development. Children, environments, historical and cultural contexts merge, then work together to determine developmental outcomes (Bronfenbrenner, 2005).

For children in early learning environments, development is affected by the quality of interactions within the Microsystem. In an optimum environment, proximal processes should provide a level of security and protection for children as well as engage children in the learning process. The proximal process of being cared for and protected by a teacher may give a child the belief that a personal and caring relationship is common place in the early learning environment. Shonkoff & Phillips (2000) highlight the need for warm and supportive interactions within the learning environment. Shonkoff & Phillips (2000) state that children learn best in a relational mode as opposed to rote learning that emphasizes didactic instruction. In the context of warm and supportive interactions children learn greater social competence and enhanced problem solving skills (Shonkoff & Phillips, 2000). Not only do children benefit from caring relationships, but in the context of the relationship, children's development is enhanced when teachers have higher levels of education, have knowledge of how children grow and develop, and understand how to implement developmentally appropriate activities (Shonkoff & Phillips, 2000).

A telling aspect of Bronfenbrenner's Ecological Theory (2005) is his conception that "somebody has to be crazy about that kid" and be actively involved in his or her continued development (p. 262). This happens in a partnership, where children and caregivers are in a relationship of give and take that nurtures children as they grow and develop. Bronfenbrenner (2005) states that the family is the basic unit of our society and "the family is the most humane, the most powerful, and by far the most economical system for making and keeping human beings human" (p. 262). Bronfenbrenner's theory (2005) acknowledges that nurturing and supportive relationships are necessary for a child's optimal development. In educational environments, teachers and children are in relationships that are analogous to families. Werner (1992) highlighted children's resiliency to the effects of poverty in a longitudinal study called *The Children of Kauai*. In this study, Werner followed 505 children from birth into adulthood. She studied the effects of physical and psychological environments on children's development. Werner (1992) assessed the cumulative effects of poverty, disorganized care giving, and parental stress. Werner (1992) found that children who were in relationships, in which an adult had a genuine and profound interest in the child's success, were more likely to be resilient to environmental stressors and were more likely to succeed in school.

In the Microsystem, children interact not only with teachers but with other children. In this context, children learn social conventions by interacting with other children. They learn how to conduct themselves within a group and how the learning process occurs in the context or relationships. Children learn reciprocity, self regulation, and learn to manage impulses (Rose-Krasnor, 1997; Rubin, Bukowski & Parker, 1998). DAP suggests teachers facilitate peer learning by bringing in other children to help

mentor those who need help or more information to solve a problem (Bredekamp & Copple, 2009). Children's development of social skills is strengthened when children become friends with other children because the relationships are more complex and longitudinal than interacting with unfamiliar peers (Rubin et al., 1998).

Conclusion. In Bronfenbrenner's Ecological Theory all of the systems converge to support children's development. This environmental convergence, to support optimal development, is evident in early learning programs in the context of a developmentally appropriate curriculum framework. DAP requires teachers, administrators, and policy makers to create deliberate policy about environmental and teaching constructs. Policy supports families and teachers as they work together to facilitate children's learning through the implementation of DAP.

Developmentally Appropriate Practice

Guidelines for Developmentally Appropriate Practice. For children to have high quality experiences within an early learning program teachers must comprehend that DAP consists of: creating a caring community of learners, teaching to enhance development and learning, planning curriculum to achieve important goals, assessing children's development and learning, and reciprocal relationships with children and families. For children to learn at their optimal level, all of the principles of DAP need to be addressed in early learning environments (Bredekamp & Copple, 2009).

Creating a Community of Learners. Teachers' adherence to DAP requires that teachers support and facilitate relationships. Bredekamp and Copple (2009) state,

Each member of the community is valued by the others. By observing and participating in the community, children learn about themselves and their world and also how to develop positive, constructive relationships with other people. Each child has unique strengths, interests, and perspectives to contribute. Children

learn to respect and acknowledge differences of all kinds and to value each person. (p. 16)

Proponents of DAP advocate the belief that positive interactions within the classroom community are crucial for optimal development (Bredekamp & Copple, 2009). Bronfenbrenner (2005) theorized that for children to develop to their optimum, the positive content of interactions must occur on a regular basis over an extended period of time. He called these interactions with the immediate environment proximal processes (Bronfenbrenner, 2005).

In a caring community of learners, children gain knowledge of how to value other children and adults as integral parts of a learning system. Through this process, positive relationships become the foundation for investigation and exploration. In a developmentally appropriate environment, teachers keep children physically and psychologically safe so the emotional and social climate is conducive for children's optimal development (Bredekamp & Copple, 2009). Children construct their own understandings as to how the world works (Bredekamp & Copple, 2009). In the context of positive supportive relationships with other children, adults and the larger learning community, children are given the freedom to clarify understandings and extend thinking skills by testing theories, experimenting with materials, and collaborating with others to solve problems (Bredekamp & Copple, 2009).

Teaching to Enhance Development and Learning. Teachers' adherence to DAP requires that teachers use teaching strategies that enhance development and learning. Bredekamp and Copple (2009) state,

Teachers plan for learning experiences that effectively implement a comprehensive curriculum so that children attain key goals across the domains

(physical, social, emotional, cognitive) and across the disciplines (language literacy, including English acquisition, mathematics, social studies, science, art, music, physical education, and health). Teachers plan the environment, schedule, and daily activities to promote each child's learning and development. (p. 18)

In this curriculum framework, teachers understand that children are creators of their own perceptions and understanding of the world around them (Bredekamp & Copple, 2009).

In order for children to develop at the optimal level, teachers plan and implement environments and activities that support development across domains. Teachers facilitate and support the learning that children need to be successful through children's active engagement in activities that are either adult guided or child guided (Bredekamp & Copple, 2009).

Adult guided activities are driven by goals embedded in the curriculum, but are based and facilitated through children's interests and children's active engagement (Bredekamp & Copple, 2009). Child guided experiences proceed from the children's interests, ideas, and actions, but teachers add vital and deliberate supports to enhance children's learning and clarify misunderstandings that children may have (Bredekamp & Copple, 2009). In developmentally appropriate environments, teachers have a large repertoire of teaching strategies for engaging, motivating, and facilitating learning experiences that children need to sustain and support optimal development (Bredekamp & Copple, 2009).

Planning Curriculum to Achieve Important Goals. Teachers' adherence to DAP requires that teachers plan curriculum to achieve learning goals. Bredekamp and Copple (2009) state,

Teachers use the curriculum framework in their planning to ensure there is ample attention to important learning goals and to enhance the coherence of the

classroom experience for children. Teachers make meaningful connections a priority in the learning experiences they provide children, to reflect that all learners, and certainly young children, learn best when the concepts, language, and skills they encounter are related to something they know and care about, and when the new learnings are themselves interconnected in meaningful, coherent ways. (p. 21)

In a developmentally appropriate program, teachers implement curricula that support children in the achievement of goals that are considerable within developmental and educational contexts (Bredekamp & Copple, 2009). Teachers who understand child development use this knowledge base to gather information about children's interests to plan engaging and meaningful learning experiences that support positive outcomes (Bredekamp & Copple, 2009). Teachers use intentional teaching strategies to coach and assess curriculum goals throughout the day and facilitate relevant experiences within adult guided interactions and child guided interactions (Bredekamp & Copple, 2009).

Assessing Children's Development and Learning. Teachers' adherence to DAP requires that teachers assess children's development and learning.

Bredekkamp and Copple (2009) state,

Assessment of young children's progress and achievements is ongoing, strategic, and purposeful. The results of assessment are used to inform the planning and implementing of experiences, to communicate with the child's family, and to evaluate and improve teachers' and the program's effectiveness. Assessment focuses on children's progress toward goals that are developmentally and educationally significant. (p. 22)

Assessment in developmentally appropriate early learning programs is used to monitor effectiveness of curricula in the context of the experiences teachers provide children, to plan and implement activities, as well as monitor children's progress toward developmental goals (Bredekamp & Copple, 2009). Assessment is educationally sound and is formative in its purpose to guide curriculum planning. Assessment in a

developmentally appropriate program is authentic in that it is measured by what children achieve and produce within the learning environment (Bredekamp & Copple, 2009). In the framework of authentic assessment, “the real life nature of the task and the natural context in which the assessment occurs or the observational data are gathered” provides the means by which assessment is conducted (Bagnato, Neisworth, & Munson, 1997, p.26).

Coutinho & Malouf (1992) and Bagnato et al. (1997) state that authenticity is crucial in developmentally appropriate curricula because: (a) motivation to complete the task is greater if the commission is more realistic or natural in conjunction with everyday routines and events, (b) authentic behaviors promote a competency based approach to early education and allow all children to be assessed across disciplines and across learning settings, and (c) authentic performance based assessments require the assessor to make no inferences about a child’s abilities because children are observed in a natural environment.

In a developmentally appropriate program, teachers gather assessment information from multiple sources and recognize parents as experts on their children in areas of strength and need (Bredekamp & Copple, 2009). Teachers involve families in important decisions and follow up on evaluation and implementation of interventions (Bredekamp & Copple, 2009).

Establishing Reciprocal Relationships. Teachers’ adherence to DAP requires that teachers support and facilitate relationships with families. Bredekamp and Copple (2009) state,

In reciprocal relationships between practitioners and families, there is mutual respect, cooperation, shared responsibility, and negotiation of conflicts toward

achievement of shared goals. Practitioners work in collaborative partnerships with families, establishing and maintaining regular, frequent two-way communication with them. (p.23)

Teachers who are guided by developmentally appropriate curriculum framework understand and support the belief that parents are their child's first and best teacher. Teachers facilitate relationships with families to gain insight into children's development and to receive input from families concerning their children's developmental goals (Bredekamp & Copple, 2009). Teacher and families work together in the context of a caring community of learners. In essence the learning community goes far beyond the early learning environment and includes respect, responsibility, and sensitivity to support children's development and parent's competence and proficiencies (Bredekamp & Copple, 2009).

DAP is a curriculum framework for guiding teacher's decisions regarding the implementation of teaching strategies (Bredekamp & Copple, 2009). Teachers use a knowledge base of pedagogy, child development, children and family needs to plan learning experiences (Bredekamp & Copple, 2009). However, there are barriers to the implementation of DAP.

The Application of Developmentally Appropriate Practice

Developmentally appropriate curricula are based in the knowledge of developmental Theory, child development, and in the growing knowledge base of brain development (Shonkoff & Phillips, 2000). Shonkoff & Phillips (2000) state brain development is longitudinal and a substantial portion of brain development occurs within the first five years of life. The brain's ordered sequence requires foundational abilities to facilitate advanced learning of more complex skills (Shonkoff & Phillips, 2000). Brain

connections are set and solidified within the context of experiences with adults, children, and the environment (Shonkoff & Phillips, 2000). The brain's capacity for change decreases as children and adults get older (Shonkoff & Phillips, 2000).

There too, is reciprocity between genes and experiences that determine how children grow and develop. Children in situations where there is a reciprocal relationship are more likely to have higher levels of brain function (Shonkoff & Phillips 2000). The probability of positive outcomes increases when children are engaged in reciprocal relationships, thus creating more connections in the brain. Conversely, children's lack of positive interactions with people in their environment can augment a child's risk for developmental deficiencies (Shonkoff & Phillips, 2000). Attention to social and regulatory skills facilitates strong social, emotional, and behavioral skills across learning environments (Raver & Knitzer, 2002). To facilitate children's success teachers foster positive interactions with children, between children, with families, and with other teachers (Bredekamp & Copple, 2009).

To enhance a child's developmental capabilities, there are features of developmentally appropriate curricula that must be present. For children to develop optimally teachers need to be nurturing, welcoming, and respectful in their interactions with children and families (Bredekamp & Copple, 2009). Teachers act as facilitators not only in their relationships with children, but with families, and they facilitate relationships between children (Bredekamp & Copple, 2009).

Teachers draw upon their knowledge base of child development to create well planned environments and experiences (Bredekamp & Copple, 2009). First and foremost in a DAP environment; teachers understand that children's safety and health needs must

be met so that children may feel safe and secure (Bredekamp & Copple, 2009). Once children feel safe then they may begin to engage in purposeful play. In developmentally appropriate curricula, play is the primary process by which learning occurs. Bredekamp & Copple (2009) suggest that for play to be successful, teachers need to support children and engage them in tasks with specific goals and objectives in mind. When children play they are making sense of the world around them by recreating experiences from their prior knowledge, exploring materials and hypothesizing possible outcomes (Bredekamp & Copple, 2009).

Within the environment, teachers implement small and large group activities, facilitate project learning, help children learn strategies to solve problems, and implement routines to engage and enrich children's learning (Bredekamp & Copple, 2009).

Teachers provide children with stimulating, hands on materials that have many possible uses that allow for children's open ended utilization and investigations. Teachers support children in their ability to make choices and decisions within the safety of the materials and the environment that is provided. Children's responsibility for their decisions result in children's increased independence, self regulation, joy in learning process, and intrinsic motivation (Bredekamp & Copple, 2009).

Teachers and administrators think deliberately about the social structure presented in developmentally appropriate environments. Children learn they are part of a learning community and build relationships with teachers and children. Classrooms have low child to adult ratios and small class sizes, so that children have the responsive interactions, which includes culturally and linguistic responsive interactions they need for optimal development. Teachers plan for individual and cultural needs and implement

instruction accordingly (Bredekamp & Copple, 2009). Teachers engage in intentional planning and activity execution that encapsulates individual and group needs while reaching goals and objectives. Planning is based in observation and authentic assessment. Poorly planned or implemented interventions have no beneficial effects; conversely intentionality in interventions and activity planning produce positive outcomes (Shonkoff & Phillips, 2000). Teachers facilitate comprehensive learning across all developmental domains and understand development is interrelated and engage children in whole child learning (Bredekamp & Copple, 2009). All development domains are considered in curriculum planning with special emphasis on language development in order to enhance brain development (Zamboo, 2007).

Teachers in developmentally appropriate environments understand that children do not learn skills or concepts within a direct instruction model. Teachers who adhere to DAP exercise a variety of teaching strategies such as small group learning, large group learning, and engage children in conversations using open ended questions and scientific thinking (Bredekamp & Copple, 2009). Teachers strive to offer challenging activities with achievable outcomes. They scaffold children's learning from one level to the next by working with children in the zone of proximal development (Bredekamp & Copple, 2009). Teachers are co-creators of knowledge with children and engage in intersubjectivity. Hill, Stremmel, & Fu (2005) suggest that intersubjectivity allows children and adults to operate on the "bubble of the zone of proximal development, where the challenge to learn and grow and transformation is supported and exciting" (p.178). Teachers include all children and incorporate learning strategies for diverse types of

learners planning for multiple intelligences and adaptations or modifications for children with disabilities.

Barriers to the Implementation of Developmentally Appropriate Practice.

Teachers in early learning programs face pressure from a multitude of sources to conform to procedures that contradict Developmentally Appropriate Practices (Brashier & Norris, 2008). DAP promotes the use of learning centers while giving children opportunities to play, inside or outdoors, to explore and investigate learning environments. However, many teachers feel pressure from administrators, other teachers, and parents to conform to highly structured and curriculum driven learning experiences (Brashier & Norris, 2008).

Brashier and Norris (2008) identified constraints for teachers in the implementation of DAP. Teachers report state curriculum and standards requirements are so rigid that they feel little freedom to allow children to investigate and explore the environment for fear that children will not meet curriculum goals and promotion standards (Brashier & Norris, 2008). A paradigm shift is evident in many early learning environments where school policy requires that teachers focus on test driven curricula instead of the development of the whole child (Brashier & Norris, 2008). Teachers in the Brashier and Norris study report that kindergarten children are thought to be too old to play. Play was seen to have no educational value and frivolous by the school community when working to meet curriculum goals. Teachers in this study reported that they felt pressure to “teach” concepts and foundational skills through pencil and paper tasks instead of play based activities. Many educators may view play as a waste of time and see no educational benefit in embedding academic skills in play (Brashier & Norris,

2008). However, an active and engaging play based curriculum is the foundation for developmentally appropriate learning environments (Bredekamp & Copple, 2009).

Teacher Characteristics. There are certain characteristics of teachers that facilitate the implementation of developmentally appropriate curricula. File and Gullo (2002) found that pre-service teachers who had BS degrees in Early Childhood Education were more likely to hold a Constructivist view of early education and implement DAP than their degree holding Elementary Education peers. Teachers who were trained in BS programs in Elementary Education were less likely to adhere to a Constructivist view. However, the level of assurance that teachers felt in their interactions with children were similar in both educational backgrounds (File & Gullo, 2002).

McMullen et al. (2006) examined the self reported teaching practices of 57 preschool teachers through collaborative assessment. Participants completed surveys, completed documentation of children's work, were interviewed by researchers and were observed while teaching. Researchers found that teachers who practiced and emphasized DAP, frequently facilitated child-directed play time as well as emergent literacy and language activities. This view of children as capable and empowered learners is congruent with the Constructivist view of child development. Conversely, teachers who practiced more traditional academic behaviors were more likely to view themselves as a conveyor of knowledge. In such classrooms, children were solely dependent upon teachers as sources of knowledge for academic skills (McMullen et al., 2006). Therefore, teachers who presented an Instructivist view of early education did not see children as capable of constructing their own knowledge or being intrinsically motivated to learn.

Wilcox-Herzog & Ward (2004) examined teachers' beliefs and intentions about teacher-child interactions and how teachers implemented their beliefs in daily interactions with children. Wilcox-Herzog & Ward developed the Beliefs and Intentions Scale to assess teachers' beliefs about their practices. This study found that teachers with higher levels of Early Childhood Education were more likely to offer educational opportunities that were aligned with DAP. Conversely, teachers with no formal education were more likely to adhere to the premise that children learn best from direct instruction and memorization.

These studies identified teachers' beliefs and perceptions concerning curriculum and the efficacy of teaching strategies. Teachers' daily interactions with children in the classroom provide the catalyst to measure their perceived teaching success. These studies also give insight as to how teachers feel about their teaching practices. Teachers who are trained to teach children in a more didactic manner are as likely as their constructivist peers to perceive themselves as successful teachers.

Teacher Dispositions. There are also teacher attitudes towards teaching that affect interactions within the learning environment. Edward (2005) identifies differences of early learning educators' formation of teaching practices based upon developmental Theory and Constructivism in relation to the curriculum framework of the National Association of the Education of Young Children's Developmentally Appropriate Practice and Reggio Emilia's project work. Both curriculum frameworks are based upon Constructivism. Edward (2005) found that teachers who study Reggio ground their teaching in the notion that children are capable learners. Educators who embrace the Reggio philosophy view children as capable of learning more than what is

expected of them at a certain developmental stage (Edward, 2005). Teachers who adhere to DAP and complete project work with children view themselves as co-constructors of knowledge. Teachers also view children's developmental potential as the catalyst for curriculum planning. Inasmuch, children are seen as protagonists in their own learning and partners in the learning process. Children are respected as intrinsic learners and are valued as part of the classroom community.

Rose-Krasnor (1997) highlights the need for warm and responsive interactions within the environment. There is the belief that teachers need to genuinely care for the children in the early learning environment and act accordingly. Of course there are teachers who have the natural disposition to care for and nurture children in educational constructs. They understand the importance of building relationships between teacher and child, child and child, teacher and teachers, families and school. These natural tendencies as well as beliefs and perceptions impact classroom practices in that, teachers make relationships a priority. In the context of relationships, children can bond with an adult who is invested in their development and success. Children are more likely to demonstrate positive outcomes when they feel safe and secure in the learning environment.

Pre-Service Training. Pre-service training refers to undergraduate course work in which students learn pedagogy (Smith, 1993). Teachers who are trained to teach in a manner that supports DAP are likely to adhere to the principles of DAP in their daily interactions with children and families (Smith, 1993). However, there are pedagogical differences in the way teachers are trained in ECE and EE teacher education programs.

ECE pre-service teachers are more likely to be introduced to a Constructivist view in which children create their own understandings about how the world works (Spidell-Rusher et al., 1992). This view is congruent with DAP. Play is seen to have value and children have opportunities to carry out learning experiences as they determine and these experiences are seen to have value (Spidell-Rusher et al., 1992). In a Constructivist view, teachers help children clarify misunderstandings and facilitate children's learning while building upon children's interests (Katz, 1999b).

Conversely, EE teachers may be presented a Behaviorist view or Instructivist model in which pre-service teachers learn a more teacher-directed approach to curriculum and instruction (Spidell-Rusher et al., 1992). This didactic view highlights a teacher - centered perspective with the use of direct instruction to help children learn skills; is an Instructivist perspective and is direct opposition with a Constructivist view of child development (Katz, 1999b). In this teaching method, learning experiences are highly structured and highlight teachers' use of assessment to monitor students' competence (Spidell-Rusher et al., 1992). Teachers give children feedback in order to teach children correct procedures for acquisition of academic skills (Spidell-Rusher et al., 1992). Constructivist and Instructivist views can influence pre-service teacher training, but also can influence in-service professional development activities.

Professional Development. NAEYC has developed a conceptual framework for Early Childhood Professional Development. Professional development is a vital determinant of the beliefs systems teachers hold as well as the implementation of teaching strategies. NAEYC's conceptual framework supports ideas that professional development and continued training be consistent with features of effective curricula,

considers development in terms of the whole child across developmental domains and ecological systems and advocates that teachers are the vital component in the early learning environment. Some administrators believe that teachers in educational settings must hold to a set of conventions and practices that advocates that teachers impart their expertise to children while effectively managing their behavior (Goldstein, 2007). This notion is contrary to the principles of DAP and negates the importance of relationships in Bronfenbrenner's Ecological Systems Theory. Professional development activities that support a Constructivist view of early education facilitate DAP and recognize relationships as a mechanism for development.

Teacher Perceptions of Developmentally Appropriate Practice and their Impact

on Practice. Shonkoff & Phillips (2000) highlight characteristics of successful early childhood teachers that facilitate positive outcomes; however, teacher dispositions are only one factor in successful early learning programs. Teachers' beliefs and philosophies about how children learn best are critical in the determination of actual classroom practice. Teachers who support a Constructivist view of early education are more likely to align classroom practices with their beliefs (Charlesworth, Hart, Burts, Thomasson, Mosely, & Fleege, 1993). In the reverse, teachers who support a more didactic view, or Instructivist view, of learning are as likely to align their classroom practices with their beliefs (Charlesworth et al, 1993). There seems to be a demand for teachers to ensure that children are ready for the next grade or school setting (Katz, 1999b). Katz (1999b) calls this phenomenon the “push down” of expectations and curriculum and reports that early education programs as well as their higher grade peers feel the pressure to get children ready to move to the next level.

Early educators need a solid foundation as to how children grow and develop in developmentally appropriate environments. Pre-service teachers need to have an understanding of developmental Theory as well as the science of child development in the context of relationships (Shonkoff & Phillips, 2000). If pre-service teachers have a solid foundation in the principles of DAP, then they are more likely to adhere to a DAP curriculum framework. Pre-service training affects how teachers interact with children in the classroom. Teacher training affects teachers' beliefs about how young children grow and develop.

Conversely, teachers who are practicing in the field need professional development that facilitates the use of DAP as well as the understanding of the nature of child development as a scientific discipline (Shonkoff & Phillips, 2000). Shonkoff & Phillips (2000) state that delivery methods of professional development are fractured and come from a variety of sources. Different modes of professional development delivery may have different contextual agendas. DAP highlights the importance of child development within the context of relationships and the belief that teachers facilitate children's learning through the use of engaging environments and children's interests as a catalyst for learning. However, there is the instructive notion that children learn best by teacher directed activities that see children as partakers of information (Katz, 1999b).

DAP is based in a complex set of principles that inform and guide practice. Teachers' perceptions and beliefs about how children learn best affect daily interactions within the early learning environment. Beliefs and practices directly affect children and their ability to be successful learners. How teachers perceive DAP and barriers to the

implementation of DAP are crucial in determining the level at which teachers effectively implement DAP in early learning programs.

CHAPTER 3: METHODOLOGY

This research is both qualitative and quantitative in its nature as an exploratory study. A convenience sample was utilized by accessing pre-k and kindergarten teachers in the context of professional development sessions. The principle researcher was employed by the school system in which research was conducted. The Beliefs and Intentions Questionnaire by Wilcox-Herzog and Ward (2004) was used to gather data regarding early educators' beliefs and intentions i.e. practices. A self report questionnaire was used to measure teachers' educational histories such as college program of study, area of licensure, and teaching longevity. Teachers were also asked to share information concerning perceived barriers that inhibit their teaching practices as well as their thoughts about the current educational climate. These data were used to examine teachers' instructional behaviors and justifications for their teaching practices.

Research Context

Research was conducted in a rural county in western North Carolina. The population of the county where research was conducted was approximately 67,000. The population is comprised of 50.3% women and 49.7% men. During data collection, the unemployment rate for the county was 11.9%. Eleven percent of the population had Bachelors of Science degrees or higher when data was collected.

The participating school system serves a diverse group of children and families including English as Second Language learners. The school system receives funding from a state initiative to provide high quality academic early learning services for children who are placed "at risk" for school failure. Children represented in the pre-k program have been selected on the basis of program eligibility requirements. Children's age and family income are the primary requirements; however children who have limited English proficiency or who have an identified disability may also be accepted into the pre-k program. Approximately 650 children were identified to be eligible for pre-k services. However, approximately 500 children are served with state monies to enhance school readiness.

The school system provides universal kindergarten programs for approximately 900 children. The school system provides all teachers with professional development activities through the use of curriculum specialists as well as university faculty through partnerships with higher learning institutions. Professional development sessions are offered monthly to both pre-k and kindergarten teachers. However, professional development activities are separate. Pre-k professional development is coordinated by the Pre-K Department while kindergarten professional development activities are coordinated by the K-6 and Middle School Department. Both departments are under the umbrella of Instructional Services.

Participants

A convenience sample of pre-k and kindergarten teachers was drawn from a rural county in western North Carolina. The primary researcher provides technical assistance to pre-k classrooms to enhance the quality of instruction. This cooperating school system

employs a large number of early educators. Because of an existing partnership between the school system and a higher learning institution in the region, the cooperating early learning program was accessible to study. Teachers ($N=67$) participating in this study taught four to six year olds. Participants in this study had Bachelors of Science degrees; some participants had Master's degrees, and all received licensure from the state education authority. Eighty-four percent of kindergarten teachers had licensure in Elementary Education while 15.5% had Birth – Kindergarten Education licensure. In the pre-k sample, 77.3% of teachers had licensure in Birth – Kindergarten Education and 22.7% Elementary Education licensure with pre-k add on licensure.

The principal researcher accessed both pre-k and kindergarten teachers at a central location on three different dates. The convenience sample consisted of sixty-seven teachers who were contacted in the context of three separate professional development sessions. The school system employs 72 teachers combined in the pre-k and kindergarten programs. However, two pre-k teachers were absent from the meetings and three pre-k teachers chose not to participate in the data collection. All kindergarten teachers chose to participate. Twenty-two pre-k teachers and forty-five kindergarten teachers are represented in the data.

Birth – Kindergarten licensure is granted by the North Carolina Department of Public Instruction when undergraduates complete course work from a higher learning institute. In addition to general college course work, undergraduates must complete child development courses, early education curriculum courses, and special education classes. All classes focus on children ages birth to five. Conversely, Preschool- Add On licensure is granted by North Carolina Department of Public Instruction when teachers hold a

degree and licensure in Elementary Education, Special Education, or Family and Consumer Sciences with a specialization in child development and complete additional course work. Teachers must complete course work that focuses on children ages 3-5 and satisfies six competencies. Competencies include: Understanding Diversity of Children and Families, Positive Guidance, Observations, Assessment, and Diagnosis, Collaborating with Families of Children, Emergent Literacy, and Preschool Curriculum (Regional Alternative Licensing Centers, 2010).

As represented in Table 2, kindergarten teachers represented in this sample had varied degrees of licensure from their state department of education licensure. Six kindergarten teachers of the 45 had Master's Degrees in Elementary Education. There were varying degrees of teaching longevity represented in the sample from beginning teachers to teachers who had been practicing for over thirty years ($M=12.2$; $SD=1.63$).

Twenty- two pre-k teachers participated in data collection. Pre-k teachers' areas of licensure as well as educational levels are represented in Table 2. All pre-k teachers were licensed by the state to teach in the public school system. Two pre-k teachers of the 22 who participated had Master's Degrees in Elementary Education. No teachers in the sample held a Master's Degree in Birth – Kindergarten Education. In the state in which research was conducted, the Birth –Kindergarten Education undergraduate licensure program was created in 1992. Comparatively, the Birth –Kindergarten Education course of study is a younger model than that of the Elementary Education course of study. This factor could contribute to the lower number of teachers who hold Master's Degrees in Birth –Kindergarten Education. There were varying degrees of teaching longevity

represented in the sample (see Table 2) from beginning teachers to teachers who had been practicing for over twenty-five years ($M=9.54$; $SD=1.61$).

Table 2. Teacher Characteristics

	<i>N</i>	Percent
<i>Kindergarten Teachers' Area of Licensure</i>		
K-12	2	4.4
K-6	29	64.4
K-5	1	2.3
K-4	1	2.3
K-3	5	11.1
B-K, K-6 add on	5	11.1
B-K	2	4.4
Total	45	100
<i>Pre-K Teachers' Area of Licensure</i>		
K-6, Preschool add on	5	22.7
B-K	17	77.3
Total	22	100
<i>Kindergarten Teachers' Level of Education</i>		
BS: Elementary Education	32	71.1
BS: Birth - kindergarten	7	15.6
MA: Elementary Education	6	13.3
MA: Birth - kindergarten	0	0
Total	45	100
<i>Pre-K Teachers' Level of Education</i>		
BS: Elementary Education	4	18.2
BS: Birth - kindergarten	16	72.7
MA: Elementary Education	2	9.1
MA: Birth - kindergarten	0	0
Total	22	100

Table 3. Teacher Longevity

	<i>M</i>	<i>SD</i>	Actual Range
<i>Kindergarten Teachers' Longevity in Years</i>	12.2	1.63	1-35
<i>Pre-k Teachers' Longevity in Years</i>	9.54	1.61	1-28

Procedures

The participating school system seeks out and facilitates partnerships with higher learning institutions. Therefore, the primary researcher was given the freedom to access teachers within the context of curriculum alignment meetings. Signed permission was given by the Deputy Superintendent of the participating public school system to complete the survey with professionals who teach in the early learning program. While teachers were participating in professional development meetings, the principal investigator explained the nature of the research studies. Participants were informed that direct supervisors would not have access to their responses nor would their responses be used in anyway to evaluate job performance. Participants were given copies of IRB approval as well as informed consent. Teachers were given opportunities to ask questions or express concerns regarding the nature of the study and the research questions. Teachers interested in participating gave written consent and then returned consent to the principal investigator prior to completing the questionnaire. Those who chose to participate in the study were entered into a drawing for a classroom easel. Teachers who did not want to participate were given the freedom to excuse themselves from the room. Participation in the research study was voluntary and teachers were at liberty to leave the room at any time.

The principal researcher was able to secure two classroom easels to offer as door prizes for teachers who chose to participate in the study. The easels were procured from Kaplan Early Learning Companies at a significantly reduced rate. Kaplan produces materials, furniture, and supplies for preschool and elementary school programs. Kaplan is located in Clemmons, North Carolina and ships early education supplies and merchandise all over the world. The retail value of each easel was \$279.95.

Teachers were not asked to supply their names or any identifying information on the data collection instrument. After the principal researcher introduced the study, received informed consent, and gave respondents an opportunity to ask questions about the research instrument, the principal researcher left the room. Participants returned the survey to a volunteer who was not affiliated with either the pre-k or kindergarten program. When participants completed the research questionnaire, they were given a card to complete to be entered into the drawing for the classroom easel. The card requested their name, phone number, and the school where they could be contacted. Once all the entries were received by the volunteer survey collector, she drew two cards from the collection. Teachers were contacted by the volunteer and arrangements were made for the winning teachers to collect their easel.

The volunteer tallied and typed responses to The Beliefs and Intentions Questionnaire on a separate form. She then compiled teachers' educational histories and responses and entered them onto one form. Data compilation took approximately one month and was completed by the volunteer in a separate location from the principal researcher. Once data was compiled by the volunteer, data was submitted to the principal investigator for analysis.

Instrumentation

The Beliefs and Intentions Questionnaire by Wilcox-Herzog and Ward (2004) was utilized to ask teachers to rate their teaching beliefs and intentions on a Likert scale. The Belief and Intentions Questionnaire measures teachers' beliefs and teaching intentions and practices in the context of relationships with children. Specifically, the questionnaire asked teachers to reflect upon their beliefs and teaching practices in the early learning environment and rate them on a Likert scale.

For the purpose of this research, teachers were asked to respond to items on a five-point Likert scale with (1) being always and (5) being never. This instrument was designed to measure these aspects of teacher perception of teacher-child interactions: (1) sensitivity of interactions with children, (2) teachers' verbal involvement of interactions with children, (3) teachers' non-verbal interactions with children and (4) play style adopted when interacting with children (Wilcox-Herzog & Ward, 2004). A copy of the Beliefs and Intentions Questionnaire is available in the appendices (see Appendix A). At the time of this study, information regarding reliability and validity were not available.

In addition to measuring teachers' beliefs and intentions, researchers created a self report questionnaire to measure teachers' educational histories such as college program of study, area of licensure, and teaching longevity. The self report questionnaire was also used to give teachers an open-ended opportunity to provide feedback regarding perceived barriers for implementing developmentally appropriate practices and how their teaching practices would change if they were given complete freedom to teach as they believed to produce the best learning outcomes for young children. The survey packet is included in the appendices.

Summary

Pre-k and kindergarten teachers participated in a quantitative and qualitative study of teachers' perceptions of developmentally appropriate practice in early learning programs. Teachers completed The Beliefs and Intentions Questionnaire by Wilcox-Herzog and Ward (2004). Researchers created a separate questionnaire that solicited teachers' responses concerning their educational histories as well as information regarding their beliefs about their current teaching practices. This chapter has described methods used in the study. The next chapter presents the results of the study.

CHAPTER 4: RESULTS

The purpose of this study was to identify teachers' beliefs and perceptions of DAP.

Data analysis was divided into statistical analysis and content analysis. Statistical analyses were used to determine descriptive statistics, differences, and relationships among pre-k and kindergarten teachers' responses in order to investigate research questions one, two, and three. Content analysis was utilized to determine themes in the data and answer research question four.

The Beliefs and Intentions Questionnaire was designed to measure the following aspects of teacher-child interactions: (1) sensitivity of interactions with children, (2) teachers' verbal involvement of interactions with children, (3) teachers' non-verbal interactions with children and (4) play style adopted when interacting with children (Wilcox-Herzog & Ward, 2004). A cumulative score was summed from participant responses on the beliefs and intentions sections of the questionnaire. The range of possible scores for the beliefs section of the instrument is 17-85 and the range of scores for the intentions section of the instrument is 20-110 (Wilcox-Herzog & Ward, 2004). A higher score on the beliefs scale indicated stronger beliefs regarding the importance of positive relationships in early learning environments. A higher score on the intention scale indicated the teacher reported practices that were consistent with positive relationships with children in early learning programs.

Scores higher than 51 on the teaching beliefs section and higher than 60 on the teaching intentions section indicated congruence with DAP. While completing the questionnaire, three pre-k teachers in the sample openly questioned the validity of the items in regards to their congruence with DAP. Five items on the Beliefs portion of the questionnaire were determined to be inconsistent with the pattern of the other items on the beliefs section. Pre-k teachers reported their concern regarding such practices routinely taking place in an early learning program as well as their congruence with DAP. Thus these items were reversed in meaning from the overall direction of the scale. Items number 7, 9, 14, 16, & 17 on the Beliefs portion of the scale were considered to be reversal items by the primary researcher (see Table 4). On these items, when teachers responded with a 1, it was summed as a 5; when teachers scored the item a 2 it was summed as a 4; 3 = 3; 4 = 2; and, 5 = 1. The Beliefs and Intentions Questionnaire (Wilcox-Herzog & Ward, 2004) is included in the appendices (see Appendix A).

Table 4. Reversal Items - Beliefs and Intentions Questionnaire

-
- 7. Teachers should talk to children like adults (e.g. use long sentences and words unfamiliar to young children).
 - 9. When a child throws play dough one time, teachers should tell her to leave the play dough area.
 - 14. When children hit each other, teachers should make them apologize (say sorry) to each other.
 - 16. When many children in the class lose interest during story time, teachers should make them sit on their bottoms until the story is finished.
 - 17. When a child takes a toy from another child, teachers should intervene quickly.
-

Relationship between Beliefs and Intentions

A Pearson product - moment correlation coefficient was computed to assess the relationship between the entire sample of early educators' beliefs and intentions i.e. practices. Table 5 represents the descriptive statistics for the entire sample. There was a positive correlation between the two variables, $r=.292$, $n=67$, $p=.017$. Since the p -value is less than .05, there was a significant correlation between the entire sample of early educators' beliefs and teaching practices. Therefore the hypothesis for question one was supported; early educators' teaching beliefs were positively related to their intentions. Table 9 represents correlations between beliefs and intentions for each sample in the study.

Early Educators' Scores with the Removal of Reversal Items. There were items that were considered to be reversal items on the research instrument by the principal researcher. However, The Beliefs and Intentions Questionnaire did not implicitly recognize these items as reversal items nor did it give specific instruction about scoring these reversal items. Data analysis was conducted with the removal of the five items (see Table 4), since the research measure did not identify these as reversal items. Table 6 represents the descriptive statistics for the entire sample with the removal of the reversal items.

A Pearson product – moment correlation coefficient was computed to assess the relationship between the entire sample of early educators' beliefs and intentions with the removal of the 5 reversal items. There was a positive correlation between the two variables, $r=.296$, $n=67$, $p=.015$. Since the p -value is less than .05, there was a significant correlation between the entire sample of early educators' beliefs and teaching

practices. This correlation was analogous to the entire sample's correlation when including the 5 reversal items from The Beliefs and Intentions Questionnaire. Table 10 represents correlations for the sample with the removal of the reversal items.

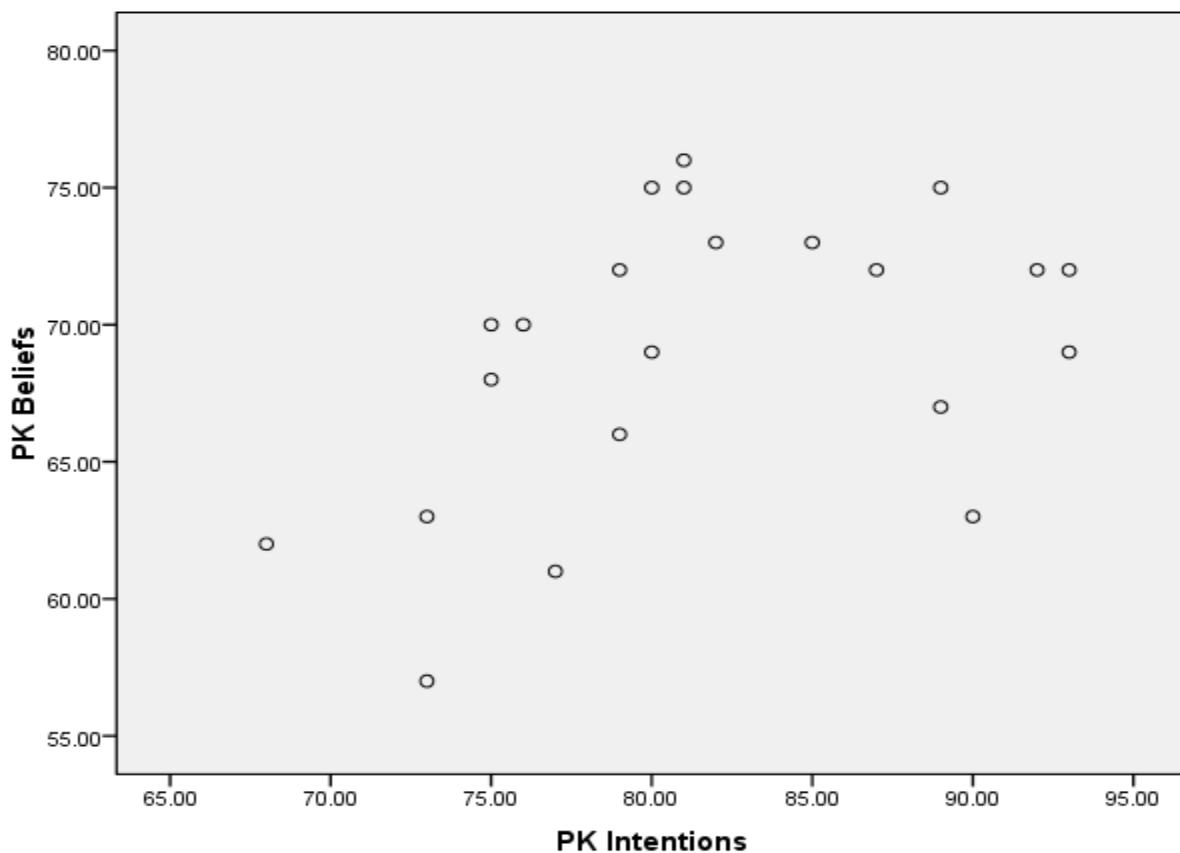
Table 5. Descriptive Statistics: Beliefs and Intentions Questionnaire

		<i>M</i>	<i>SD</i>	Possible Range	Actual Range
<i>Pre-K Teachers'</i>					
	Beliefs	69.1	5.2	17-85	57-76
	Intentions	81.7	7.2	20-110	68-93
<i>Kindergarten Teachers'</i>					
	Beliefs	66.5	5.9	17-85	57-79
	Intentions	81.1	7.7	20-110	62-96
<i>ECE Degreed</i>	Beliefs	71.1	5.2	17-85	61-79
	Intentions	82.3	7.0	20-110	68-95
<i>EE Degreed</i>					
	Beliefs	65.2	4.9	17-85	57-76
	Intentions	80.6	7.7	20-110	62-96

Table 6. Descriptive Statistics: Beliefs and Intentions Questionnaire – Removal of Reversal items

		<i>M</i>	<i>SD</i>	Possible Range	Actual Range
<i>Pre-K Teachers'</i>					
	Beliefs	49.1	4.1	12-60	39-54
	Intentions	81.7	7.2	20-110	68-93
<i>Kindergarten Teachers'</i>					
	Beliefs	50.7	4.5	12-60	44-60
	Intentions	81.1	7.7	20-110	62-96
<i>EE Degreed</i>					
	Beliefs	49.3	3.5	12-60	39-56
	Intentions	80.6	7.7	20-110	62-96
<i>ECE Degreed</i>					
	Beliefs	51.6	5.1	12-60	40-60
	Intentions	82.3	7.0	20-110	68-95

Pre-K and Kindergarten Teachers' Scores. Pre-k teachers' scores on the Beliefs section of the questionnaire were in the range of 57-76, with a possible score of 17-85 ($M=69.1$; $SD=5.2$). Pre-k teachers' scores on the Intentions section of the questionnaire were in the range of 68-93, with a possible score of 20-110 ($M=81.7$; $SD=7.2$). Table 5 represents descriptive statistics for all samples in the data. Table 7 presents the range of scores including all items from pre-k teachers in the form of a scatter plot. This analysis was conducted to ensure there were no outliers in the data. The ranges of responses on the questionnaire were from 57-93 with no outliers in the data set.

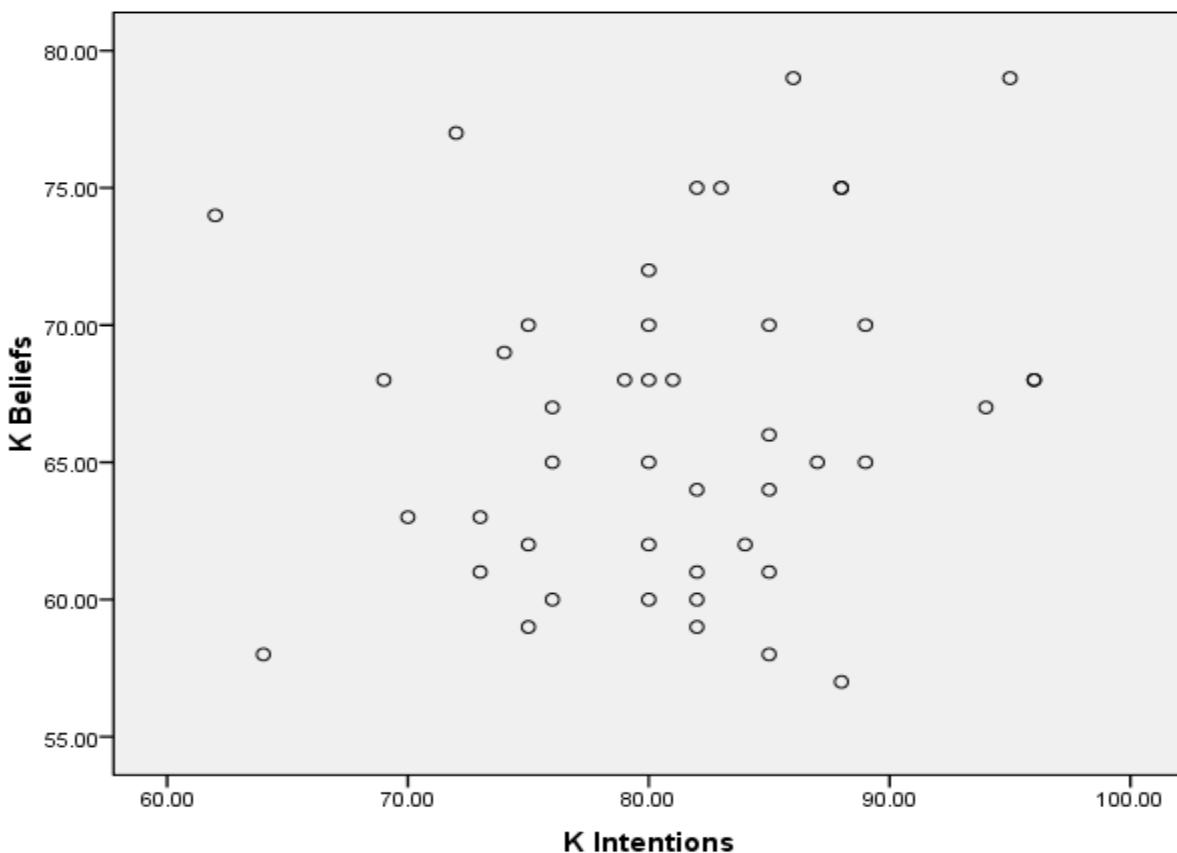
Table 7. Pre-K Teachers' Responses on the Beliefs and Intentions Questionnaire

A Pearson product - moment correlation coefficient was computed to assess the relationship between pre-k teachers' beliefs and intentions i.e. practices. There was a positive correlation between the two variables, $r=.433$, $n=22$, $p=.044$. Since the p -value is less than .05, there was a moderately significant correlation between pre-k teachers' beliefs and teaching practices. Table 9 represents correlations for all samples in the data.

With the removal of the reversal items, pre-k teachers' scores were in the range of 39-54, with a possible of score of 12-60 ($M=49.1$; $SD=4$). Pre-k teachers scored a lower mean indicating lower level of congruence with DAP than with the

inclusion of the reversal items. For pre-k teachers, the correlation between the two variables, $r=.664$, $n=22$, $p=.001$, is significant at the .01 level, because $p=.001$ is less than .01. Pre-k teachers' correlation between beliefs and intentions was at a higher level of significance with the inclusion of the reversal items. Table 10 represents correlations for the sample with the removal of the reversal items.

Kindergarten teachers' scores on the Beliefs section of the questionnaire were in the range of 57-79, with a possible of score of 17-85($M=66.5$; $SD=5.9$). Kindergarten teachers' scores on the Intentions section of the questionnaire were in the range of 62-96, with a possible of score of 20-110 ($M=81.1$; $SD=7.7$). Table 8 demonstrates ranges of scores including all items from kindergarten teachers in the form of a scatter plot. This analysis was conducted to ensure there were no outliers in the data; however there is more variability in kindergarten teachers' responses than in pre-k teachers' responses. The ranges of kindergarten teachers' responses on the questionnaire were from 57-96 with no outliers in the data set as represented in the tables below.

Table 8. Kindergarten Teachers' Responses on the Beliefs and Intentions Questionnaire

A Pearson product - moment correlation coefficient was computed to assess the relationship between kindergarten teachers' beliefs and practices. There was not a significant correlation between the two variables, $r=.177$, $n=45$, $p=.246$. Since $p=.246$ and is greater than .05, there was not a significant correlation between kindergarten teachers' beliefs and teaching practices. Thus the hypothesis for question two was supported; kindergarten teachers' teaching beliefs were not strongly related to their intentions. Table 9 represents correlations for all samples in the data.

With the removal of the reversal items, kindergarten teachers' scores on the Beliefs section of the questionnaire were in the range of 44-60, with a possible score of 17-85($M=50.7$; $SD=4.5$). Kindergarten teachers had a higher mean score indicating a higher level of congruence with DAP than with the inclusion of the reversal items. Kindergarten teachers correlation, between beliefs and intentions, $r=.163$, $n=45$, $p=.284$, is not statistically significant because $p=.284$ is greater than .05. Table 10 represents correlations for all samples in the data with the removal of the reversal items. This correlation is similar to kindergarten teachers' relationship between beliefs and intentions when including the reversal items.

Table 9. Correlations between Teaching Beliefs and Intentions

Intentions		Beliefs
<i>Early Educators</i>	Pearson Correlation	.292*
	Sig. (2-tailed)	.017
	N	67
<i>Pre-K Teachers</i>		
	Pearson Correlation	.433*
	Sig. (2-tailed)	.044
	N	22
<i>Kindergarten Teachers</i>	Pearson Correlation	.177
	Sig. (2-tailed)	.246
	N	45

*. Correlation is significant at the 0.05 level (2-tailed).

Table 10. Correlations between Teaching Beliefs and Intentions with removal of reversal items

Intentions	Beliefs
<i>Early Educators</i>	
Pearson Correlation	.296*
Sig. (2-tailed)	.015
N	67
<i>Pre-K Teachers</i>	
Pearson Correlation	.664**
Sig. (2-tailed)	.001
N	45
<i>Kindergarten Teachers</i>	
Pearson Correlation	.163
Sig. (2-tailed)	.284
N	45

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Differences in Teachers' Perceptions of Developmentally Appropriate Practice

The hypothesis for question three was, teachers who hold degrees in ECE will have higher scores on the Beliefs and Intentions Questionnaire than teachers who hold degrees in EE. ECE degreed teachers' scores on the Beliefs section of the questionnaire were in the range of 61-79, with a possible score of 17-85 ($M=71.1$; $SD=5.2$). ECE degreed teachers' scores on the Intentions section of the questionnaire were in the range of 61-79, with a possible score of 20-110 ($M=82.3$; $SD=7.0$). EE degreed teachers' scores on the Beliefs section of the questionnaire were in the range of 57-76, with a possible score of 17-85 ($M=65.2$; $SD=4.9$). EE degreed teachers' scores on the Intentions

section of the questionnaire were in the range of 62-96, with a possible score of 20-110 ($M=80.6.$; $SD=7.7$).

An independent samples t-test was conducted to compare ECE licensed teachers' scores and EE licensed teachers' scores on the Beliefs and Intentions Questionnaire. When compared, there was a difference in the scores for teachers with ECE licensure responses ($M=76.7$, $SD=8.3$) and teachers with EE teacher licensure ($M=72.9$, $SD=10.1$). A significant difference between the groups was noted $t(132) = 2.22$, $p=.028$. Since $p=.028$ is less than $.05$, the results indicate a significant statistical difference. These results suggest there is a difference between ECE licensed and EE teachers' perceptions of DAP, thus the hypothesis for question three was supported.

Scores with the Removal of Reversal Items. ECE degreed teachers' scores were in the range of 40-60, with a possible score of 12-60 ($M=51.6$; $SD=5.1$) EE degreed teachers' scores on the Beliefs section of the questionnaire were in the range of 39-56, with a possible of score of 12-60($M=49.3$; $SD=3.6$ (see Table 6). An independent samples t-test was conducted to compare ECE licensed teachers' scores and EE licensed teachers' scores on the Beliefs and Intentions Questionnaire. Data analysis revealed conditions $t(132) = .659$, $p=.512$., indicating there was not a significant difference between the two groups. When determining differences between EE and EC teachers' perceptions of DAP, the removal of the reversal items changed the t-test statistic, indicating these practices (see Table 4) affect teachers' perceptions of DAP.

Teachers' Perceptions of Barriers to Developmentally Appropriate Practice

Teachers in this study were asked to report their perceived barriers to the implementation of DAP. Content analysis was employed to determine themes in the data and is defined as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p.1278). Teachers’ responses to questions helped determine categories.

The principal researcher identified categories based on teachers’ responses and the principles DAP. Teacher responses on the self report portion of the questionnaire packet, included in the appendices, were sorted and then categorized. Key words from teachers’ responses were used to sort teachers’ responses as well as the repetition in teachers’ responses. Teachers reported time, stress, class size, and money as a consideration in their ability to realize developmentally appropriate learning environments, however four categories emerged. Categories were planning curriculum to achieve important goals, teaching to enhance development and leaning, administrative support, and teacher as decision maker. Responses were organized and could be coded in multiple categories. Teachers’ responses are included in Appendix B.

Planning Curriculum to Achieve Important Goals. Bredekamp & Copple, (2009) state that curriculum consists of the knowledge and skills that children acquire and the plans by which achievement occurs. Child outcomes and how those outcomes are achieved are crucial in a developmentally appropriate program. In DAP, teachers have flexibility combined with pedagogical expertise to determine the means by which curriculum is designed and implemented in the classroom (Bredekamp & Copple, 2009).

Teachers were asked to respond to the question, “What barriers, if any, prevent you from implementing learning activities that are developmentally appropriate for the children in your classroom?” Responses were coded by keywords in teachers’ answers to questions. Teachers indicated concern regarding the types of curricula and standards that they are required to use by state and local agencies to implement. Forty-eight percent of kindergarten teachers’ responses were categorized as being related to curriculum.

Seventy –one percent of kindergarten teachers reported the belief that children are being pushed to master the acquisition of academic skills in an atmosphere that is not based in developmentally appropriate curriculum. Federal, state, and local mandates are issued from governing authorities and directly affect teacher practices in the classroom environment, producing a feeling of a “pushed down” curriculum. A kindergarten teacher reported, “We have to ‘cover’ and do so many things to make sure curriculum and county expectations are met.” Another kindergarten teacher responded by saying, “I feel pressure to only focus on academic goals and this causes a lapse in social and emotional activities I know my students need.” Kindergarten teachers in this study were more likely to indicate concern for children’s acquisition of social skills than their pre-k peers. Four kindergarten teachers presented their concerns about social learning, while there were no pre-k teachers who reported concern about children’s social learning.

In the pre-k sample, 32% of the teachers’ responses were categorized as being related to curriculum; however the feeling of a “pushed down” curriculum as mandated by state and local policy was not as predominantly reported by pre-k teachers in the study. However, they did report that their ability to plan curriculum to achieve important goals is affected by being in the public school environment. One pre-k teacher reported,

"The expectations of being in the 'school' environment. Sometimes it dictates that we go along with the rest of the school." While another teacher reported feeling pressure from other teachers to accelerate the pace at which children learn academic content. A pre-k teacher reported feeling, "pressure from kindergarten teacher expectations about what children should know by the time they enter kindergarten – it's more like what children should know when they leave kindergarten." Both groups indicated factors that limit their ability to plan curriculum to achieve important goals.

Teaching to Enhance Development and Learning. Children actively construct understandings of the world around them and benefit from initiating and regulating their own learning experiences within the context of relationships with peers and teachers (Bredekamp & Copple, 2009). In a DAP curriculum framework, teachers understand that children are creators of their own conceptions and understanding of the world around them (Bredekamp & Copple, 2009). Teachers facilitate and support the learning that children need to be successful by actively engaging children in activities that are either child guided or adult guided (Bredekamp & Copple, 2009). DAP suggests that adult guided activities are driven by goals embedded in the curriculum, but are based on and facilitated through children's interests and children's active engagement (Bredekamp & Copple, 2009). Child guided experiences proceed from the children's interests, ideas, and actions, but teachers add vital and deliberate supports to enhance children's learning and clarify misunderstandings that children may have (Bredekamp & Copple, 2009).

When asked, "What barriers, if any, prevent you from implementing learning activities that are developmentally appropriate in your classroom?" and "How would your teaching practices change if you were given complete freedom to teach how and

what you felt best for children?" teachers responded about issues regarding curricula and their implications on practice. Teachers in this sample reported the demands of learning standards, promotion, and retention standards are limiting their ability to offer children opportunities to engage in play activities that foster social and emotional development.

Ninety – eight percent of kindergarten teachers' responses were categorized as being related to teaching to enhance children's learning. Kindergarten teachers recognize that children in early learning programs are expected to perform tasks that limit play and creativity, focusing on adult-guided experiences that limit children's ability to construct their own understandings of concepts. DAP is grounded in the belief that teachers build curriculum upon children's interests. A kindergarten teacher reported, "The SCOS [Standard Course of Study] and county expectations can sometimes hinder the 'natural flow' of Developmentally Appropriate Practice." Academic goals are not embedded in children's exploration, manipulation of materials, or based in relationships, because of the perceived school wide belief that play has no educational value. Another teacher expressed the belief that children's previous experiences are not being considered when planning curriculum. She said, "Too much is expected too soon, I think too much pressure is being put on the child that enters kindergarten without 1000 or 2000 hours of literacy exposure. Everyone is expected to be ready for 1st grade when they come to kindergarten."

Sixty-eight percent of pre-k teachers' responses were categorized as being related to their teaching practices and their ability to teach to enhance learning and development. Teachers mentioned lesson planning as well as standardized measures used to assess the appropriateness of learning environments as barriers to the implementation of DAP. One

pre-k teacher said, "I would love to have the extra sets of hands that could make what I think is right a real possibility," indicating the belief that lower child adult ratios facilitate positive supportive relationships that allow teachers the ability to teach in a manner that enhances development and learning.

Teachers in the study reported the belief that there are current practices in place that limit their ability to implement effective comprehensive curricula that enhances and supports children's development.

Administrative Support. Parlakian (2003) found that when teaching staff feel that they are supported, feel they are part of a team, feel safe in the work and their ability to learn, then faculty are more likely to approach children and families in the same manner. However, teachers in this study indicated that they did not feel support and acceptance from administrators in their endeavors to implement a developmentally appropriate learning environment. For DAP to be successful there must be a level of support across administrative levels for teachers to apply their knowledge of child development and knowledge of individual children's interests in determining curricula and program planning. Fourteen percent of pre-k teachers' responses were categorized as being related to administrative support. A pre-k teacher said, "Principals' understanding of our program and developmentally appropriate practices act as a barrier to the implementation of DAP. Another pre-k teacher echoed the same sentiment by saying, "School specific administration- their understanding of DAP and the pre-k program" affect classroom practices.

Eleven percent of kindergarten teachers' responses were categorized as being related to administrative support. Kindergarten teachers' responses regarding administrative

support were congruent with their pre-k peers. Kindergarten teachers reported, “administrative lack of understanding about DAP, not being knowledgeable of DAP, and lack of support from administration” negatively affect teachers’ ability to implement a developmentally appropriate early learning program.

Responses from teachers indicated that teachers felt school system administrators and principals did not understand the nature or importance of DAP, thus the hypothesis for question four was supported. Teachers did not feel free to implement developmentally appropriate activities. Teachers in the study reported the belief that school administrators do not have an understanding of DAP. Therefore, decisions concerning curricula are based in a knowledge base not supported by knowledge of and principles of child development that inform practice.

Teacher as Decision Maker. DAP supports the supposition that teachers make vital decisions concerning children’s learning based on knowledge of general characteristics of Child Development as well of knowledge of individual children and families (Bredekamp & Copple, 2009). The questionnaire item “How would your teaching practices change if you were given complete freedom to teach how and what you felt best for children?” elicited responses about teachers’ concerns about their ability to make decisions about their teaching practices. Twenty – seven percent of pre-k teachers’ responses indicated they felt free to make decisions about curriculum, “I feel like in this pre-k program, I have the freedom to do what is best for children.” While another pre-k teacher said, “Play, free choice activities, DAP all the way.”

However, kindergarten teachers’ responses were in stark contrast. Ninety – three percent of kindergarten teachers in this study reported their teaching practices would

change if they were given the freedom to make decisions about pedagogy they felt were best for children. They were more forthcoming with and articulate about their concerns regarding their ability to make decisions about pedagogy and curricula.

Kindergarten teachers articulated their concerns regarding play and exploration more frequently on the research measure than their pre-k peers. A kindergarten teacher stated, "My day would not be so structured. Not have to do this and have to do this. I would have lots more unstructured time and more reading to my students for fun and more teachable moments." A thirty-five year veteran kindergarten teacher echoed this sentiment, "I would like for children to have more time to explore and be children. I know the importance of the dramatic play area but sometimes I almost feel guilty (not really) for this time."

Kindergarten teachers in the study reported the belief that teaching practices would be more developmentally appropriate if they were given the freedom to make informed decisions concerning curricula based upon children's needs. "Teaching would be a lot more fun, if we could just teach the objectives in our own teaching styles. I do not like new resources being shoved down our throats, and then we are expected to use them all. We need to do what is best for our students." Another kindergarten teacher reported, "We would spend more time in centers and have more free choice. We would also spend more time outside in free play."

Kindergarten teachers viewed themselves as capable decision makers who feel as though they are mandated to adhere to practices that are contrary to DAP. A kindergarten teacher said, "I would be able to facilitate learning opportunities at a more developmentally appropriate level and not expect all children to achieve at the same

time." Another kindergarten teacher said, "I would have it more age appropriate and let the children be children. We want them to do things that are not appropriate."

Pre-k and kindergarten teachers in the study shared their beliefs about their ability to make decisions that affect classroom practices.

Summary

The Beliefs and Intentions Questionnaire was employed to gather data (Wilcox-Herzog & Ward, 2004). Results indicated that pre-k and kindergarten teachers' had varying levels of education and licensure. Data analyses were employed to determine relationships and differences within the sample. In the sample, all early educators teaching beliefs were related to their teaching intentions. However, pre-k teachers' beliefs were more strongly related to their intentions than their kindergarten teacher peers. There, too was a significant difference in ECE and EE trained teachers' scores on The Beliefs and Intentions Questionnaire. Teachers who were trained in ECE had higher mean scores indicating a higher level of congruence with DAP.

Teachers shared their beliefs about barriers to the implementation of DAP. Four categories based upon the principles of DAP emerged as a means to sort teachers' responses. Categories were planning curriculum to achieve important goals, teaching to enhance development and learning, administrative support, and teacher as decision maker.

CHAPTER 5: DISCUSSION

This purpose of this study was to investigate pre-k and kindergarten teachers' perceptions of DAP. DAP is highly regarded as the cornerstone of high quality learning programs and is suggested to facilitate positive learning outcomes for children (Dunn & Kontos, 1997). The question that guided this research was to understand pre-k and kindergarten teachers' perceptions of DAP and barriers to the implementation of DAP.

This chapter presents a discussion of study findings. A discussion of theoretical implications of the current study, prior research regarding DAP, and conclusions are presented. A summary of contributions of the current study to the field of early education and the implementation of developmentally appropriate practices are discussed. Limitations of the current investigation are presented as well as a discussion of implications for practice and future research directions.

Summary of Major Findings

Given the responses of early educators in the sample ($N=67$), overall results from the group, indicate congruence between teachers' beliefs with their intentions. A significant correlation existed between teachers' beliefs and teaching practices. Teachers had a clear set of theoretical principles and beliefs about how children learn best. At some level, the teachers in the sample reported that they were able to implement these principles into their classroom routines and interactions with children. However, when

looking at specific responses between and from the two groups, pre-k and kindergarten teachers, there were significant differences based upon teaching context and pre-service training.

Differences Based Upon Setting. This study found, pre-k teachers' reported beliefs and teaching practices were significantly related; conversely, kindergarten teachers' beliefs and intentions were not significantly correlated. Pre-k teachers in this sample were able to demonstrate a high level of congruence with their beliefs and their ability to implement these beliefs in their teaching intentions; however kindergarten teachers did not demonstrate congruence of beliefs with their teaching intentions. The data indicates that there were differences in pre-k and kindergarten teachers' ability to implement teaching practices based upon their teaching setting, training, and beliefs about how young children learn best.

Administrative Support. Teachers in the sample reported the belief that school system administrators or principals did not understand the characteristics or complexity of DAP. In the school system where research was conducted there are two separate departments, Pre-K and K-6, who serve as program resources and provide technical assistance to improve program quality of instruction. Both departments are under the scope of Instructional Services. There are eleven elementary curriculum specialists who are required to have Master's Degrees in EE, while there is one pre-k curriculum specialist who is required to have a Master's Degree in ECE. Both departments are responsible for helping classrooms maintain compliance with state and local mandates. They too, serve as a resource for principals regarding curriculum and program monitoring. Both pre-k and kindergarten teachers in this study receive

professional development services and curriculum support from the corresponding department within the larger school system. However, school level administrators are responsible for managing both pre-k and kindergarten teachers in their day to day teaching activities and interactions with children. Neither department serves in a direct supervisory role, but provides administrative support to classroom teachers.

Elementary curriculum specialists are housed in their assigned elementary school, while the pre-k curriculum specialist is housed in the central office. The pre-k curriculum specialist travels from school to school visiting classrooms. Both pre-k and elementary curriculum specialists work closely with principals to identify teachers who need extra support and guidance in classrooms to enhance the quality of educational services. They too, serve as a resource for principals in regards to state and local curriculum mandates. Pre-k and elementary curriculum specialists provide professional development activities based upon their teaching area of expertise. These in-service trainings are determined by central office administrators. Both types of curriculum specialists have an advanced understanding of their teaching content areas; however their training is congruent with the pre-service training of the teachers to which they provide technical assistance.

Pre-k teachers indicated some level of support to implement theoretical contexts that facilitate children's learning. One pre-k teacher said, "I feel like in this pre-k program, I have the freedom to do what is best for children." When asked to respond to how their teaching practices would change if they were given freedom to teach as they saw fit a pre-k teacher responded, "In kindergarten I was faced with assessments, pleasing administration and the new K [kindergarten] promotion/retention standards.

Pre-k is looking pretty good." Another teacher responded, "I feel that our pre-k program does support me and gives me freedom to teach how and what I feel is best." However, within the school context, pre-k teachers did feel some pressure to change their practices especially from administrators and other teachers. When asked about barriers to the implementation of DAP one teacher stated, "School specific administration- their understanding of DAP and the pre-k program." Another teacher reported as a barrier, "Administrators not being knowledgeable of DAP. They should all have to take a child development class." Teachers indicated the belief that administrators do not understand the complexity of DAP or the elaborate nature of building relationships in pre-k classrooms. "Being in a public school does sometimes limit the way I do certain things, especially when it comes to involving families."

Pre-k teachers reported feeling pressure to change their practices from the school community at large. One teacher said, "The expectation of the 'school' environment sometimes dictates that we go along with the rest of the school." Indicating the belief that in order to be a part of the elementary school, pre-k classrooms have to follow and adhere to upper grade ideas and norms, especially in regards to curriculum. One teacher indicated a barrier to the implementation of DAP as being, "Pressure from kindergarten-teacher expectations about what children should know by the time they enter kindergarten – it's more like what children should know when they leave kindergarten." The administrator in the school sets the expectations of the school community. If upper grade teachers feel pressure to conform to higher expectations, then that creates a trickle down effect into lower grade levels.

Kindergarten teachers in this study felt pressure to abandon their beliefs and adhere to practices that were contrary to DAP. One kindergarten teacher said, "Administrator's viewpoint of DAP keeps me from teaching how I would like." They also felt principals and administrators did not understand the complexity of DAP, nor how to successfully implement developmentally appropriate practices. One teacher reported, "Administrators' lack of understanding about developmentally appropriate practices" directly affect classroom practices.

Kindergarten teachers indicated that they did not feel support from program policies or administrators to implement an early learning program based on theoretical theories of child development and teachers' beliefs that inform and support DAP, however pre-k teachers did report some freedom to implement a developmentally appropriate program. Although both pre-k and kindergarten teachers indicated that administrators' misconceptions of DAP were barriers to the implementation of DAP, kindergarten teachers articulated more frequently the impact of administrative directives on classroom practices.

State and Local Mandates. Both pre-k and kindergarten teachers reported state and local mandates influences that affected their ability to implement DAP. Pre-k teachers reported the belief that there are some factors that affect their ability to implement a DAP curriculum. In the state where research was conducted, elementary school based pre-k programs are not only regulated by the local school system but also by the state environmental health section and the Division of Child Development (DCD). In addition to school mandated requirements, pre-k teachers must follow stricter guidelines in regards to sanitation and child supervision as determined by environmental health and

the DCD. These stricter guidelines may inhibit teachers' ability to engage children in learning simply because they require a great deal of teachers' attention to maintain compliance. Teachers cited state and local mandates as barriers, "Sanitation, fire code, and other regulations sometimes make it harder to plan activities for children." Teachers reported that these mandates require them to complete activities that take time away from engaging in relationships with children. When asked how they would change their teaching practices if given the freedom to teach as they saw fit one teacher reported, "Less time spent cleaning and sanitizing. More time actively engaged with children."

Kindergarten teachers in the current study expressed that they feel pressure to conform to learning standards and promotion standards that are not developmentally appropriate. The state department of public instruction determines learning standards that teachers must teach children by the end of kindergarten. The local school system determines promotion standards or the level of mastery children must demonstrate in order to move to first grade. Kindergarten teachers in this research demonstrated concern regarding the types of curricula and promotion standards they must implement in classrooms. Teachers reported they feel pressure to conform to curricula that are not developmentally appropriate for five and six year olds. Responses echoed the sentiment that teachers felt as if children in their classrooms were responsible for mastering too much information at too rigorous a pace. As a veteran kindergarten teacher of 35 years stated, "Too much is expected too soon, I think too much pressure is being put on the child that enters kindergarten." Another teacher stated, "Everyone is expected to be ready for 1st grade when they come to kindergarten."

Kindergarten teachers in this study reported their belief that children are being limited

in their ability to engage in exploratory play. They also reported learning activities that foster social and emotional development are being replaced with activities that focus on academic skills. Assessing children's development and learning is the primary drive for curriculum instead of teaching to enhance children's learning and development. In kindergarten classrooms, curriculum planning focuses on promotion standards and standard courses of study instead of the principles and knowledge of child development that should inform teaching practices.

A previous study by Brashier and Norris (2008) identified constraints for teachers in the implementation of DAP. Brashier and Norris (2008) found that early learning teachers report state curriculum and standard requirements are so rigid that they feel little freedom to allow children to investigate and explore the environment. Teachers indicated that principals and administrators believed that children would not meet curriculum goals and promotion standards if academic goals were embedded in the context of play (Brasher& Norris, 2008). Brashier and Norris (2008) found that teachers recognize a paradigm shift in many early learning environments where school policy requires that teachers focus on test driven curricula instead of the development of the whole child. Teachers in the current study echoed the same sentiment that children are being asked to master more academic content at an earlier age.

In this study, kindergarten teachers mentioned the Standard Course of Study, pacing guides, and promotion standards as barriers to the implementation of DAP. In the state in which research was conducted, the Standard Course of Study outlines the skills children should be able to master by the end of the kindergarten year. Pacing guides determine the time during the school year when children are taught skills. Promotion standards

outline the level of achievement children must demonstrate in order to be promoted to the next grade level. The Standard Course of Study is determined by the state educational authority. Pacing guides and promotion standards are determined by the county school administrative unit.

Kindergarten teachers in the study shared their concern about all three guiding documents. "The SCOS is not developmentally appropriate in various areas." reported a kindergarten teacher. Another teacher recognized, "Constant mandates – both state and local – for ramped up expectations and curriculum" as a barrier to the implementation of DAP. "New state guidelines that are expected of kindergarteners are not always best for 4 and 5 years olds." Pacing guides determine the schedule for the year, the level of mastery children need to exhibit, and in turn affect daily practices in the classroom. "Almost every minute of my day is planned for me. I feel like we have to keep constant pressure on the children and have to fight to keep center time." Another teacher stated, "The push of the curriculum and deadlines sometimes do not allow for independent time with the children and free learning and exploration."

Teachers must assess children to determine their level of mastery in order to determine if children will be promoted to first grade. "I would spend less time formally assessing the same thing (ex: reading) in several different ways. I would throw all these assessments out the window and do my job!" A kindergarten teacher shared her concern about "Having a set schedule of when certain subjects have to be taught and having to test children when you feel like there is no extra time." When asked how their teaching practices would change a teacher said, "Less formal assessments and more exploratory play at a less rigorous pace."

Another kindergarten teacher said, "Everyone is expected to be ready for 1st grade when they come to kindergarten." A kindergarten teacher of 10 years said if given the freedom to teach as she believed to be best for children, "kindergarten would be for 5 year olds again." Pre-k teachers in this study did not report the same level of pressure to conform to promotion and curriculum standards as their kindergarten peers. This could be indicative of the increasingly academic nature of kindergarten programs as well as the relatively new idea of having four year olds in elementary schools. In recent years, there has been a great deal of research and curricula development that has emphasized social and emotional skill formation for children ages birth to five. This may explain why pre-k teachers in this study were not as articulate with concerns regarding the paradigm shift focusing on more academic learning.

Pre-k and kindergarten teachers indicated state and local mandates as barriers to the implementation of DAP, however there were differences in the characteristics of the mandates. Pre-k teachers indicated more focus on regulatory issues such as sanitation rules and fire code. Kindergarten teachers indicated more concern over local school policy regarding interpretation of state curriculum mandates.

Differences Based upon Pre-Service Training. Results from this study indicate a significant difference between ECE licensed and EE licensed teachers' perceptions of DAP. ECE pre-service training is distinctly different from EE pre-service training. Teachers who are trained in ECE are required to take courses that are specifically focused on areas of child development. Pre-service ECE teachers must complete infant and toddler curriculum, preschool curriculum, and kindergarten curriculum. They too must

complete lab work that requires them to interact with children in educational settings while taking courses.

Child development isn't studied as comprehensively in EE programs as it is in ECE course work. Most pre-service programs require EE majors to complete an educational psychology course; it could be argued that one class focused on development is not sufficient. Many could also argue that educational psychology is not necessarily a developmental psychology course. Teachers who are trained in EE take classes that are based in core subjects such as math, science, and social studies. EE majors also are required to complete teaching methods courses, but are only engaged with children in a classroom setting when they complete a practicum and student teaching at the end of their pre-service training. Differences highlighted in this study are indicative of larger contextual factors that influence how higher learning institutions prepare teachers to teach young children.

File and Gullo (2002) found that teachers who were trained in Bachelor of Science programs in EE were less likely to adhere to a Constructivist view. A higher score on the Beliefs and Intentions Questionnaire indicated congruence with the importance of playing with children, engaging children in conversations, and engaging in responsive relationships with children. From teachers' responses on the questionnaire, pre-k teachers more clearly articulated a Constructivist view of teaching. Eighty-four percent of kindergarten teachers received licensure in EE and 16% reported having licensure in ECE. In contrast, 77% of the pre-k sample had ECE licensure and 13% had EE licensure. Because pre-k teachers had more pre-service training in ECE, it is possible

they were able to present beliefs that were more consistent with a Constructivist view of child development.

DAP recognizes that children create their own understandings of how the world works and teachers act as facilitators to help children clarify misunderstandings (Bredekamp & Copple, 2009). This is consistent with a Constructivist view of child development. In the current study, teachers who held degrees in EE demonstrated lower mean scores on the Beliefs and Intentions Questionnaire, than their ECE teacher peers, thus presenting a view of developmental theory more aligned with an Instructivist view of child development.

DAP requires that teachers have an in-depth understanding of how children proceed through the stages of development (Bredekamp & Copple, 2009). For the successful implementation of DAP, teachers must understand that children construct their own understandings of how the world works through manipulation of materials and environments (Bredekamp & Copple, 2009). Teachers who are trained in ECE learn to create environments that support children's active engagement with materials, teachers, and peers. Teachers who are trained in EE may not learn the importance of creating environments that support children's learning, nor have a comprehensive understanding of the stages of child development. Simply, if teachers don't understand how children learn best, they cannot implement DAP effectively.

These finding do not suggest that all EE trained teachers employ only direct instruction or that they do not have an understanding of the importance of child development as a contextual factor for teaching young children. In fact, there were kindergarten teachers who indicated the increasingly academic nature of the kindergarten

classroom as being in stark contrast to their beliefs about how young children learn best.

In the state where data was collected, ECE teaching licensure is relatively new. A specialized teaching license that focuses on children from birth to kindergarten has been in existence for less than 15 years in the state where research was conducted.

Smith (1993) found that teaching perspectives developed in pre-service training are relatively stable throughout a teacher's career and may be difficult to change as a teacher becomes more experienced. It could be suggested that teachers who are trained in both ECE and EE may be influenced by their training as well as environmental factors that inhibit their ability to teach in a constructivist manner. Teachers, no matter their pre-service training, cited the restrictions of state and local mandates that present themselves as barriers to the implementation of DAP.

Limitations to the Present Study

Data collected in this study presents insight into the differences present in pre-k and kindergarten classrooms and pedagogy; however there are limitations to the study.

Sample Size. In the sample, the ratio of kindergarten teachers to pre-k teachers was 2:1. Because of the limited number of pre-k teachers in the sample, limited qualitative data was available from the ECE perspective. More information about current practices and barriers to the implementation of DAP was available from kindergarten teachers, potentially limiting researchers' ability to complete a comprehensive comparison of factors that impede DAP between the two groups.

Characteristics of the Sample. Research was conducted in a rural area that could be considered small in size and therefore produced a relatively small sample size ($N= 67$). Data collected from a larger school system could possibly produce a more

diverse sample. It, too, could provide data that gives a more insightful view into the larger teaching community's perceptions of DAP.

In the area where data was collected, the community at large has placed a great deal of emphasis on early childhood education, especially for children who are placed "at risk" for school failure. The pre-k program and school system partner with many community and state agencies to provide free high quality pre-k services to children and families. The pre-k program recruits highly qualified ECE professionals from higher learning institutions. Teachers in the pre-k had participated in a professional development session about DAP six months prior to the time they participated in the study. Kindergarten teachers were not a part of the professional development session that focused on DAP in early learning classrooms. Inasmuch, because program quality and specific training regarding DAP, pre-k teachers in this sample could possibly have a better understanding of DAP than their pre-k peers in other geographical locations.

Curriculum Specialist as Researcher. The principal researcher does provide technical assistance to public school pre-k programs in the participating school system to increase the quality of educational services. Pre-k teachers completed the research measure after a professional development session that went late into the evening after being in the classroom with children for a full day. Because of the researcher's connection to the pre-k program, teachers might not have been as willing to share their thoughts about their beliefs, intentions, and barriers to the implementation of DAP.

In the context of a professional development session, kindergarten teachers completed the Beliefs and Intentions Questionnaire. During the session, they were introduced to a new math curriculum and assessment. Kindergarten teachers openly shared their

discontent regarding the implementation of the new math curriculum and assessment with the principal researcher. Because kindergarten teachers were concerned about the new mandated curriculum and assessment, they might have been more likely to share their frustrations about DAP on that particular day.

Measures that Assess Developmentally Appropriate Practice. In the current body of research, there are a limited number of measures that assess teachers' ability to implement teaching practices based upon their beliefs. There are even fewer that adequately and broadly assess DAP and its implementation. Because there were few measures available, there were few choices. The Beliefs and Intentions Questionnaire did not present an all-inclusive measure of DAP. The Beliefs and Intentions Questionnaire did not evaluate how teachers assess children's development and learning or establish reciprocal relationships with families. For DAP to be successfully implemented teachers must consider and incorporate these practices in their everyday teaching routines (Bredekamp & Copple, 2009).

The Beliefs and Intentions Questionnaire was limited in its capacity to comprehensively measure contextual and environmental factors that affect teachers' ability to apply their beliefs to pedagogy. In order to determine if teachers' reported practices were congruent with their actual practices and DAP, observations should be included in research protocol. It would be appropriate to assess classroom practices with an observation tool that verified teachers' reported practices and adherence to DAP. This research did not include classroom observations by researchers. The Beliefs and Intentions Questionnaire did not include information regarding reliability and validity of the measure itself. If there had been questionnaire available that presented a more

comprehensive measure of DAP and included an observation tool, The Beliefs and Intentions Questionnaire would not have been employed to gather data.

It was soon evident when analyzing data that the self report portion of the questionnaire was too open ended in its scope to accurately capture teachers' comprehensive responses to the limitations of engaging in DAP in a school environment. Simply, the questions did not elicit the types of responses the researcher had anticipated. Because of the relationship between pre-k respondents and the researcher, it was believed that teachers would be able to articulate in-depth responses to open ended questions regarding teacher training and barriers to the implementation to DAP. However, this was not the case; in fact it was the opposite. Pre-k teachers could have believed the researcher already knew their concerns and beliefs and did not record them on the questionnaire. It was anticipated the kindergarten teachers would not be as forthcoming with their responses; however, kindergarten teachers were more willing to share their thoughts about their beliefs and teaching practices than their pre-k peers.

There were limitations to the study, however teachers provided valuable insight into their beliefs and practices as well as the implementation of DAP. Teachers shared their beliefs and intentions; barriers to the implementation of DAP, educational histories, and pre-service training.

Implications

Setting. Both pre-k and kindergarten teachers in this study, reported their belief that principals and school administrators do not understand nor support the implementation of DAP. Because principals are in positions of authority, they can influence direct practices in the classroom. Teachers in this study reported pressure to

abandon their beliefs that young children learn best through active and engaging play.

Thus, administrators' beliefs directly affected classroom practices.

Teachers' beliefs and philosophies about how children learn best are critical in the determination of actual classroom practice. Teachers who support a Constructivist view of early education are more likely to align classroom practices with their beliefs (Charlesworth et al., 2001). In the reverse teachers who believe that children learn best through direct instruction are just as likely to align and implement practices with their beliefs. (Charlesworth et al., 2001). However, regardless of how teachers believe children learn best, in some educational settings there is the notion that teachers must hold to a set of conventions and practices that advocates teachers impart their expertise to children while effectively managing their behavior (Goldstein, 2007).

Currently, an educational construct exists that supposes children should be introduced to more concepts related to academic performance at an earlier age in order to achieve a better score on high stakes tests. Administrators' beliefs and program constructs that adhere to the view that children need access to more academic content at an earlier age may limit some teachers' ability to engage in developmentally appropriate learning experiences. Many public school teachers may have trouble implementing a developmentally appropriate early learning program because of barriers that prevent the full implementation of DAP (Goldstein, 2007). Teachers in this study, echoed the belief that barriers to the implementation of DAP exist in public school systems. Eighty-seven percent of kindergarten teachers indicated barriers to the implementation to DAP as well as 77% of pre-k teachers.

Strong emphasis is placed on children's success on academic measures for the sake of accountability in regards to funding. There is concern across the field of early education about the "push down" of expectations school programs are asking of our children. Early education programs may feel pressure to engage children in learning experiences that are not developmentally appropriate. In most early education programs, central office level administrators and principals determine what types of professional development opportunities are afforded to teachers as well as the instructional content emphasized in professional development sessions. Teaching strategies and continued training are academically driven in that teachers learn how to move children to acceptable levels on standardized tests. Such practices could impact a teachers' ability to align their teaching beliefs and practices with DAP.

Classroom practices are adversely affected when teachers are limited in their ability to individualize early learning experiences because of administrators' interpretation of mandates. Parlakian (2003) stated when teaching staff feel they are supported, feel they are part of a team and feel safe in the work and their ability to learn, then faculty are more likely to approach children and families in the same manner. The manner in which people in authority treat their staff members directly affects how they in turn treat children and families. If teachers do not feel as if they are valued by administrators or the work they do is important these feelings can be transferred to children (Parlakian, 2003). This in turn affects relationships with children and families in the classroom community.

If administrators do not understand or support DAP, then teachers cannot fully implement developmentally appropriate curricula. Administrators need to have an in-

depth understanding of child development in order to support teachers as they facilitate educational experiences. Administrators should have an extensive knowledge base of child development as well as the principles of DAP. For many administrators, this may require course work based in a Constructivist view of child development. For teachers to feel supported in the implementation of developmentally appropriate curricula, all stakeholders need to understand the principles of child development that inform children's learning. Teachers need to be supported and exert a level of freedom to make decisions regarding curricula and instructional strategies for children based upon individual needs. Administrators play a vital role in teachers' ability to successful implement DAP across the

Pre-Service Training. In this study, data analyses revealed differences in ECE and EE trained teachers perceptions of DAP. This research highlights the differences of contextual factors in pre-service training. ECE and EE trained teachers are learning pedagogy in a markedly different manner. ECE teachers engage in comprehensive study of child development while EE teachers engage in course work that focuses on academic content i.e. math, literacy learning, and science. ECE students spend time in lab work that requires them to work directly with children in order to integrate course work with practice. EE students are limited in their ability to engage with children in the context of course work because there are limited lab and practicum opportunities. Decision makers in higher learning institutions need to consider research about child centered pedagogy and implement course work that fosters pre-service teachers ability to learn about the efficacy and implementation of DAP.

For DAP to be successfully implemented, teachers need to understand and have a solid foundation built upon the principles of child development that inform learning and practice. They must know how to teach children in a developmentally appropriate manner. This will only happen for EE pre-service teachers when students are trained to teach children in such a manner. When teachers have a solid understanding of child development and DAP, then they can gather information about individual children to make important curriculum decisions.

Teachers, more than anyone else in the school environment, understand and know individual children's abilities and interests. In turn, teachers can implement curricula based upon children's strengths, determining activities and exploration that facilitate the greatest child outcomes. For DAP to be successfully realized, teachers must have the ability to make decisions based on the principles of child development as well as knowledge of individual children. When early learning programs support teachers who hold and implement a Constructivist view of child development and when teachers learn how to implement DAP, then a synergy is created that facilitates positive child outcomes.

If pre-service teachers do not learn and understand the principles of child development that inform practice then teachers cannot implement DAP. When teachers do not learn and understand a Constructivist view of child development then teachers cannot implement DAP. In order for teachers to learn how to implement DAP, pre-service course work must be aligned with a DAP framework. Only when pre-service teachers are taught how to teach in a Constructivist manner that allows children to be protagonists in their own learning then DAP can be fully realized.

Future Research Directions

This research presents a call for the development of a more comprehensive tool to accurately assess teachers' beliefs, intentions, and their ability to implement DAP in early learning programs. There are few measures of teachers' perceptions of DAP and as well as assessments that present a comprehensive measure of the implementation of DAP. Development of a measure that correlates pre-service training and teachers' beliefs and observed intentions i.e practices would be prudent in efforts to identify successful implementation of DAP. An assessment that has been standardized on a large sample size with significant *p values* for reliability and validity measures would be beneficial as a resource for early education programs.

This study identified differences in teaching contexts and pre-service training for pre-k and kindergarten teachers. Relationships between teaching beliefs and intentions are complicated and are influenced by a myriad of factors. This research has identified differences in pre-k and kindergarten pre-service teacher training. It would be appropriate for more study on the influence of pre-service course work on teachers' perceptions of DAP. There too, needs to be research regarding pre-service teachers' ability to implement DAP practices and strategies in early learning classrooms based upon pedagogical constructs. Simply, teacher preparation programs need to study the importance of expanding course work to include a comprehensive study of child development. Regardless of the area of licensure, characteristics of child and adolescent development are interrelated and occur in a relatively orderly sequence of development with new experiences building upon prior knowledge (Bredekamp & Copple, 2009). Pedagogical differences in pre-service training for ECE and EE need to be examined to

determine how course work can be aligned with the DAP framework. For children to be successful in learning environments there must be a synthesis between pre-service teacher training and principles of child development that inform practice. When pre-service teachers are taught the fundamentals of child development, then they are prepared to implement DAP curricula.

This present investigation identified differences in pre-k and kindergarten teachers' teaching contexts. This study indicates the need for more research regarding school principals' and administrators' understanding of DAP. DAP, as a curriculum framework, requires that adults understand how children grow and develop (Bredekamp & Copple, 2009). For DAP to be implemented appropriately, administrators and principals need to have a developmental perspective regarding how children think and come to understand the world around them. DAP requires that adults view learning from a child's perspective and engage in intersubjectivity with children.

When school administrators do not understand DAP, and if they believe that didactic learning activities produce better results on standardized tests, then teachers are not viewed as being capable decision makers in curriculum implementation. Acknowledging teachers as empowered decision makers regarding curriculum decisions is an important factor in the implementation of DAP (Bredekamp & Copple, 2009). It would be important for research to identify empirically proven interventions for use by school administrators to facilitate the implementation of DAP in classrooms that serve children from birth to age eight.

It would also be prudent for there to be more research regarding local school systems interpretation of state mandated courses of study. If state agencies have created

developmentally appropriate curricula for local agencies to mandate and the curricula is misinterpreted and accelerated in a way that fosters developmentally inappropriate practice, then teachers are expected to implement curriculum that negatively affects classroom practice, thus creating low quality early learning programs. This notion is contrary to the current economic trend that has allowed federal and state agencies to focus large amount of monies on the implementation of high quality programs for young children, especially those who have been placed “at risk” for school failure.

ARRA has helped contribute to the urgency of implementing high quality programs that are based in DAP. However, in order for children to access these programs at the local level, early learning program administrators and teachers need to reach consensus about how young children learn best. If teachers understand the importance of DAP, but higher level decision makers do not, then teachers’ voices will be ignored. Obviously, principals and administrators will advocate for the implementation of teaching practices they believe to be most effective. However, many school administrators do not know nor understand developmental perspectives that inform DAP. Teachers are expected to take classes that foster their ability to teach young children, but there is no mandate that requires public school administrators to be knowledgeable of, or proficient in the administration of programs that serve children ages four to eight.

As a community of early educators, every stakeholder needs to have an in-depth understanding of child development and developmentally appropriate curricula, this includes school administration. Research should be conducted on the feasibility of requiring public school programs to prove schools administrators’ proficiency and understanding of child development from birth to age eight. For systems who receive

state and federal monies to implement programs to decrease the achievement gap, it could be argued they need to be proficient at facilitating and maintaining developmentally appropriate early learning programs.

This research also indicates the importance of studying the impact of NCLB on teachers' perceptions of DAP as well as their ability to implement DAP curricula. Administrators and teachers who practiced before the 2001 authorization of NCLB may have different beliefs and value systems concerning DAP than teachers who entered into practice after the onset of NCLB. It would be important to determine a relationship between teaching beliefs and practices in regards to pre-NCLB and post-NCLB notions of school success. Not only should it be studied at the school level, but it would be prudent to identify if or how NCLB has affected pre-service teacher training programs. More study is needed to ascertain if pedagogy and college course work has been affected by NCLB. Before NCLB, school success could be found to be grounded in the ability to demonstrate knowledge of academic skills and navigate relationships with peers and the community at large. It would be important to identify how NCLB has affected administrators' and teachers' beliefs systems regarding the definition of school readiness and the implementation of DAP. It too, would be appropriate to study the effect of NCLB on college faculty and their teaching. Pre and post NCLB notions of school success from teachers, administrators, and pre-service teacher training faculty should be investigated to identify if beliefs have changed what factors have changed perspectives of DAP.

Conclusion

In sum, this research investigated pre-k and kindergarten perceptions of DAP. This research is important because it identifies differences in pre-k and kindergarten teachers' perceptions of their beliefs and practices. This research found that pre-k teachers' beliefs and intentions were more strongly related. It was also found that there are differences in ECE and EE teachers' view of DAP. This research has highlighted teachers' perceived barriers to the implementation of DAP.

In consideration of the limitations presented, this research is important to add to the existing data base regarding the implementation of DAP. This research also serves as a catalyst for more study regarding teachers' perceptions of DAP and barriers that prevent the successful implementation of DAP. In the climate of high stakes testing, it is important to examine current educational trends and their efficacy. Teachers in this study provide a valuable source of information that could change how the larger community views the implementation of educational mandates that directly affect classroom practices and children's academic success.

REFERENCES

- American Recovery and Reinvestment Act of 2009 (ARRA), Pub. L. No. 111-5 (2009).
- Bagnato, S., Neisworth, J., & Munson, S. (1997). *LINKing assessment and early intervention: An authentic curriculum-based approach (3rd Edition)*. Baltimore, MD: Brookes.
- Bellm, D., & Whitebook, M. (2006). *Roots of decline: How government policy has de-educated teachers of young children*. Center for the Study of Child Care Employment. Berkeley, CA: Institute of Industrial Relations, University of California at Berkeley.
- Berk, L. (2002). *Infants and children: Prenatal through middle childhood*. Boston, MA: Allyn & Bacon.
- Blaustein, M. (2005). See, hear, touch: The basics of learning readiness. *Young Children*. Retrieved Oct. 28, 2009 from
<http://www.naeyc.org/files/yc/file/200507/01Blaustein.pdf>.
- Bowman, B., Donovan, M., & Burns, M. (Eds.). (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.
- Brashier A., & Norris E. (2008). Breaking down barriers for first year teachers: What teacher preparation programs can do. *Journal of Early Teacher Education*. 29, 30-44.

- Bredekkamp, S., & Copple, C. (2009). *Developmentally appropriate practice in early childhood programs*. Washington, DC: National Association for the Education of Young Children.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage publications.
- Charlesworth, R., Hart, C.H., Burts, D.C., Thomasson, R.H., Mosley, J., & Fleege, P.O. (1993). Measuring the developmental appropriateness of kindergarten teachers' beliefs and practices. *Early Childhood Research Quarterly*, 8, 255-276.
- Coutinho, M., & Malouf, D. (1992). Performance assessment and children with disabilities: Issues and possibilities. *Teaching Exceptional Children*, 25, 63-67.
- Crain, W (2005). *Theories of development: Concepts and applications*. Englewood Cliffs: Prentice- Hall.
- Dunn, L., & Kontos, S. (1997). Research in review: What have we learned about Developmentally Appropriate Practice? *Young Children*, 52, 4-13.
- Edward, S. (2005). Children's learning and developmental potential: Examining the theoretical informants of early childhood curricula for the educator's perspective. *Early Year*, 25, 67-80.
- File, N., & Gullo, D.F. (2002). A comparison of early childhood and elementary education students' beliefs about primary classroom teaching practices. *Early Childhood Research Quarterly*. 17, 126-137.

- Goldstein, L. (2007). Beyond the DAP versus standards dilemma: Examining the unforgiving complexity of kindergarten teaching in the United States. *Early Childhood Research Quarterly*, 2, 22, 39-54.
- Gonzalez-Mena, J. (2001). Cross-cultural infant care and issues of equity and social justice. *Contemporary Issues in Early Childhood*, 2, 368-371.
- Hill, L., Stremmel, A., & Fu, V. (2005). *Teaching as inquiry: rethinking curriculum in early childhood education*. Boston, MA: Pearson Education.
- Hsieh, H.-F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Karp, N. (2005). Building a new early childhood professional development system based on the three r's: Research, rigor, and respect. *Journal of Early Childhood Teacher Education*, 2, 171-178.
- Katz, L. (1999a). *Another look at what young children should be learning*. Retrieved November 2, 2009, from
<http://ceep.crc.uiuc.edu/eecarchive/digests/1999/katzle99.html>
- Katz, L. (1999b). Balancing constructivist and instructivist curriculum goals in early childhood education. *Kindergarten Education: Theory, Research and Practice: A Journal of the California Kindergarten Association*, 4(2), 71-86.
- McIntyre, L. L., Eckert, T. L., Fiese, B. H., DiGennaro, F. D., & Wildenger, L. K. (2007). The transition to kindergarten: Family experiences and involvement. *Early Childhood Education Journal*, 35, 83-88.

- McMullen, M.B., Elicker, J., Goetze, J., Goetze, G., Huang, H., Lee, S., Mathers, C.,
Wen, X., & Yang, H. (2006) Using collaborative assessment to examine the
relationship between self reported beliefs and the documentable practices of
preschool teachers. *Early Childhood Education Journal*, 34, 81-91.
- North Carolina Partnership for Children (NCPC). (2010). *Smart Start: Building a
brighter future for North Carolina*. Retrieved July 4, 2010 from
http://hugh.ncsmartstart.org/wpcontent/uploads/2010/05/smartsstart_tabbed_brochure.pdf
- Parlakian, R. (2003). *Before the ABCs: Promoting school readiness in infants and
toddlers*. Washington, DC: Zero to Three.
- Phillips, D, Mekos, D., Scarr, S., McCartney, K. & Abbott-Shim, M. (2000). Within and
beyond the classroom door: Assessing quality in child care centers. *Early
Childhood Research Quarterly*, 15, 475-496.
- Pianta, R., Steinberg, M., & Rollins, K. (1995). The first two years of school: Teacher-
child relationships and deflections in children's classroom adjustment.
Development of Psychology, 7, 295-312.
- Raver, C., & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about
strategies to promote social and emotional school readiness among three- and
four-year old children*. New York, NY: National Center for Children in Poverty.
- Regional Alternative Licensing Centers. (2010). *Courses meeting required competencies
for birth through kindergarten licensure*. Retrieved July 20, 2010, from
<http://www.ralc.ccs.k12.nc.us/BK.htm>.

- Rose-Krasnor, L. (1997). The nature of social competence: A theoretical review. *Social Development, 6*, 111-135.
- Rubin, K.H., Bukowski, W., & Parker, J.G. (1998). Peer interactions, relationships, and groups. In N. Eisenberg (E), *Handbook of child psychology, 5*, pp. 619-700. New York: Wiley.
- Sandall, S., Hemmeter, M.L., Smith B.J., & McLean, M.E. (Eds.). (2005). *DEC recommended practices: a comprehensive guide for practical application in early intervention/early childhood special education*. Missoula, MT: Division for Early Childhood.
- Schmidt, H. M., Burts, D. C., Durham, R. S., Charlesworth, R., & Hart, C. H. (2007). Impact of the developmental appropriateness of teacher guidance strategies on kindergarten children's interpersonal relations. *Journal of Research in Childhood Education, 21*(3), 290-301.
- Schweinhart, L. J., & Weikart, D. P. (1997). The High/Scope preschool curriculum comparison study through age 23. *Early Childhood Research Quarterly, 12*, 117-143.
- Shonkoff, J., & Phillips, D. A (Eds.). (2000). *From neurons to neighborhoods*. Washington, DC: National Academy of Sciences.
- Smith, K. (1993). Development of the primary teacher questionnaire. *Journal of Educational Research, 87*, 22-29.
- Spidell-Rusher, A., McGrevin, C.Z., & Lambiotte, J.G. (1992). Belief systems of early childhood teachers and their principals regarding early childhood education. *Early Childhood Research Quarterly, 7*, 277-296.

- Wein, C.A. (1995). *Developmentally appropriate practices in real life*. New York: Teachers College Press.
- Werner, E. E. (1992). The children of Kauai: Resiliency and recovery in adolescence and adulthood. *Journal of Adolescent Health, 13*, 262-268.
- Wilcox- Herzog, A. & Ward, S.L. (2004). Measuring teachers perceived interactions with children: a tool for assessing beliefs and intentions. *Early Childhood Research and Practice, 6*, 1-14.
- Wilgus, G. (2005). If you carry him around all the time at home, he expects one of us to carry him around all day here and there are only TWO of us! Parents', teachers', and administrators' beliefs about the parent's role in the infant/toddler center. *Journal of Early Childhood Teacher Education, 26* (3), 259-273.
- Vartuli, S. (1999). How early childhood teacher beliefs vary across grade level. *Early Childhood Research Quarterly, 14*, 489-514.
- Zamboo, D. (2007). Childcare workers' knowledge about the brain and developmentally appropriate practice. *Early Childhood Education Journal, 35*, 571-577.

Appendix A

Notice of IRB Exemption

Appendix B

The Beliefs and Intentions Questionnaire (Wilcox- Herzog & Ward, 2004)

Beliefs and Intentions Questionnaire (Wilcox- Herzog & Ward, 2004)					
About Your Teaching Beliefs					
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	1. When children hit each other, teachers should help them to understand each other's feelings.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	2. During group time, teachers should encourage children to sit and listen most of the time.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	3. Teachers should plan some novel activities that will challenge children to try new experiences (sometimes with adult assistance).
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	4. Teachers should encourage children to pick up their toys (with adult help) during clean-up time.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	5. When a child takes a toy from another child, teachers should observe and see what happens.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	6. Teachers should speak to children at their own level (e.g., use language familiar to young children, make eye contact).
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	7. Teachers should talk to children like adults (e.g., use long sentences and words unfamiliar to young children).
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	8. Teachers should encourage children to use good manners (even if children don't always use them).

Teachers' Perceptions of DAP

1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	9. When a child throws play dough one time, teachers should tell her to leave the play dough area.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	10. Teachers should put a variety of interesting activities out during free choice time and then let children make their own activity choice
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	11. When children play, teachers should sit down sometimes and talk with them about what they are doing.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	12. Teachers should make children pick up all of their toys (without adult help) during clean-up time.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	13. When a child throws play dough one time, teachers should remind her that play dough is for rolling.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	14. When children hit each other, teachers should make them apologize (say sorry) to each other.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	15. When many children in the class lose interest during story time, teachers should stop and go on to something else.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	16. When many children in the class lose interest during story time, teachers should make them sit on their bottoms until the story is finished.

1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	17. When a child takes a toy from another child, teachers should intervene quickly.
About Your Teaching Intentions					
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	1. I get down on the floor and play with children.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	2. I speak warmly to the children when I interact with them.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	3. I watch children play.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	4. I ask children open-ended questions rather than yes-no ones.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	5. I engage children in two-way conversations about their play.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	6. I am enthusiastic about children's activities and efforts (e.g., I congratulate them when they do good job).
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	7. I help children use play materials.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	8. I talk with children about their play.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	9. I make suggestions for how to use materials.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	10. I listen attentively when children speak to me.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	11. I help children remember to clean up as they finish activities.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	12. I hug and hold children.

Teachers' Perceptions of DAP

1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	13. I get involved in children's dramatic play.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	14. I am firm with children when it is necessary.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	15. I talk with children in order to enhance their play.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	16. When children talk to me, I restate their comments.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	17. When I describe what children are doing, I give extra information (e.g., "Your red car is going really fast.").
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	18. I help children find activities to play with.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	19. I enjoy being with children.
1 Never	2 Almost Never	3 Sometimes	4 Almost Always	5 Always	20. I show children the appropriate way to use play materials.

Appendix C

Teaching Experience and Barriers to DAP Questionnaire

About Your Experience
What is your area of licensure?
How long have you been teaching?
List 3 major course classes that you feel affected your teaching practices and beliefs. A. B. C.
What barriers, if any, prevent you from implementing learning activities that are developmentally appropriate for the children in your classroom?
How would your teaching practice change if you were given complete freedom to teach how and what you felt was best for children?

Appendix D

Teacher Responses to the Teaching Experience and Barriers to DAP Questionnaire

Pre- kindergarten teachers' responses to "List 3 major course classes that you feel affect your teaching practices and beliefs."

Smart board training, NCaeyc Conference

Any class from Dr. McGaha and Dr. Hearron

Early childhood environments, family practicum, child development

Child guidance, children with special needs

Guidance, summer institute for pre-k

Child development, psychology of the young child, creative curriculum

Creative art, exceptional children classes, Becky Bailey's conscious discipline

Pre-school methods, assessment of the young, Becky Bailey conscious discipline

Montessori training, positive child guidance, child development

Young children, observation classes, student teaching/practicum

Conscious discipline, Project Enlightenment visit

NAEYC resources, Foundations, various books

Conscious discipline, Project Enlightenment, all ASU education classes

Power of play, art

NAEYC, Creative Curriculum, Foundations

Child guidance, conscious discipline w/Becky Bailey, Foundations

Child development, early literature experiences

Pre-kindergarten teachers' responses to "What barriers, if any, prevent you from implementing learning activities that are developmentally appropriate for the children in your classroom?"

Being in a public school does sometimes limit the way I do certain things, especially when it comes to involving families.

In kindergarten I was faced with assessments, pleasing administration & the new K promotion/retention standards. Pre-k is looking pretty good.

The extent and necessity for differentiation of learning activities for my children

Lack of money, ideas

Lack of materials

Principals' understanding of our program and developmentally appropriate practices

Type of materials, energy

Lack of consumables and supplies. I would access more materials from local vendors.

Cost & time – I spend hours and still can't get it all done.

Time, support from school staff

School specific administration- their understanding of DAP and the pre-k program.

Sanitation, fire code, and other regulations sometimes make it harder to plan activities for children.

Space

Time, money (budgets) assistance, lesson planning

Time constraints

Difficult behavior, lack of the Exceptional Children's department's help with guidance and meeting IEP goals.

Time, money, instructional help - two assistants would be nice.

Pressure from kindergarten- teacher expectations about what children should know by the time they enter kindergarten – it's more like what children should know when they leave kindergarten.

The expectation of the “school” environment sometimes dictates that we go along with the rest of the school.

Other teachers don't understand or offer developmentally appropriate activities.

Pre-kindergarten teachers' responses to "How would your teaching practices change if you were given complete freedom to teach how and what you felt were best for children?"

I would use all kinds of tools to help children learn.

Play, free choice activities, DAP all the way

I would provide more materials and more field trips.

More open ended activities.

Less time spent cleaning and sanitizing. More time actively engaged with children

I would have more space

We would cook in the classroom. We would not hold to a schedule as much

Probably a little more structure for some children

None really – I would love to have the extra sets of hands that could make what I think is right a real possibility.

I feel like in this pre-k program, I have the freedom to do what is best for children.

Enrich classroom

No ECERS-R, a curriculum other than Creative Curriculum

Would be able to be flexible with ideas

I feel that our pre-k program does support and give me freedom to teach how and what I feel is best.

Some licensure requirements I would change. ECERS and sanitation rules cause some barriers.

I wouldn't worry about ECERS –R, state regulations or sanitation rules.

Less stress

I would do a different lesson plan that left room to change from day to day.

Kindergarten teachers' responses to "List 3 major course classes that you feel affect your teaching practices and beliefs."

NC Teacher Academy, K-2 reading practices based research, brain development

Educational psychology

Learning Focused Schools, Kagan, Lucy Calkins

Literacy Strategies, grade level meetings, Kagan and curriculum differentiation

Student teaching, "Imagine It" training, science conference 2007

Children with special needs, ready schools initiatives, Creative Curriculum

Learning cooperatively (Kagan), child development, strategies for learning center management

Grade level, diversity class in college, Kagan strategies

Advanced studies in children's literature, elementary education teaching strategies,

Instructional technology

Course about differentiation

Classroom management, student teaching, Dr. Jean workshop

"How children move" PE class at ASU, educational psychology

Literacy, social studies, curriculum differentiation

Internship, classroom management, teaching strategies

Ron Clark books, explorations, math our way, Dr Jean activities, Zoo Phonics

Psychology, knowing differences in brain make up / learning, social studies knowing about various types of family backgrounds, reading how students start and excel at different points.

Management, core classes (reading, writing, math, science etc...) teaching methods, child development

EC Class, Ron Clark, Zoo Phonics

Science, core classes, child development

Music, Kagan, Dr. Jean

Student teaching, Ron Clark, teaching young children

Kagan, AIMS, Learning Focused Schools

Learning focused schools, thinking maps, graphic organizers, Kagan

Curriculum differentiation, technology- smart board training, cooperative learning

Literacy stations, language arts for young children, reading practices for young children

Music for kindergarten

“Early years: the integrated day”, taking the curriculum outdoors, learning differentiation

Student teaching internship practicum

Student teaching with an excellent 1st grade teacher, supervision courses, hands-on activities for children

Introduction to preschool in college, my elementary methods blocks, student teaching

Diversity, child development classes, curriculum instruction

Dr. Jean practices, my teaching peers, my belief in teaching and in children.

Dr. Jean, peers

Dr. Morris classes on reading at ASU grad school, Alice Naylor's children lit grad school, Gail E. Hailey puppet class

Child development classes, diversity classes, interacting with families

Ready Schools: differentiated instruction, Laura Robb- reading strategies.

Internship in a 3rd grade classroom, students teaching in a kindergarten classroom, AIMS training

My four blocks (building blocks) training with Pat Cunningham, Dr. Jean, training on performance based math assessments

Children's literature, methods courses, educational psychology

Teachers, schools, and learners course

Children's literature, math, a music class

Foundations of reading, classroom diversity, independent study on practices in a developmentally appropriate kindergarten

Children's literature, math, science for children

Kindergarten teachers' responses to "What barriers, if any, prevent you from implementing learning activities that are developmentally appropriate for the children in your classroom?"

Sometimes money, often I need new or updated materials and there is not enough money.

I spend lots of my own money. Sometimes county expectations, we have to "cover" and do so many things to make sure curriculum and county expectations are met.

Sometimes not having the resources I need.

There is always the issue of limited funds to furnish supplies for children. Classroom size (too many children in a class) sometimes hinders activities.

I feel pressure to only focus on academic goals and this causes a lapse in social and emotional activities I know my students need.

Time constraints with planning

Lack of time, curriculum restraints/county requirements, SCOS

Funding, administrative lack of understanding about developmentally appropriate practices

Large classroom size

The NCSCOS is not developmentally appropriate in various areas.

I do not encounter barriers as much as regular classroom teachers because I follow children's IEPs. However, I do have concerns when children with special needs are in the regular classroom a expected to write according to state guidelines.

WCS promotion standards

Supplies, other requirements – school (time restrictions, assessments, paperwork)

Money for supplies and materials, NCSCOS

Wide range of maturity, age, and behavior in a classroom so many different levels of learning

Limited supplies, time for planning (too much paperwork, meetings) restrictions - Assessments

NCSCOS and county expectations can sometimes hinder the "NATURAL FLOW" of Developmentally Appropriate Practice

I would say funding, but if it is something my students really need I buy it myself. So yes, funding is a barrier.

Mandates given by local & state departments (that are not DAP), resources in my classroom

NCSCOS, county expectations

Less experience, not knowing about available resources & materials

WCS promotion standards

State, county, materials, principal

Time, too many assessments, not enough materials especially for social studies & science.

Management routines, supplies

Administrator's viewpoint of DAP, time!

Lack of teacher assistant's help to supervise

The entire curriculum that needs to be taught

Having a set schedule of when certain subjects have to be taught. Having to test children when you feel like there is no extra time.

The rotating/ structured approach in my US kinder class as opposed to a more flexible / integrated day approach in the UK where free choice & learning through play are more valued.

Time, materials available, resources

Curriculum demands

This is my 1st year in kindergarten so the materials I do not have. I would like to attend more training to learn about the K curriculum.

Having appropriate time to plan and look for activities, lack of materials, money to buy materials, lack of support from administration, SCOS

All the added "expected" things that have to be included in kindergarten day

New state guidelines that are expected of kindergarteners that are not always best for 4 and 5 years olds.

Too much is expected too soon, I think too much pressure is being put on the child that enters kindergarten without 1000 or 2000 hours of literacy exposure. Everyone is expected to be ready for 1st grade when they come to kindergarten.

NCSCOS and standardized testing, administrators not being knowledgeable of DAP, money for developmentally appropriate furniture, props, etc.

County & state guidelines & requirements testing

SCOS, time, schedules, being away from the classroom for professional development

Constant mandates – both state and local – for ramped up expectations and curriculum.

Almost every minute of my day is planned for me. I feel like we have to keep constant pressure on the children and have to fight to keep center time.

Promotion standards, accountability, expectations from the state

SCOS, county standards and promotion and retention standards

The push of the curriculum and deadlines sometimes do not allow for independent time with the children and the free learning and exploration.

Kindergarten teachers' responses to "How would your teaching practices change if you were given complete freedom to teach how and what you felt were best for children?"

I would like for children to have more time to explore and be children. I know the importance of the dramatic play area but sometimes I almost feel guilty (not really) for this time.

I would look at children more as individuals rather than as a whole class.

If I had the freedom to teach as I feel free to teach I feel that the children would feel more freedom to be creative and grow.

I would still work to meet those academic goals but at a different pace.

I do not think they would change much because I feel like we already have a lot of freedom.

I could be more developmentally appropriate.

I would be able to facilitate learning opportunities at a more developmentally appropriate level and not expect all children to achieve at the same time.

Teaching would be a lot more fun, if we could just teach the objectives in our own teaching styles. I do not like new resources being shoved down our throats, and then we are expected to use them all. We need to do what is best for our students.

If I would have more freedom with my schedule I could give students more time with idea groups and teaching situations.

They would not change a whole lot. I would teach what is more developmentally appropriate for kindergarten. Social skills are so important.

I would not use Lucy Calkins' curriculum in kindergarten. We should be teaching handwriting skills & letter formation. Then at the end of the year, focus on story writing. More time to plan and more education on how to address all of the "real life" situations that go on in an everyday classroom setting.

More manipulatives, structure –some drill & practice and more theme oriented and hands on tasks. Less of Lucy Calkins or begin this program with K after Christmas. Write from the beginning has great strategies also.

Less formal assessment and more exploratory play at a less rigorous pace!

My teaching practices would not change greatly, but I would devote more time to social studies & learning about others – We integrate, but I just feel like there are not enough hours in the day. I would also make kindergarten for 5 years olds again. Now it seems it is more like 1st & 2nd grade used to be.

Teaching would be somewhat more fun, however, we do need some mandates so we are all doing the same thing from school to school – continuity is crucial. We need a curriculum to go by as well. The how is equally important as what, however the fun is easily taken away when too many mandates are given.

More free play

More explorations that lead to student discovery and learning

I believe that social skills are very, very, important in this the real world. Children need to be able to get along w/each other – learn to share with each other and co-operate. They need to enjoy kindergarten. It is really trying to teaching them stuff we used to do in 1st grade.

More hands on than ever! More global studies, children would be happier, less stressed

I would spend less time formally assessing the same thing (ex: Reading) in several different ways (ex. Data notebooks, BPA RTI probes) & assess it one-way and spend more time teaching.

I would implement progress based developmentally appropriate activities.

I would throw all these assessments out the window & do my job! We would observe & explore the world in fun ways.

Feeling that I could focus on the developmental level of individual children

I would be able to teach more and able to combine lessons to get the best information to the kinds.

I could work with small groups on a focused activity throughout the day rather than having a rotating system where I dash between groups with less quality time per group.

Time would not be an issue because I would spend time where I see it is needed to be spent.

More play – more socialization

I would have it more age appropriate and let the children be children. We want them to do things that are not appropriate.

Based on children's interests

My day would not be so structured. Not have to do this & have to do this. I would have lots more unstructured time and more reading to my students for fun and more teachable moments.

I would not stress the children as much by asking them to do things that I feel are not age appropriate.

It would be a lot less stressful.

I would not tell parents their child was “At-Risk” in kindergarten, No One should be “at risk” in kindergarten.

More “relaxed” environment, more appropriate and “new” materials.

We would spend more time in centers and have more free choice. We would also spend more time outside in free play.

I would be able to focus more on the student’s individual needs. I would have more time to spend on things that I feel would be more meaningful and interesting to the students.

I would be able to provide more “play” and developmentally appropriate activities.

Lessons would be subject driven by student interests.

Students would be able to learn through inventive play. There would be more emphasis on social development.

Many thins would change but being bound by the NCSCOS sometimes makes that difficult.

Less testing and try to allow the children to explore and learn through exploration.

I would do more fun and education if I didn’t have to assess all the time. I will spend more one on one time with students that need it.

VITA

Andrea Watson Anderson graduated from Appalachian State University in 1994 with a BS degree in Child Development. In 2001, she received Birth through Kindergarten teacher licensure from Western Carolina. Andrea received her MA degree in Child Development: Birth through kindergarten in 2010.

Andrea has worked in various early learning settings. She has been a classroom teacher in Head Start, taught in a private child care center, served as a teacher in a public school system, and taught classes at a community college. She has presented various workshops across the state of North Carolina. Andrea has provided technical assistance to teachers in early learning environments. She is interested in Developmentally Appropriate Practice, family involvement in early education programs, and the Project Approach.