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Perceptions of Kindergarten Teachers Regarding Systemic Constraints on the Teacher/Learner Pedagogical Relationship

Javier Gonzalez

PERCEPTIONS OF KINDERGARTEN TEACHERS REGARDING SYSTEMIC CONSTRAINTS ON THE TEACHER/LEARNER PEDAGOGICAL RELATIONSHIP

DISSERTATION

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by

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Area of Specialization: Early Childhood Education

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ABSTRACT

The purpose of this multiple case study was to examine the perceptions of Kindergarten teachers regarding systemic constraints on the teacher/learner pedagogical relationship. As greater responsibility and increasing pressure is imposed on early childhood teachers to focus on a subject-centered curricula and accountability standards, less time is afforded to implementing developmentally appropriate practices.

This qualitative study attained data from four randomly selected experienced Kindergarten teachers using interviews, classroom observations, and a review of classroom documents. An interview protocol focused on the following areas: (a) The Role of the Teacher, (b) The Learner, and (c) The Kindergarten Curriculum. Observations focused on four areas: 1) The Physical Ecology of the Setting, 2) The Social Ecology of the Setting, 3) The Formal/Academic Instruction Time of the Setting, and 4) The Enrichment Activities of the Setting. Document analysis was employed to provide the researcher with a means of describing and interpreting the documents of the setting including curricular guidelines, lesson plans, and class schedules. Data analysis consisted of two main phases. In the first phase, each individual case was analyzed, coded, and reported. In the second phase, cross-case analysis was employed to merge all cases and provide a more in-depth, comprehensive understanding of the research questions.

Data analysis generated three highly prominent themes: 1) developmentally appropriate practices in the Kindergarten setting are compromised in a high stakes environment; 2) the instructional pacing of the curriculum has changed the dynamics of the Kindergarten classroom; and 3) academic skills are emphasized as a result of the push-down curriculum in Kindergarten settings. In sum, the Kindergarten teachers

believed that the dynamics of the pedagogical relationship between the teacher and the learner have changed as a result of systemic constraints. Teachers from the study perceived that the push-down curriculum imposed pressure to cover an academic curriculum throughout most of the day. However, the teachers maintained that even under the mounting pressures of the push-down curriculum, they were able to sustain a high sense of self-efficacy, still believing in their ability to help their students succeed.

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"Let us be grateful to people who make us happy, they are the charming gardeners who make our souls blossom."

-Marcel Proust

In Gratitude To:

To my Dissertation Committee…Dr. Lilia DiBello (Chair),

Dr. Jill Farrell, Dr. Victoria Giordano, Dr. David Martin

To my parents…Raisa and Miguel

To my Life Partner…Dennis

To my colleagues and peers in the Adrian Dominican School of Education.

DEDICATION

This dissertation is dedicated to my parents Raisa and Miguel.

…To the children of the world.

In Memory of….

My grandmother Dilia (Yiya) – 1912-2001

Esther (Madrina) – 1909-2003

Dr. Joseph Kaplan, Professor, Florida International University

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

The purpose of the current research study was to inform the early childhood community regarding the effects of systemic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings. As greater responsibility and increasing pressure is imposed on early childhood teachers to focus on a subject-centered curricula and accountability standards, less time is afforded to implementing developmentally appropriate practices; hence, the teacher-learner pedagogical relationship is constrained. The main goals of this study were to examine the perceptions of teachers regarding: (a) the impact of systemic constraints on the teacher/learner pedagogical relationship, (b) how the role of the teacher and the role of the learner is fostered or compromised in relation to institutional systemic constraints, and c) the impact of curricular decisions made by teachers in relation to developmentally appropriate practices and systemic constraints.

Background Information

The intention of the *No Child Left Behind Act* (NCLB) of 2001, enacted by the United States Department of Education, was to raise student achievement and improve student motivation, especially for those students from low socio-economic status, students with disabilities, and students from minority groups (Amrein & Berliner, 2003). A standards-based, accountability system in schools emerged from *No Child Left Behind* emphasizing content standards, high stakes testing, incentives for high performing schools on state tests, and sanctions for low performing ones (Abrams & Madaus, 2003; Nichols & Berliner, 2008). As a result, a 'pushdown' of academic standards and accountability has proliferated in early childhood settings. All states require students to

show progress in high standards through mandated testing (Raines & Johnston, 2003). Children are expected to achieve more at a younger age as they try to attain challenging learning standards limiting the scope of what is being learned and taught (Amos, 2002; Lewis, 2003; Goldstein, 2007). Enrichment experiences with hands-on materials have been replaced with paper and pencil tasks (National Association of Early Childhood Specialists, 2000). Moreover, as a result of accountability mandates, academic skills are emphasized resulting in a trend toward traditional, academic instruction in early childhood programs (Nell, 2000).

Currently, under the new administration, *Race to the Top* is an initiative to improve schools whose funding was approved by Congress under the American Recovery and Reinvestment Act of 2009. A key feature of *Race to the Top* is to encourage states to adopt systems that align student achievement data to teachers. This value-added approach compares the test scores of students coming into a grade and comparing it to the students' test scores exiting a grade in order to evaluate the "value" of students' experiences with that particular teacher. However, little or no research actually supports policies linking teacher compensation to student test scores (Welner, 2009).

Many early childhood educators agree that standards and curriculum guidelines are essential to the development of early readiness as a way to improve the quality of early childhood settings (NAEYC/NAECS, 2002). There is consensus among early childhood practitioners that developmentally appropriate practices provide the foundation necessary to achieve optimal learning and foster growth and development of all children (Raines & Johnston, 2003). However, in the current climate, early childhood teachers are experiencing a 'philosophy-reality conflict' that constrains and compromises their beliefs

about what they feel is effective, developmentally-appropriate, and age-appropriate teaching practice for young children (Adock & Patton, 2001). According to Adock & Patton (2001), those pressures that have influenced the personal teaching philosophies of early childhood teachers stemming from a prescriptive, 'pushed-down' curriculum, early learning standards, and accountability mandates such as high stakes testing are known as "systemic constraints" (p. 195).

Developmentally appropriate practices provide a research-based framework for successful teaching and learning in early childhood settings (NAEYC, 2009). The use of developmentally appropriate practices is grounded in the works of early childhood supporters such as Dewey (1916, 1938), Montessori (1949), Piaget (1952), Erikson (1963), Vygotsky (1978), Bronfenbrenner (1979), and Gardner (1993) and are based on the following principles: 1) the cognitive, physical, emotional, and social domains of learning and development are interconnected; 2) children build knowledge and skills based on prior experiences; 3) each child learns and develops at varying rates; 4) development and learning is shaped by social and physical interactions and experiences; 5) children learn and develop in a variety of ways utilizing a wide-range of teaching strategies; and 6) children learn in a supportive, relational community that promotes well-being and care (NAEYC, 2009). Designing curriculum around the use of developmentally appropriate practices provides a dynamic and holistic approach to curriculum and instruction that informs best practices in early childhood settings.

Unfortunately, as a curriculum based on mandated accountability standards stemming from the *No Child Left Behind Act* (2001) and *Race for the Top* (2009) is implemented in the classroom, the teacher's power of curricular decision-making is lost

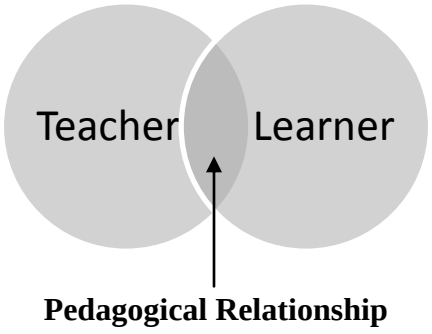
(Fecho, 2004). Early childhood teachers are experiencing very little power over decision-making processes regarding their school's curriculum and instructional practices. As schools are more externally controlled, teachers' autonomy is eroded in making curricular decisions in their classrooms, resulting in more didactic, achievement-oriented instruction (Pence, 2005). Didactic-oriented instruction results in students working most of the time individually on class tasks, hence, limiting the amount of time spent on collaborative work and social interaction with their teachers and classroom peers (Stipek, 2004).

Also lost are opportunities for teachers to engage in activities with their students in the ways they prefer. Teachers are spending more time on tested areas such as reading, science and math, than non-tested areas such as social studies and the arts. As more time is spent on preparing students for state tests, less time is spent on enrichment activities, field trips, and structured play. As a result, some of this instructional time does not represent good pedagogical practice (Pedulla, 2003).

Taking an active role in the classroom is imperative for reaching goals and actions set forth by the teacher. The classroom leader goes from control and demand to facilitator; from directives to shared direction; from exclusion to inclusion. Hence, teaching goes from a 'unidirectional' to a relational process of learning (See Figure 1).

Figure 1

Relational Process of Teaching and Learning



Learning relations are activated and cultivated by 'being' in relation with our students in trust and respect. Without such a relationship, pedagogy becomes a recipe for compliance rather than for promotion of learning (Fecho, 2004). Human relations can provide educators the motivation to promote and maintain what is central to the task of teaching and learning (Sidorkin, 2002). Ultimately, as a result of institutional systemic constraints, the integrity of the teacher/learner pedagogical relationship is compromised.

Statement of the Problem

A focus on accountability standards and a push for early academics have early childhood teachers struggling to negotiate between systemic constraints imposed by accountability mandates stemming from federal and state policies and personal beliefs as to what is developmentally appropriate practice in early childhood settings. Mandated academic standards have intensified the instructional expectations, especially those of kindergarten teachers. Teachers express frustration over having to maintain an accelerated teaching pace which may not be developmentally appropriate in order to cover all mandated standards and content by the end of the year. In the midst of a standards-driven curriculum, early childhood teachers still believe that teaching social skills to children is more important than teaching academic skills (Goldstein, 2007). Moreover, teachers believe that developing social skills such as following directions, taking turns, sharing, and getting along with others are prerequisites to developing successful academic skills (Lin, Lawrence, Gorell, 2003).

Children create knowledge through meaningful classroom experiences that are developmentally appropriate (NAEYC, 2009). Meaningful classroom experiences include

a system of communication and interaction between teacher and child that is conducive to learning. In a recent study children in child-centered programs evidenced greater intrinsic motivation to learn, higher self-confidence in their ability to complete school related tasks, and pride in school related accomplishments (Stipek, 2005). On the other hand, an academic focus without a nurturing and supportive environment may reduce children's engagement and motivation (Hyson, 2003). Learning is a constructivist, reciprocal process that is transformed by curiosity, interest, and the desire to learn (Sarason**,** 2004). When teachers provide an emotionally stable, supportive learning relationship, children can thrive academically and socially (Gallagher & Mayer, 2008).

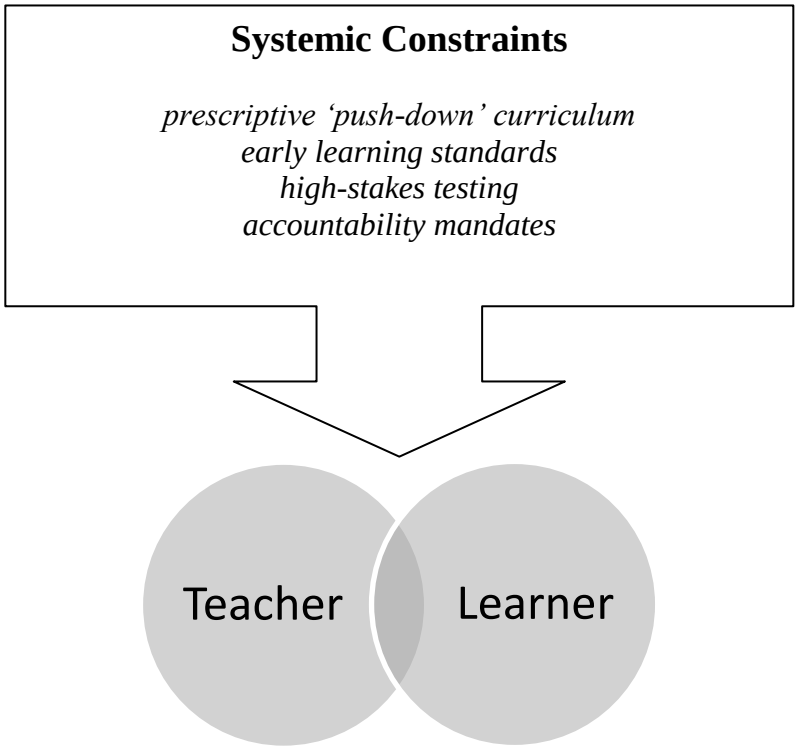
Under the accountability mandates of *No Child Left Behind* and *Race to the Top,* however, children learn to conform to the rules and policies that erode those experiences necessary for meaningful and joyful learning that stem from discovery and curiosity. Curiosity is at risk of becoming valueless to students and teachers who are pressed to conform to the demands of accountability mandates (Jackson, 1990). Even in an era that was not dominated by accountability, John Dewey (1934) noted that without curiosity, the environment is shattered and eventually the physiological as well as the psychological 'self' of the child is affected. The child's knowledge of content areas is not enough; there must be a personal desire to employ this knowledge (Dewey, 1938). Students must be actively involved in their own learning as a substitution for learning passively in the classroom (Redman, 2003).

As greater responsibility and increasing pressure is imposed on early childhood teachers to focus on a subject-centered curricula and accountability standards, less time is

afforded to implementing developmentally appropriate practices; hence, the teacher-learner pedagogical relationship is constrained (See Figure 2).

Figure 2

Pedagogical Relationship is Compromised



Research Questions

This study investigated the perceptions of Kindergarten teachers regarding systemic constraints on the teacher/learner pedagogical relationship. The researcher sought to answer the following questions:

- What are Kindergarten teachers' perceptions regarding systemic constraints on the teacher/learner pedagogical relationship in an era of *No Child Left Behind* and *Race to the Top*?

- How are the roles of the teacher and the roles of the learner fostered or compromised in relation to institutional systemic constraints?
- How are the Kindergarten curriculum and developmentally appropriate practices responsive to systemic constraints?

Significance of the Study

This study arises out of a need to better understand the implications of systemic constraints on the teacher/learner pedagogical relationship in early childhood education. How early childhood teachers respond to the influences of systemic constraints on their teaching practice is important because it impacts the teacher's belief system, classroom autonomy, and ultimately, the teacher/learner pedagogical relationship. In an era of accountability (*No Child Left Behind* and *Race to the Top*), high stakes testing and standardization, it is crucial that teaching and learning be facilitated in a meaningful, constructivist environment that is immersed in the pedagogy of relationships that foster the developmentally appropriate needs and interests of the child. This can be achieved by allowing the teacher to maintain autonomy over classroom decision-making and implement developmentally appropriate practices in a time when they are experiencing systemic constraints from accountability mandates (NAEYC, 2009).

Definition of Key Terms

National Association for the Education of Young Children

NAEYC was founded in 1926 and is the largest organization of early childhood professionals dedicated to research-based standards to improve professional practice, high quality programs, and services that promote the well-being of young children (www.naeyc.org).

Association for Childhood Educational International

ACEI is an internationally known organization of educators and advocates who promote and support optimal education and development of children, from birth through early adolescence, and that influence the professional growth of educators and the efforts of others who are committed to the needs of children worldwide (www.acei.org).

Early Childhood Years

Early Childhood is the period of child development that spans from birth to age eight (www.naeyc.org).

Accountability

Particular to this study, accountability refers to a standards-based curriculum that emphasizes high-stakes testing resulting in a 'push-down' of traditional, academic instruction in early childhood programs (Abrams & Madaus, 2003).

Systemic Constraints

Specific to this study, systemic constraints is defined by Adcock & Patton (2001) as the pressures that have influenced the personal teaching philosophies of early childhood teachers stemming from a prescriptive 'push-down' curriculum, early learning standards, and accountability mandates such as high-stakes testing.

Developmentally Appropriate Practices

Grounded in child development research, developmentally appropriate practices provide age and grade level related learning experiences with reasonable expectations in early childhood education that support and promote the physical, social, emotional, and cognitive domains of development and learning of all children (NAEYC, 2009).

School Readiness

According to the National Education Goals Panel (2005) school readiness is multifaceted, encompassing those areas such as cognitive, social and physical skills, as well as family and environmental factors, that aid young children to thrive and to be successful in their early school years (www.gettingready.org).

Constructivism

Grounded in the work of John Dewey and Jean Piaget, constructivism views learning as knowledge actively constructed by the learner, rather than receiving and processing information disseminated by the teacher (Woolfolk, 2008).

The "Gifts"

Developed by Friedrich Froebel, the Gifts were a series of ten sequential and interrelated educational tools or manipulatives, used in the original Kindergarten in Germany. With increasing levels of complexity, the Gifts provide children with a vehicle to explore mathematical and scientific concepts, as well as an early appreciation for the nature of beauty (Wiggin, 2009).

The "Occupations"

Friedrich Froebel devised a series of "occupations" that Kindergarten children could physically manipulate so as to provide creative experiences with perforating, sewing, drawing, weaving, cutting, folding, and molding (Wiggin & Smith, 2009).

Differentiated Instruction

Providing different learning environments to different students that are sensitive to individual levels of readiness (Woolfolk, 2008).

Limitations

This study was limited in several ways. First, only public school Kindergarten teachers were considered in this study. A future study will need to include the perspectives of Kindergarten teachers in private schools in relation to their experiences with systemic constraints in order to compare those to public school teachers. The study may also be limited in the number of male participants, since most early childhood educators are women (Johnson, 2010). Last, even though the current study had a small sampling size of participants, qualitative case study research emphasizes careful selection of participants which will provide thick description and thorough interpretation of the study (Merriam, 2009; Patton, 2002).

Organization of the Dissertation

This dissertation is presented in five chapters. Chapter One provides an introduction to the research study, including the nature and scope of the problem under investigation and the justification/rationale for researching the question. In Chapter Two, current research and literature regarding constructivism, the evolution of the kindergarten, and the impact of systemic constraints on the teacher/learner pedagogical relationship will be reviewed. The research methodology of the study is described in Chapter Three. Data analysis and findings are discussed in Chapter Four. Finally, Chapter Five presents a discussion of the results, implications for practice, reflection, and suggestions for further research.

CHAPTER II

LITERATURE REVIEW

The purpose of the current research study was to inform the early childhood community regarding the effects of systemic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings. As greater responsibility and increasing pressure is imposed on early childhood teachers to focus on a subject-centered curricula and accountability standards, less time is afforded to implementing developmentally appropriate practices; hence, the teacher-learner pedagogical relationship is constrained. The main goals of this study were to examine the perceptions of teachers regarding: (a) the impact of systemic constraints on the teacher/learner pedagogical relationship, (b) how the role of the teacher and the role of the learner is fostered or compromised in relation to institutional systemic constraints, and c) the impact of curricular decisions made by teachers in relation to developmentally appropriate practices and systemic constraints.

The Qualitative Paradigm

Researchers situate their epistemological, ontological and methodological beliefs in a *paradigm*, or an "interpretive framework" (Denzin & Lincoln, 2005, p.22). Guba (1990) defines a paradigm as a "basic set of beliefs that guides action" (p.17). In the case of this particular study, the researcher elected a qualitative paradigm in order to work within a interpretive and naturalistic approach that seeks to understand human experience (Creswell, 1998). Qualitative research has become more dominant as a mode of inquiry in the social sciences, including education, social work, and nursing (Schram, 2003). Additionally, qualitative research has emerged in the last four decades as a "quiet

methodological revolution" that continues to gain popularity and momentum in the 21st century (Denzin & Lincoln, 2008, p. viii). Third, qualitative work in the social sciences reaches out and connects the voices and "perspective to praxis" that embraces "relationship, mutuality, and genuine dialogue" (Patton, 2002, p. 64).

Schram (2003) delineates several distinctive components of qualitative inquiry: 1) direct personal experience in real world settings; 2) interactive and intersubjective nature; 3) sensitivity to context; 4) attentiveness to particulars; and 5) interpretive nature. First, the researcher seeks a deeper understanding of human experience in real-life situations and settings. It allows the researcher to enter the world of people and their circumstances. Qualitative inquiry focuses on a natural unfolding of events without the confines of a controlled setting, which is required in quantitative research.

Second, qualitative inquiry acknowledges that in order to understand human experience, the researcher must engage in the social world of "other." The researcher's presence in the setting as he/she listens, talks, observes, reads, and reflects provides opportunities to construct knowledge and meaning.

Third, in order to understand complex phenomena, the qualitative researcher must be sensitive to context. In other words, human experience cannot be understood if separated from the circumstances or context from which they naturally occur. Quantitative inquiry, on the other hand, relies on searching for "truth" independent of context. Hence, qualitative research strives to preserve context as a means of understanding phenomena.

Fourth, qualitative research values attention to the particular or sometimes to the unpredictable nature of human experience. The particulars of human experience are

captured by the researcher observing and recording in depth the details and the complex phenomena of specific cases. Last, the qualitative inquirer enters the world of "other" not only to generate facts or data about human experience but also, and most significantly, to engage in an interpretative process that documents, constructs, and synthesizes the significance of those experiences.

Theoretical Framework

The Constructivist Paradigm

One of the philosophical orientations that informs qualitative research is constructivism (Merriam, 2009). Constructivist philosophy considers a "relativist ontology," which holds that people construct multiple realities in their lives and in their interactions with others (Patton, 2002). Its epistemological premise is "subjectivist," where "knower and respondent co-create understandings" (Denzin & Lincoln, 2008, p. 32). Methodologically speaking, constructivism positions itself in the natural world, allowing the researcher to investigate phenomena in real world settings (Denzin & Lincoln, 2008).

This study is situated in Dewey's (1938) constructivist theory, which emphasizes how a social, relational teaching and learning environment is crucial to the early childhood classroom. In *Experience and Education* (1938), Dewey explains his views:

> There is, I think, no point in the philosophy of progressive education which is sounder than its emphasis upon the importance of the learner in the formation of the purposes which direct his activities in the learning process, just as there is no defect in traditional education greater than its failure to secure the active cooperation of the pupil in the

> construction of the purposes involved in his studying. (p. 67)

Constructivism anchors itself on a spirit of individualism, which respects and validates the way we make sense of the world (Crotty, 2003). This is achieved by inviting students to explore the complexities of *their* world by asking questions and generating their own answers (Brooks and Brooks, 2002). Learning becomes a process that enables children to make sense of their world by making connections and constructing their own meanings (Greene, 1995). At its core, is the imperative of learning in an environment that is fully immersed in experiences that are constructed by an individual, and for this study, by the experiences constructed by the child in the early childhood classroom. Children in the early childhood classroom construct knowledge in an environment that is relevant to their needs and interests (Jackson, 1990). The formation of identity is nurtured in an environment that celebrates the worth and agency of the child (Greene, 1995). The child, who lives and interacts naturally in his/her surroundings, should, therefore, also construct knowledge in relevant surroundings. Learning takes place when a child's ideas completely fuse with his interactive actions (Dewey, 1934). When children are actively engaged in a relational, or as Fecho (2004) terms it, 'transactional,' pedagogical curriculum of discovery and invention, aesthetic play emerges and envelops students with learning that speaks to them. Learning becomes a seamless, transactional process that brings into play the child's motivation, attitudes, and emotions in relation to others.

Guiding Principles in Constructivism

We can trace the beginnings of constructivism to the work of the Italian scholar and philosopher Giambattista Vico. His treatise on knowledge construction was

published in 1710. He was an early source of intellectual development who, according to von Glaserfeld (1989), a radical constructivist, said, "The human mind can only know what the human mind has made." At the time his ideas on the construction of knowledge were radical since he was questioning the traditional, rationalist epistemology of Descartes. His dictum, "verum ipsum factum," whose translation means "the truth itself is made" or "true itself is fact," expresses Vico's epistemological idea that the process of constructing knowledge comes from the man who created it (von Glaserfeld, 1989).

In more current times, we can attribute constructivism to the pioneering work of Piaget. Piaget's theory of cognitive development explains how one can make sense of the world by the direct experiences we come in contact with such as objects, people, and ideas. As humans we have a tendency toward organization when we combine, arrange, recombine, and rearrange ideas into meaningful systems. These special structures are called "schemes" and are the "building blocks of thinking" (Woolfolk, p. 37). Humans also have a tendency toward adapting to their environment which Piaget termed "adaptation" (Woolfolk, p. 37). There are two processes involved in adaptation: assimilation and accommodation. Assimilation is used when people use their existing schemes to record new experiences, while accommodation is used when people open new schemata if the existing schemata are inappropriate for the new information (Woolfolk, p. 38). Hence, the "schemata are linked to each other in ways that are unique to the individual, representing the unique experiences of the individual and the unique connections the individual has made between and among those experiences" (Martin, 2009, p. 210).

Pasnak, Holt, Cambell, and McCutcheon's (1991) study compared the performance of children using Piaget's cognitive operations (Piacceleration curriculum) to those using a traditional mathematics program to examine cognitive and achievement gains in concrete operational functioning. Seventeen kindergarten classes from Northern Virginia schools were selected to participate. Teachers were asked to select five of their lowest achieving students to participate in the study, excluding those language problems or special problems. Students were then divided randomly into an experimental group or control group representing ethnic diversity and socioeconomic levels. The control group received the district's curriculum guide for mathematics instruction, while the experimental group received instruction using the Piacceleration curriculum. Instruction for the control group included bingo boards, geoboards, a variety of household items, pattern blocks, calendar work, solving addition and subtraction problems verbally, and teacher-made worksheets. The experimental group used classification, seriation, and number conservation instruction based on Piagetian principles (pp. 5-8).

The results found that using the Piacceleration curriculum led to significantly higher cognitive gains than using the conventional curriculum. Cognitive gains resulted for the experimental group in part because Piacceleration instruction involved recognizing the efforts (self-regulating and self-constructing) of the learner through coaching, feedback, and encouragement until they reached mastery of cognitive operations. On the other hand, the control group received mainly direct-teacher instruction without much support (Pasnak, Holt, Cambell, and McCutcheon, 1991, p. 12).

Piaget's theory of cognitive development is important because it illuminates an understanding of how children think. "Because the development of schemata," explains

Martin (2009), " begins as soon as the mind is capable of processing stimuli, it is plain to see it is to a child's advantage to experience the richest and most widely varied stimuli possible" (p. 212). In an era of accountability, these experiences counterbalance the scripted, prescribed guidelines imposed on teachers, and are essential in activating the teacher/learner pedagogical relationship. Hence, Piaget's "research and theory convinces constructivist educators that a particular type of adult-child relationship is necessary for children's optimal development and learning (DeVries, 1991, p. 4).

Another follower of Piaget is Rheta DeVries. DeVries (2002) believes that constructivism is based on the needs and interests of children, where learning is achieved as the child interacts with the physical world, and is facilitated in relational learning between teacher and learner, and with other children. Furthermore, DeVries believes that children are constructors of knowledge, whose knowledge is best assessed not through testing but rather in their work.

Not only is a child's interaction with the physical world essential in constructivist education, but also in his interactions in relation with teachers and peers. DeVries, Haney, and Zan's (1991) study examined the importance of interpersonal behavior in constructivist classrooms. The study included three kindergarten classrooms with three distinct instructional methods: a constructivist classroom, a teacher-directed classroom, and an eclectic classroom, which included both constructivist and teacher-directed methods. Data collection procedures included videotaping and audiotaping each of the three teachers for two days interacting with students. Coding was based on four levels of negotiation strategies: Level 0 (impulsive) – the teacher negotiates classroom situations by physical (grabbing) or psychological (yelling) means; Level 1 (Unilateral) – the

teacher negotiates classroom situations by controlling or commanding through punishment and rewards; Level 2 (Reciprocal) – the teacher negotiates classroom situations by responding to the needs or wishes of the students; Level 3 (Mutual) – the teacher negotiates classroom situations of mutual respect by recognizing diversity of points of view and interpersonal encouragement.

Results showed that the teacher-directed classroom scored 97% at the Impulsive and Unilateral levels, the eclectic teacher's interactions were at the 92% unilateral level, 5% at reciprocal level, and 0.2% at the mutual level. The constructivist classroom resulted in interpersonal interactions with 65% at the unilateral level, 31% at the reciprocal level, and 3.7% at the mutual level. Hence, the interactions of the teacher and learner in a constructivist classroom are essential. "The first principle in constructivist education, "asserts DeVries (1991), "is to create a sociomoral atmosphere in which mutual respect is continually practiced (p. 7).

Kamii's (1994) work in constructivism, specifically the teaching of mathematics constructively, contends that teachers need to view the understanding of transmitting knowledge not from the outside, but rather how knowledge is constructed from within. Teachers need to focus not on disseminating information to the student, but by having children think on their own and acting as a facilitator in the constructive process. Kamii asserts that children need to "reinvent arithmetic" using "logico-mathematical knowledge" which is the kind of "knowledge that children can and must construct from within" (p.19).

Kamii's (1994) study examined students from two private schools who have had either traditional math instruction (control group) or constructivist mathematics

instruction (experimental). Both groups had either three years (grades 1-3) of traditional math (control group) instruction or three years (grades 1-3) of constructivist math instruction. At the end of the third year, students were given a post-test to measure their ability to reason logically using word problems. The written post-test included problems that had to be solved by students showing their work. In the second part of the test, students were interviewed and asked to explain the reasoning behind their answers. It was found that the constructivist students (92%) were able to reason logically in explaining their answers while the comparison students (5%) were only able to explain their answers. Kamii concludes that children should not be taught *how* to add, subtract, multiply and divide, but rather the teacher should facilitate logico-mathematical knowledge and let the student reinvent their procedures and arrive at their own answers.

Brooks and Brooks (2002) provide a framework of five principles that guide constructivist teaching and learning: 1) posing problems of emerging relevance to students; 2) structuring learning around primary concepts; 3) seeking and valuing students' points of views; 4) adapting curriculum to address students' suppositions; and 5) assessing student learning in the context of teaching (p. 34).

Principle #1: Posing Problems of Emerging Relevance to Students

Posing problems of emerging relevance to students is an essential principle of constructivist pedagogy. Teachers should take notice of students' interests and desires. However, students' interests don't always have to be pre-existing. Teachers can facilitate topics of relevance by providing students with problem-solving tasks that stimulate and challenge students. The teacher then provides opportunities for students to ponder questions, generate possibilities for solutions, and facilitates opportunities to seek

understanding. Mediation emerges as the teacher mediates the selected topic of inquiry and the students' interests and cognitive abilities with the task at hand (Brooks & Brooks, 2002).

Constructivist teachers prepare problem solving tasks that are often preceded by one "big question" rather than a series of questions as usually posed by didactic teachers using a prescribed, endorsed curriculum. In the constructivist classroom, teachers pose a "big question," give students time to explore and discover the question, and provide the resources necessary to answer it. The didactic teacher, on the other hand, moves quickly through questions in order to keep up with the prescribed timelines of the curriculum. These rigid timelines limit the cognitive development of learners and erode opportunities to learn more complex concepts (Brooks & Brooks, 2002).

Principle #2: Structuring Learning around Primary Concepts: The Quest for Essence

Structuring learning around primary concepts is a critical component of constructivist pedagogy. Teachers design curriculum activities/tasks around broad concepts and "big ideas." When "big ideas" are presented as wholes, or holistically, rather than in isolated chunks such as in traditional teaching, students become engaged and interested in their own learning. Brooks and Brooks (2002) explain:

> When concepts are presented as wholes, on the other hand, students seek to make meaning by breaking the wholes into parts that they can see and understand. Students initiate this process to make sense of the information; they construct the process and the understanding rather than having it done for them. With curricular activities clustered

> around broad concepts, students can select their own unique problem-solving approaches and use them as springboards for the construction of new understanding. (p. 47)

Constructivist teachers create an educational environment that provides students with the primary sources, manipulatives, and interactive materials appropriate to each learning task which guides and encourages students to analyze, synthesize, and evaluate broad concepts and ideas. The environment invites students to participate wholly, regardless of individual learning styles (Brooks & Brooks, 2002).

Principle #3: Seeking and Valuing Students' Points of View

Seeking and valuing students' points of view is a pivotal guiding principle of constructivist pedagogy. Students' points of view are windows of opportunities for teachers to provide meaningful and personalized instruction. Teachers foster students' points of view by encouraging and nourishing student's autonomy and initiative. Autonomy and initiative provide students opportunities to connect ideas and concepts. As students explore, answer, and analyze their own questions, they become responsible for their own learning, and in turn, become problem solvers, but most importantly, problem finders (Brooks & Brooks, 2002).

Seeking students' points of view also means to value what students have to say. In didactic classrooms, the role of the teacher is active where teachers speak most of the time as students take a passive role and listen. On the other hand, in constructivist classrooms the role of the teacher is to listen and to facilitate the mediation process

(Brooks & Brooks, 2002). This level of interaction is critical in establishing for students the importance of their voice in the learning process.

Principle #4: Adapting Curriculum to Address Students' Suppositions

Adapting curriculum to address students' suppositions is the fourth guiding principle of constructivist pedagogy. Students come to classrooms with pre-existing knowledge or truths of how the world functions. Teachers provide meaningful learning experiences that either support or address students' suppositions. Addressing students' suppositions is critical to avoid presenting lessons void of meaning and/or context (Brooks & Brooks, 2002).

Principle #5: Assessing Student Learning in the Context of Teaching

Assessing student learning in the context of teaching is a fundamental principle of constructivist pedagogy. Authentic assessment provides a vehicle for students to partake of assessment tasks that are meaningful and purposeful. Authentic assessment provides several distinct advantages.

First, learning and assessment are not separate components, but rather work together on an ongoing basis. That is, teaching and learning continue as assessment occurs. Assessment occurs as teachers and students interact together, as teachers observe students working with other students and with materials. When teachers use a traditional approach to assessment, such as multiple choice tests, learning, or the students' personal constructions, cease to take place. Therefore, the overarching premise of a traditional assessment becomes "Do you know the material?" While the overarching premise of authentic or constructivist assessment becomes "What do you know?" Second, since authentic assessment requires students to apply pre-existing knowledge to new tasks,

teachers have the advantage of evaluating the difference between what the student has memorized and what has been internalized. Lastly, authentic assessment avoids the pitfalls of right and wrong answers, which narrow the opportunities for students to seek understanding critically and creatively. Hence, as Brooks and Brooks (2002) explain:

> Using assessment results as indices only of individual student knowledge, such information might shed light on the relationship between the student and the teacher. In this paradigm, the student is not assessed in isolation, but in conjunction with the teacher, and both learn as a result of assessment. (p. 87)

Bandura Social Constructivism and Teacher Self Efficacy

A second tenet of constructivism is that learning is situated in social experiences. Bandura's Social Cognitive Theory places an emphasis on individual's beliefs and contends that "what people think, believe, and feel affect how they behave" (p. 25). His theory posits three important constructs: observational learning, self regulation, and self-efficacy. For purposes specific to the current study, understanding self-efficacy is essential.

Bandura (1991) contends:

> The stronger the perceived self-efficacy, the higher the goal challenges people set for themselves and the firmer is their commitment to them. Personal accomplishments require not only skills but self-beliefs of efficacy to use them well. Hence, a person with the same knowledge and skills may

> perform poorly, adequately, or extraordinary depending on fluctuations of self efficacy. (p. 119)

Bandura (1991) believed that self-beliefs affect human behavior in four ways. First, self-belief influences one's choice of behavior. People will act upon tasks in which they feel they are competent and confident in achieving, and avoiding those which are not. Second, self-beliefs will determine how long and how much effort is spent on a given task. The higher self belief one has, the greater the perseverance will be. As a result, perseverance leads to increased performance which in turn leads to a higher sense of self-efficacy. Third, self beliefs affect an individual's emotional behavior and thought patterns. If an individual has a high sense of self efficacy, then the individual feels confident and accomplished. On the other hand, if an individual has a low sense of self efficacy then the individual may feel anxious or insecure in approaching a difficult or daunting task. Finally, self-beliefs affect human agency by recognizing individuals as producers and constructors of experiences. Having self doubt produces hesitation and a sense of defeat, while self-confidence produces a sense of success.

Effectiveness of Constructivist Pedagogy

According to DeVries (2002) the most relevant constructivist education studies are the ones that 1) compare constructivist and non-constructivist learning environments and 2) compare cooperative and traditional teaching styles. Those research studies that expose these ideas and provide evidence of the effectiveness of constructivist education are discussed below.

Rainer, Guyton, and Bowen's (2000) research study sought to understand how early childhood teachers implemented constructivist principles in their classrooms. Participants included six teachers in grades Kindergarten to second grade (two from each

grade level) from diverse classroom settings, and a range of teaching experience (M=8.5 years). Data collection included teachers' demographic data, formal observations using the Constructivist Early Childhood Classroom Evaluation (1998) instrument, formal interviews, and a teacher's belief survey. All six teachers were considered effective teachers; however, three of the six teachers were considered traditional in their approach to teaching, while the other three teachers considered themselves constructivist in their teaching approach.

Distinguishing differences between the traditional teachers and constructivist teachers were significant, especially in their approach to instructional methods. The traditional teachers spent more time managing student behavior including more reminders, rewards, and praise than their constructivist counterparts. The traditional teachers, furthermore, spent most of the time disseminating information during content-teaching, classroom transitions, and schedule reminders. The students in the traditional classrooms spent significantly less time on projects and centers, while the students in the constructivist classrooms worked in longer, uninterrupted blocks of time to complete their selected projects allowing more spontaneity and student/student interactions (Rainer, Guyton, & Bowen, 2000).

Several underlying commonalties emerged from the findings of the Rainer, Guyton & Bowen (2000) study including 1) respectful relationships; 2) real conversations and purposeful talking; 3) intellectual engagement; and 4) shared ownership and responsibility in behavior, learning, and the classroom environment (p.16). The above-mentioned four constructs evolving from this study are consistent with the guiding principles of Brooks and Brooks' (2002) constructivist pedagogy. Establishing *respectful*

relationships is consistent with Brooks and Brooks Principle #3: Seeking and Valuing Students' Points of View. Engaging in *real conversations and purposeful talking* is consistent with Brooks and Brooks Principle #1: Posing Problems of Emerging Relevance to Students. Teacher/student and student/student *intellectual engagement* is consistent with Brooks and Brooks Principles #5: Assessing student learning in the context of teaching. Lastly, *shared ownership and responsibility in behavior, and the class environment* is consistent with Brooks and Brooks Principle #3: Seeking and Valuing Students' Points of View.

One of the largest and most important constructivist versus non-constructivist research studies was conducted by Pfannestiel and Schattgen (1997) for the Missouri State Department of Elementary and Secondary Education. A statewide constructivist education program called *Project Construct* was implemented, though not mandatory, in public preschool through fifth grade classrooms. Over 3500 educators elected to participate and implemented the program in their classrooms. Of those educators, 2200 teachers responded to a teacher belief survey, of which 120 participants were randomly selected and classified as follows: 40 constructivist teachers, 40 non-constructivist teachers, and 40 falling in the middle.

To validate the classifications of teachers, classroom observations were conducted using the Classroom Learning Environment Scale to evaluate indicators of constructivist education. For example, traditional teachers indicated their use of worksheets and flashcards to teach and assess skills. Furthermore, traditional teachers used centers as a reward when children completed work, rather than a place for "doing" work (Pfannestiel & Scattgen, 1997).

At the end of the year, achievement data for 2346 students in both traditional and constructivist classrooms was collected based on standardized achievement batteries and performance tasks. The findings revealed that students in constructivist classrooms scored significantly higher on mathematics and language arts standardized tests as compared to the children in traditional classrooms. Also, performance task scores of classification, writing, reading, and social behavior showed children in constructivist classrooms were significantly more advanced than students in traditional classrooms (Pfannestiel & Scattgen, 1997).

Friedrich Froebel: Architect of the Kindergarten Model

Central to this study is an understanding of the evolution of Friedrich Froebel's Kindergarten model. The foundations of Froebel's educational theory can be traced to his early childhood in Germany. Born the sixth child of a pastor in 1782 and to a mother who died from childbirth complications, Froebel had a difficult time growing up. After the death of his mother, Froebel's father remarried and both took very little interest in him. Froebel's father felt that his son had inferior intellectual abilities. As a result, Froebel spent most of his early days alone and wandering the forests and meadows of Thuringian, Germany developing an observant analytical eye for nature (Heiland, 1999).

Froebel's elementary school years were uneventful; however, his confirmation in 1796 left a profound impression on his religious convictions. Eventually, Froebel's love of nature led him in 1799 to Jena University where he studied natural sciences; however, he left unexpectedly to attend to his ill father who died in 1802. In the same year, Froebel became a forest surveyor in Bamberg, Germany, an occupation that allowed him

to deepen his interest in the mathematical theory of surveying. These past experiences helped mold Froebel's future pedagogical ideas (Heiland, 1999).

In 1805, Froebel moved to Frankfurt, where he met Johann Heinrich Pestalozzi. Inspired by Pestalozzi's educational principles, Froebel discovered his true calling. Froebel wrote:

> I must tell you quite honestly that it is extraordinary how at home I feel in my employment…It is as though I had been a teacher for a long time and was born for this profession; it seems to me that I have never wanted to live in any other circumstances than these. (Lange, 1862, p. 533)

Froebelian Theory

Froebel was determined to expand on Pestalozzi's pioneering educational work, and he advanced by establishing his own educational philosophy and pedagogical principles (Marenholtz-Bulow, 1895, 2007). Froebel agreed with Pestalozzi's central principle that education begins with "sense perception" (Shapiro, 1983, p. 20). However, he also felt that there is a "spiritual mechanism" that must also accompany all early learning (Froebel, 1908, p. 55). In other words, the faculty of the child's reasoning must have a "spiritual objective," one that unites both reason and the child's soul (Shapiro, 1983, p. 20).

Froebel further expanded his theory by creating and dividing the stages of child development into four distinct periods: 1) Earliest Infancy, 2) Earliest Childhood, 3) Boyhood of Man, and 4) Man as a Scholar or Pupil. In "earliest infancy", the intimate bond and support of the parent and child is fostered. The child's self-consciousness is

revealed through his joy, smiles, and tears in union with the vigilance of his parents in comfortable, warm surroundings (Froebel, 1826).

In the stage of "earliest childhood," play and speech constitute the central activities of the child's life. According to Froebel play:

> …is the highest phase of child development…the purest, most spiritual activity of man at this stage, and at the same time, typical of human life as a whole—of the inner hidden natural life in man and all things. It gives, therefore, joy, freedom, contentment, inner and outer rest, peace with the world. It holds the sources of all this good. (Froebel, 1826, p. 55)

Play and speech are relationally imparted and fostered by the mother's maternal instinct and love, as she responds to her child's natural curiosities, needs, and desires (Froebel, 1826). The importance of the role of women in Froebelian theory led to Froebel's inclination to having women teach in the Kindergarten; hence, women—the mothers—are the "educators of the human race" (Froebel, 1826, p. 54).

In the next period, the "boyhood of man," learning and instruction take center stage. The child imitates and participates in the everyday living activities of family life. For instance, the child may care for farm animals or help grow a garden or build furniture. Imitating the fairytales, stories, and songs of childhood, the child may wander off to construct a fort, forming his individual spirit and cultivating his own living space, in the companionship of friends. It is in this stage where Froebel foreshadows the Kindergarten as the "social nursery of the child" (Froebel, 1826, p. 107). The child's

"education room," where children are making and doing things together indoors or outdoors, eventually leads to the idea of group work in the school house (Froebel, 1826).

In the last period, "man as scholar or pupil," the child enters school by transitioning from the outer view of things ("domestic order") to an inner view or "higher spiritual view" of knowledge, insight, and consciousness (Froebel, 1826, p. 129). The child is introduced to the school master who arouses and cultivates the "inner life" or "spiritual nature of things" (Froebel, 1826, p. 129). In other words, the school master imparts the knowledge that gives meaning to the child's life.

The sights, sounds, and materials of Froebel's Kindergarten were central to what he envisioned was essential in cultivating the physical, social, and spiritual development of the child. The classroom environment should be pleasant and attractive to the child's eye; filled with plants, animals, and pictures. The classroom should be comfortably furnished with desks and chairs scaled to fit children and not adults. The classroom should be ample enough to accommodate the spontaneous energy and daily activities of children. The classroom should be well-lit by natural lighting streaming through large windows. Froebel also recommended an adjoining garden outside the classroom to invigorate the child's body and foster his love for nature. Once this environment is in place, the child can be introduced to the educational materials of the Kindergarten, which were created by Froebel, and known as the "gifts" and "occupations" (Shapiro, 1983).

Froebel's Gifts

The "Gifts" were a series of ten sequential and interralated educational tools or manipulatives, used in the original Kindergarten in Germany. With increasing levels of complexity, the "Gifts" provide children with a vehicle to explore mathematical and

scientific concepts, as well as an early appreciation for the nature of beauty and unity (Froebel, 1826).

The "gifts" include balls, blocks or cubes, triangles, parquetry tablets, sticks, and rings. Learning is achieved as the child "plays" with these objects and begins to form his/her own impressions of the physical world. For instance, the child holds the ball, rolls the ball, and/or throws the ball. The "play" properties of the "gifts" introduce the child to movement, motion, direction, and position, and practice with eye-hand coordination and gross motor abilities. The "gifts" are simple and plain in their exterior but their worth is in the application (Wiggin, 2009).

Froebel's Occupations

Friedrich Froebel devised a series of "occupations" whereby Kindergarten children could physically manipulate and provide creative experiences with perforating, sewing, drawing, weaving, cutting, folding, and molding. These experiences were designed to provide the child with skills in manual dexterity, symmetry of design and the value of invention, industry, and perseverance (Wiggin & Smith, 2009).

In all, the gifts and occupations provide children with the development of self expression. Wiggin & Smith (2009) explain:

> The true worth of the gifts and occupations lies neither in the opportunities they offer for industrial training, nor for artistic development. Their prime values lies in the fact that they afford full and free development for creative self-activity, for the expression of the inner life of the child, and

> that, in accomplishing this end, they utilize the activities and interests which are natural to childhood. (p. 22-23)

The Kindergarten in Germany

In 1837, Froebel's centerpiece, the "Play and Activity Institute", comes to fruition in Bad Blakenburg, Germany, where he created his "gifts" and "occupations" and begins to train women in the principles and techniques of childhood development and childrearing (Shapiro, 1983). In 1840, Froebel renames his Institution the "Kindergarten" or "child garden." During this time, there were also preschool institutions which were mainly church-run by mostly male teachers for very poor children. Froebel's Kindergarten, however, catered mainly to middle class children in its inception. Although Froebel's teaching staff were all women, (as the owner/director) he participated in all aspects of his school (Marenhotlz-Bulow, 1985, 2007).

In 1849, Froebel met the Baroness Bertha Marie von Marenhotlz-Bulow who would become one of Froebel's greatest proponents of his Kindergarten model. Her high society status allowed her to introduce Froebel to royal society and academic circles (Marenholtz-Bulow, 1895, 2007). Froebel's Kindergarten found appeal throughout Germany; however, the Revolution of 1848 and the changing political climate thwarted his plans to expand his mission. On August 7, 1851, the education ministry of the Russian government banned Kindergartens "as an arm of the socialist movement, and despite the influence of Froebel's conservative followers, he was unsuccessful in having the prohibition rescinded" (Shapiro, p. 27). It wasn't until 1867 that the first kindergarten was established after the Prussian ban was lifted. Devastated by the closing of

kindergartens in his homeland, Froebel set his eyes on America, with the goal of expanding and establishing his Kindergarten model (Shapiro, 1983).

The Kindergarten in America: Then

The arrival of the Kindergarten in the United States came as a result of German immigrants fleeing the Revolution of 1848 in Germany. Among the political refugees familiar with Froebel's Kindergarten was Margerethe Schurz, who opened the first German speaking Kindergarten in Watertown, Wisconsin in 1856 (Shapiro, 1983).

In 1859, Margarethe Schurz met Elizabeth Peabody and inspired her to open the first English language Kindergarten in Boston in 1860. The success of Elizabeth Peabody's Kindergarten led her to become one of the most important proponents and advocates of the Kindergarten model (Wortham, 1992). Several philanthropists and organizations established Kindergartens "in order to render social services that would alleviate conditions for young children living in slums" (Wortham, 1992, p. 8). By 1876, Kindergartens were well established in the public school system in all states (Wortham, 1992). The Women's Christian Temperance Union opened twenty charity Kindergartens, along with Pauline Agassiz Shaw who opened 31 more Kindergartens by 1883 in the Boston area. By 1880, there were four hundred kindergartens in thirty states.

Froebel's Kindergarten model had its critics. Among his most outspoken critics was John Dewey for several reasons. First, Dewey felt that the name "Kindergarten" suggested a separate entity as do the names primary school and grammar school. These units resulted in "isolation" and "waste" and, therefore, hampered the development of the child. "The organization of the schools into separate units," explained Shapiro (1983),

"further isolated the child from the educational benefits of direct contact with society" (p. 159).

Second, Dewey felt that Froebel's "gifts" and "occupations" were too rigid in that children had to follow a prescribed sequence of tasks in order to move onto the next task. Dewey believed that "social occupations" should be at the heart of the early childhood curriculum, allowing children to experience family life and household chores through playful exercises (Shapiro, p. 162). That is, the laboratory school would become a microcosm of adult society.

The rapid expansion of Kindergarten across the United States continued when in 1893 a model Kindergarten was presented at the Columbian Exposition in Chicago. During the exposition, papers were read and presentations were given on a number of topics related to the Kindergarten. As recognition was gained, Kindergarten educators became part of the National Education Association in an effort to achieve further acceptance. The objectives of their organization were to:

- gather and disseminate knowledge of the Kindergarten movement throughout the world.
- bring into active cooperation all Kindergarten interests.
- promote the establishments of Kindergartens.
- elevate the standard of professional training of Kindergarten teachers (Wortham, 1992, p. 21).

In 1895, school reform is influenced during G. Stanley Hall's opening address on the "new school of scientific pedagogy" at the Annual International Kindergarten Union (IKU) Conference in Chicago whose comments on the "unsoundness of Froebel's

methodology" caused an uproar among the Kindergarten leaders present of which many left the meeting. This event created a divide among those who were staunch believers of Froebelian principles and those who had a more progressive view. As a result, a Child Study Committee was organized by IKU to debate the views between the liberals and conservatives. Subsequently, in 1903, a Committee of Fifteen, and later in 1909 a Committee of Nineteen were established to present contrasting points of view regarding the evolution of Kindergarten programs (Wortham, 1992).

IKU expanded further through 1910-1920, taking interest in the assessment of children in Kindergarten. The use of standardized tests as a way of measuring achievement in academic ability was heavily influenced by Edward Thorndike. Thorndike's influence created a testing movement which lasted through the 1940's and caused major divisions among educators. This testing movement served as a major factor in the standardization of the schools as achievement tests were used for measuring achievement, grouping students and developing a standardized curriculum…which continued to plague American schools and educators into the 1990's (Wortham, p.30).

The expansion of early childhood care during the 1930's and 1940's was prominent as parents sought a place to send their children as they worked through the depression and war, Kindergarten enrollments continued to expand to almost 1.5 million children in 1954. By 1965, between fifty percent and eighty five percent of children attended Kindergarten (Shapiro, 1983).

The Kindergarten in America Now: The Accountability Movement

A shift in Froebel's Kindergarten model came about with the advent of *A Nation at Risk* (1983), a "back to basics" movement that quickly extended to include a more

academic curriculum in the early childhood classroom. In the late 1980's, as a result of the report *A Nation at Risk* a "back to basics" movement, several childhood organizations, including the Association for Childhood Educational International (ACEI) and the National Association Education of Young Children (NAEYC), began to voice their concerns over a growing number of inappropriate instructional practices in early childhood classrooms. NAEYC warned the educational community of standardized testing before the age of eight. Instead, NAEYC recommended that children's progress should be measured by using observation, authentic assessment, and portfolios (NAEYC, 1987). By 1990, the early childhood community's child-centered view of child development and learning was in direct conflict with the opposing view of the educational reform movement's academically oriented view of the curriculum (Wortham, 1992).

In 1991, the Association for Childhood Education International issued a moratorium against standardized testing in early childhood education, warning that teachers were spending a considerable amount of time preparing children to take tests. Hence, teaching to the tests had become the new school curriculum. The role of the teacher is compromised when they are unable to make informed decisions about instruction and provide children with developmentally appropriate learning experiences. Standardized tests are anchored firmly to curricular materials such as basal textbooks and state guidelines that impose a predetermined program that teachers must follow and instructional objectives that children must achieve. As a result, the role of the learner is also compromised, hindering the developmental needs and interests of the child (Perrone, 1991).

In 1999, The Alliance for Childhood, a non-profit organization, was created by eminent scholars such as Linda Darling-Hammond, David Elkind, Howard Gardner, Samuel J. Meisels, Vivian Gussin Paley, Dorothy G. Singer, and Jerome L. Singer, who were concerned for the welfare of children and the endangerment of childhood itself. They were especially concerned at the kindergarten level where the most drastic changes have taken place, including prescriptive curricula, test preparation to meet literary and mathematics standards, resulting in less time afforded to play and exploration (Miller & Almon, 2009). As a result, in 2009 The Alliance for Childhood published a compelling report, *Crisis in a Kindergarten: Why Children Need to Play in School*, containing the most recent empirical evidence from nine research studies calling attention to the growing crisis in public Kindergarten classrooms today. Three of the nine research studies were sponsored by the Alliance for Childhood and are explicated below, which show the effect of systematic constraints on the teacher/learner pedagogical relationship.

The first research study commissioned by the Alliance for Childhood was conducted by Jennifer Astuto from Long Island University and La Rue Allen from New York City. This quantitative study surveyed 142 teachers who worked in New York City full-day Kindergarten classrooms. Seventy-six percent of the teachers reported spending more than an hour each day teaching literacy. Twenty-three percent of the teachers reported spending more than an hour teaching mathematics. Only two percent of the teachers surveyed gave their students more than one hour of choice time. The average amount of time reported by teachers of daily choice time was 29.2 minutes. Forty-four percent of teachers reported that there is not enough time in the daily schedule for sand or water play. Seventy-nine percent of the teachers reported spending some time (1-30

minutes) on daily testing or test preparation. Thirty-seven percent of the teachers reported spending more than 30 minutes per day on testing or test preparation (Alliance of Childhood, 2009).

Similar results were found in the second research study commissioned by the Alliance for Childhood (2009) conducted by Allison Fuligni and Sandra Hong of U.C.L.A. This quantitative study surveyed 112 teachers who worked in full day Kindergarten classrooms in the city of Los Angeles. Ninety-two percent of the teachers reported spending more than an hour daily teaching literacy. Seventeen percent of the teachers reported spending more than an hour daily teaching mathematics. Only one percent of teachers reported giving their children more than 60 minutes of choice time. Twenty-five percent of teachers gave no daily free play to their class. More than half of the teachers, fifty-three percent, reported that there is not enough time in the daily schedule for sand or water play (Alliance for Childhood, 2009).

The third research study, a qualitative study, commissioned by the Alliance for Childhood (2009) and conducted by the Sarah Lawrence College Child Development Institute, examined 14 Kindergarten classrooms in Westchester County, New York. The findings revealed that two out of the fourteen classrooms provided less than 30 minutes of choice or center time daily. The majority of the classrooms gave only 30 minutes of daily choice or center time (Alliance for Childhood, 2009).

The findings of the three preceding research studies suggest a troubling picture of how systemic constraints are impacting teaching and learning in Kindergarten classrooms today. First, most instructional time is dedicated to teacher-directed tasks, especially in mathematics and literacy skills. Second, standardized testing and test preparation are

daily occurrences in most Kindergarten classrooms today. Third, choice time or free play is limited to 30 minutes per day, with many classrooms experiencing no daily playtime. Last, teachers report that the main obstacle for children not having playtime in Kindergarten classrooms is that the curriculum does not allow for extra time for play and is not an integral part of the daily curriculum (Alliance for Childhood, 2009).

Goldstein's qualitative study (2007) revealed that early academics in Kindergarten, has created a curriculum/instruction tension between what they perceive to be developmentally appropriate practices and the demands of academic standards as a result of the push-down curriculum. Participants from the study also indicated that tensions also exist from the expectations of first grade teachers and from the students' parents. The results also indicated that instructional pacing has intensified in order for the Kindergarten teachers to cover the required content. Professional tensions revealed that the first grade teachers pushed their own load down into the Kindergarten, which resulted in more material that the Kindergarten teacher had to cover. This study clearly revealed that mounting systemic constraints have imposed pressure and tension in Kindergarten teaching and learning today.

Stipek's (2004) study of 314 Kindergarten and first-grade classrooms points to systemic constraints that have infiltrated especially hard in areas serving low-income and minority students. As a result, the study found that teachers in these areas stressed basic skills more than inquiry-oriented, constructivist learning activities. Didactic, scripted teaching instruction was particularly prevalent among schools serving African American students. Didactic instruction included an emphasis on phonics, paper/pencil activities, rote memorization of letters, sounds, words and passages. Teachers perceived that

didactic instruction and students working individually would result in higher test scores. Cooperative groups and social interaction were discouraged. The main result of the study indicated that those schools that served low-income children and African American students resulted in more didactic teaching and less constructivist, child teaching.

As evident in the research studies above, systemic constraints are also impeding children from the benefits of play, which are imperative to the cognitive, physical, social and emotional development of young children (Alliance for Childhood, 2009). The American Academy of Pediatrics also supports with this premise:

> American children with adequate resources may be limited from enjoying the full development assets associated with play because of an increased focus on the fundamentals of academic preparation…Play is integral to the academic environment. It ensures that the social setting attends to the social and emotional development of children as well as their cognitive development. (Ginsburg, 2007, p. 183)

In an international study of Chinese Kindergartens Yan, Yuejuan, and Hongfen (2005) examined how play and play-related activities have impacted Kindergarten educational reform. The study revealed that the Kindergarten's "interesting centers" remain centers for play. When children of the study were asked if they were allowed to play during the day, 70.4% responded that they could go to play in the "interesting corners" or when outdoors during activity time. The "interesting corners" or " interest corners" provided children with freedom to select toys and materials to play with and make choices based on constructive principles, which stresses children as active learners

learning through play. The study revealed that children were allowed to play every day for at least 49 minutes in the "interest corners" (p. 110). The study concludes that considering China's traditional teaching practices, play and play-related activities have increased and have had positive effects in today's Kindergarten.

School Readiness and Transition to Kindergarten

The new demands of the academic curriculum in Kindergarten requires students who are entering Kindergarten to be ready for school. The largest research study conducted to date was in 1996 by the National Center for Early Development and Learning which surveyed 3,600 Kindergarten teachers regarding how transitions to Kindergarten impacted the readiness skills of incoming children. The survey found that 52 percent of children entered Kindergarten successfully; however, teachers reported that 48 percent of the students exhibited moderate to serious problems transitioning to Kindergarten. Teachers of the study also reported that they had concerns with students not following directions (46%), poor academic skills (36%), lack of parental support (35%), and difficulty of the child working independently (34%) (Pianta, R.C., Cox, M.J., Taylor, L., & Early, D.M., 1999).

The National Center for Education Statistics (2001), the primary federal department that collects, analyzes, and reports on data related to education in the United States, conducted one of the largest studies on school readiness for children entering Kindergarten. This national study of 19,000 public and private school children gathered data through interviews with parents, surveys to teachers and administrators, and school records. Also, a battery of assessments were administered to measure the ability of academic skills in three areas: reading, mathematics, and general knowledge (nature,

science, social studies, and citizenship). The assessments for reading skills of first time Kindergartners showed that 66% were able to recognize letters, 29% knew the beginning sounds of words, 17% knew ending sounds of words, 2% could read sight words, 1 percent could read words in context. The results of the math assessment indicated that 94 percent of first time Kindergarteners could count to ten, identify numbers 1-10, and could identify shapes such as a circle and square; 58% could count beyond 10, and judge relative length; 20% of Kindergarteners could read two-digit numerals, identify ordinal position (first, second, third) and identify a pattern in number sequence (2, 4, 6, 8, 10); 4% were able to add or subtract simple addition or subtraction; 1% was able to complete simple multiplication and division problems.

The study also indicated that the demands of the academic curriculum in Kindergarten may be more challenging to at-risk children entering Kindergarten for the first time. Risk factors in the study included children coming from a single-parent household, having a mother with less than a high school education, food stamps or welfare households, and having parents whose first language was not English. The findings indicated that 46 percent of Kindergartens have at least one or more of the above risk factors, 31 percent have one risk factor, and 16 percent had two or more risk factors (National Center for Education Statistics, 2001).

The implications of both of the above studies indicated that children entering Kindergarten for the first time may not be adequately prepared for the increasing academic demands of the Kindergarten curriculum. Teachers, therefore, are not only experiencing the systemic constraints imposed on them as a result of the push-down curriculum in Kindergarten, but also the mounting pressures of children who are entering

Kindergarten unequipped with the academic skills needed to succeed (National Center for Education Statistics, 2001).

Cox, Rimm-Kaufman, and Pianta's (2000) national study examined the perceptions of Kindergarten teachers regarding the problems that children encountered entering Kindergarten. Teachers of the study indicated that 52 percent of children transition into Kindergarten successfully, 32 percent had a moderately successful transition, and 16 percent with serious transition problems. Specific transition problems included difficulty following directions, weak academic skills, and difficulty in working independently. Teachers perceived that almost half of the children entering Kindergarten demonstrated problems in transitions because of the differences in climate as they transition from a socially oriented environment to an academically oriented environment.

Stuber and Patrick's (2010) longitudinal study, which followed children from Kindergarten to third grade, found that children entered Kindergarten with strong oral language skills and adequate social skills; however, their written language skills were the lowest of all skills assessed. Those students who scored high among all assessed domains attributed their high scores to having attended a preschool before entering Kindergarten. In the third year of the study, when the Kindergarten children completed their third grade year several significant findings resulted. First, those children who entered Kindergarten with the highest literacy levels continued to maintain high levels in their third grade assessments. Second, those students who entered Kindergarten with low scores, but had higher changing scores, improved more than those students who entered Kindergarten with a higher score. Last, those children whose parents read daily to them before entering Kindergarten, scored higher on third grade assessments.

Chapter Summary

Chapter II explored the literature including the researcher's theoretical stance, which is constructivism. A history of the kindergarten was provided in order to establish background knowledge of the evolution of the kindergarten. School readiness was explored within the context of examining the demands of the academic curriculum in kindergarten.

Current systemic constraints in our schools are putting students at risk of failing (Darling-Hammond, 2006). What students are being taught and the way that they are learning in school is reduced in quantity and quality as a result of standardization (McNeil, 2000). Hence, we cease taking the lead from the learner and follow a new standardized pedagogy (Kagan, Carroll, & Scott, 2006). These systemic constraints are most evident in current kindergarten pedagogical practices today (Alliance of Childhood, 2009).

CHAPTER III

METHODOLOGY

The purpose of the current research study was to inform the early childhood community regarding the effects of systemic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings. As greater responsibility and increasing pressure is imposed on early childhood teachers to focus on a subject-centered curricula and accountability standards, less time is afforded to implementing developmentally appropriate practices; hence, the teacher-learner pedagogical relationship is constrained. The main goals of this study were to examine the perceptions of teachers regarding: (a) the impact of systemic constraints on the teacher/learner pedagogical relationship, (b) how the role of the teacher and the role of the learner is fostered or compromised in relation to institutional systemic constraints, and (c) the impact of curricular decisions made by teachers in relation to developmentally appropriate practices and systemic constraints.

The aim of this case study was to examine how kindergarten teachers perceive the effects of systematic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings. This section presents the research methodology that was implemented to examine the problem/situation. An explanation of the instrumentation, sampling, reporting of the interview data and observations is provided below.

Rationale for a Multiple Case Study Design

Case study research is currently a well-accepted approach in qualitative research literature (Flick, 2002; Schram, 2003; Shank, 2006). This empirical inquiry method is used by researchers who seek to investigate a phenomenon within a real-life context (Yin, 2003b). Specifically, the design type that was employed for this study was a qualitative,

multiple case study approach which produces more powerful and robust results than a single case study (Yin, 2003a). This approach is designed to focus on the meaning of a particular experience and allows the researcher to inquire and frame the perspectives and experiences of its participants (Rossman & Rallis**,** 1998).

Currently, an understanding of complex phenomena, such as the study of 'human learning' and 'human relations' is prevalent in qualitative descriptive work (Jarvis & Parker, 2005). Particular to this study is the examination of how systemic constraints influence the teacher/learner pedagogical relationship in the Kindergarten setting. By experiencing the phenomenon first hand, one can begin to understand and interpret the 'world' through the other person's experiences. Therefore, conducting in-depth interviews and field observations is essential to the study as these approaches allow the researcher to capture the thoughts, actions, and interactions of human experience (Lawrence-Lightfoot & Davis, 2002). In order to understand the phenomenon being studied, experiences must be thoroughly described and rigorously explicated and interpreted. Explication and interpretation emerge from capturing the essence of participants' experiences and, in turn, give meaning to understanding human experience (Patton, 2002; Seidman, 2006).

Data Generation

As recommended by Merriam (1998) data collection was threefold: interviewing teachers, conducting field observations of the randomly selected participants, and examining relevant classroom documents. Prior to collecting data, the researcher obtained approval from Barry University's Institutional Review Board and the Miami Dade County Public Schools Research Office. The first method of data collection was to interview the randomly selected participants using semi-structured, in-depth interviews

(Denzin & Lincoln, 2000; Seidman, 2006; Stake, 1995). Use of semi-structured interviews is most favored by qualitative researchers to assure some degree of latitude in asking questions and comparability among all interviews (Shank, 2006). According to Kvale and Brinkmann (2009), an *inter-view* is a conversation between two persons on a mutual topic of interest (p. 2). A 'semi-structured world interview' provides the researcher with thick description of the 'life world' of the participants and interpretation of the ascribed phenomena (Kvale & Brinkmann, 2009). Following each interview, the researcher also attained data relevant to the Kindergarten experience by conducting a series of classroom observations and performing a document review of relevant data sources that were provided by the teacher.

The Interview Protocol

An interview protocol was developed by the researcher using Kvale's and Brinkmann's (2009) framework on designing interview instruments. Particular to this study, the interview protocol included three sets of semi-structured questions that attempt to capture the perceptions of Kindergarten teachers regarding the effects of systemic constraints on the teacher/learner pedagogical relationship. The interview protocol is provided in Appendix A. The three sets of questions focus on the following areas: (a) The Role of the Teacher, (b) The Learner, and (c) The Kindergarten Curriculum.

In the first component, The Role of the Teacher, the questions prompted participants to share their perceptions regarding systemic constraints and how these constraints influenced their teaching style, autonomy and philosophy in relation to early childhood education. In the second component, The Learner, the interview questions focused on pedagogical relations (interaction, active learning versus passive learning, engagement, lingering, intentionality) between teacher and learner and explore whether

relationships are influenced by systemic constraints. In the last component, The Kindergarten Curriculum, the interview questions addressed how the curriculum and developmentally appropriate practices are responsive to systemic constraints. In addition to these guiding questions, teachers were given the opportunity to address any topic in relation to Kindergarten curriculum and/or instructional practices which might be pertinent to the discussion.

Participant Sampling

The participants were selected from a sample of all Kindergarten school teachers from Miami Dade County Public Schools. Random sampling was utilized to select participants. Random sampling ensured no bias and an equal opportunity for all participants to be selected as part of the sample. It also provided an 'independent chance' that the researcher did not select one participant over another (Salkind, 2006). In terms of sampling size, a maximum of four participants were selected by the researcher to participate in the qualitative interviews and observations of the setting as recommended by Creswell & Plano (2007).

Sampling criteria was based on Kindergarten teachers who had a minimum of seven years of teaching experience, of which two years teaching were at the Kindergarten level. Focusing the sample group to include teachers with prior teaching experience and advanced educational training was important to this study in order to ensure that teachers have had the time to reflect upon policies such as NCLB (See Table 1). These criteria provided the researcher with thick description and in depth understanding of the perspectives of Kindergarten teachers from different educational settings and/or ethnic backgrounds in regards to how systemic constraints influenced the teacher/learner pedagogical relationship.

Table 1

Teaching Experience

	Yrs. Teaching	Yrs. Kindergarten	Highest Degree
Ana	23	23	Master's
Beth	25	20	Master's
Coretta	25	12	Master's
Diane	37	9	Specialist

With the recommendation and approval from Miami Dade County Public School's Research Office, the Director of the "Pre-K/Elementary Instructional Support" Division was chosen to attain the contact information needed to gain access to Miami Dade Public School Kindergarten teachers. Once this information was attained, the Director generated a sampling pool of schools and teachers who met the criteria of the study, of which four teachers were randomly selected.

The Director then sent an email to the principals of the selected school locations to explain the nature of the study. After the principals responded to the Director, the researcher made appointments at the school site to meet with each of the respective principals to discuss the research study. Furthermore, each principal introduced the researcher to the randomly selected teachers at each of the designated schools. The researcher met individually with each teacher, and an invitational letter (Appendix B) was presented describing the purpose of the study and explaining how to contact the researcher to schedule a time for signing the consent forms (Appendix C and D) and arranging for the commencement of the interview process. All teachers were told that participating in the study was strictly voluntary and they had the option of declining to

participate. They were also given the option to drop out of the study anytime. At a mutually convenient time, consent forms were signed and interviews were conducted individually at the participant's school site.

To maintain confidentiality, participants were assigned a pseudonym. In the order when interviews were conducted teachers were given the following pseudonyms: Ana, Beth, Coretta, and Diane. School sites where each teacher worked were also protected and assigned pseudonyms as follows: Arbor Elementary (Ana), Bright Elementary (Beth), Casa Elementary (Coretta), and Davis Elementary (Diane).

Data Generation: Participant Interviews

Each respondent was interviewed once by the researcher at the participant's selected site for approximately one hour using the interview protocol. Interviews were audiotaped digitally and transcribed with the consent of each participant. The researcher conducted a 'validity check' by having participants review each of their interviews transcripts. All interviews were conducted by the researcher over a period of one month. After all interviews were conducted, audio-taped transcriptions were completed by an experienced transcriber who agreed to sign the Third Party Confidentiality Agreement Form (Appendix E). Audio tapes were kept in the researcher's office in a securely locked cabinet until completion and approval of transcription, at which point they were destroyed.

Data Generation: Field Observations

After the interviews were conducted, the second form of data collection generated was the field notes from observations of each teacher interacting with her students in the educational setting. The complexities of human experience and behavior are captured in its 'ecological context' (Lawrence-Lightfoot & Davis, 2002, p. 44). Being

immersed in the setting allows the researcher to experience the reality of the participants (Marshall & Rossman, 2006). This type of observation is naturalistic allowing the researcher to observe participants in their natural environment. The role of the researcher is 'participant-as-observer' where the researcher spends time on the 'inside' and informs participants that they are being studied (Tashakkori & Teddlie, 2003).

Developed by the researcher, the observation form included four areas: 1) The Physical Ecology of the Setting, 2) The Social Ecology of the Setting, 3) The Formal/Academic Instruction Time of the Setting, and 4) The Enrichment Activities of the Setting. Each teacher was observed in the classroom setting by the researcher two times over a period of two weeks. Each week the teacher was observed once for three hours for a total of two observations (See Table 2). These focused observations were conducted after the interviews, to see how the classroom setting influenced behavior and relationships (Marshall & Rossman, 2006). The observation form is provided in Appendix F. There was no video-taping during the observations of the educational setting.

Table 2

Observation Timeline

Week 1	→	Observation 1	→ Day 1 (3 Hours)
Week 2	→	Observation 2	→ Day 2 (3 Hours)

Data Generation: Document Collection

The third method of data collection was to examine documents relevant to classroom practice. The documents were examined by the researcher after the interviews and observations had been conducted in order to provide critical insights into how the documents informed the teachers' classroom practice. Document analysis was employed to provide the researcher with a means of describing and interpreting the documents of the setting (Merriam, 1998; Shank, 2006). Documents provided the researcher with a richer understanding of the complexities of the study (Marshall & Rossman, 2006). These documents included curricular guidelines, lesson plans, and class schedules which informed the researcher of the various types of materials used during instructional time and their influence on teaching practice. Some teachers provided other documents which they felt might be of interest to the researcher (i.e. home learning documents). All data collection was completed by June 2010.

Establishing Trustworthiness

In order to substantiate findings, several dependability and credibility procedures were employed. For ensuring dependability, an audit trail and 'member checks' were conducted (Marshall & Rossman, 2006; Stake, 1995). An audit trail and member checks confirmed the rigor of fieldwork and minimized biases (Patton, 2002). Also, as recommended by Yin (2003b), triangulation was employed which offered the best approach when working with case study data.

Triangulation of Data

In order to achieve triangulation, the interviews, classroom observations, and classroom documents were first analyzed separately. Data analysis of the interviews consisted of two main phases. In the first phase each individual case was analyzed, coded, and reported. In the second phase, cross-case analysis was employed to merge all

cases and provide a more in-depth, comprehensive understanding of the research questions. After the interviews were completed, the researcher collected data in the form of field notes of each teacher interacting with the students in the educational setting. Using the observation protocol (Appendix F), the teacher documented four areas with specific relevance to the study. After all observations were completed, the researcher conducted a document review and analysis of the data by utilizing a checklist (See Table 6). Triangulation of data established the credibility and rigor of research findings (Shank, 2006). To attain assurance of data results and interpretation, triangulation was achieved by reviewing participant interviews, focused observations, and relevant classroom documents including curricular guidelines, lesson plans, and class schedules.

Particular to this study, triangulation was achieved by conducting a "cross-data validity check" (Patton, 2002, p. 248). After each of the three data sources (interview transcriptions, observation notes, documents) of the study were analyzed separately, documents were then cross-checked to confirm consistency among all sources. According to Patton, "cross-data validity checks" offer the opportunity "for deeper insight into the relationship between inquiry approach and the phenomena under study" (p. 248).

Pilot of Instrument

To establish content validity of the instrument, a pilot of the interview protocol was conducted using a Miami Dade County Public School Kindergarten teacher. The piloting of the interview instrument took place at the teacher's school site. Using the interview protocol developed by the researcher, the interview was recorded on a digital tape recorder. The interview took one (1) hour and fifteen (15) minutes to complete. After the interview was completed, the researcher asked the participant to recall any situational

constraints that she may have experienced during the interview. The participant noted that the questions asked were clear and provided for interesting discussion and reflection. Also, the amount of time the interview took to complete was fair and appropriate in length. At the conclusion of piloting the instrument, the tape recording was destroyed.

Piloting the instrument permitted the researcher to establish content validity of the interview protocol. "Validity" explains Patton (2002), "depends on careful instrument construction to ensure that the instrument measures what it is supposed to measure" (p.14). As a result, no modifications were made to the interview protocol nor the observation protocol. Procedurally, the use of a cassette player during the pilot study was upgraded to a digital recording device to produce better sound and for establishing an easier way of facilitating transcriptions.

The preliminary findings from piloting the instrument indicated the theme of "stress" linked to the push for academics and high stakes testing in Kindergarten. That is, not only was the teacher stressed by the fact that a push for academics and standards has infiltrated the Kindergarten setting, but also that the teacher was stressed by having to teach and cover aspects of the mandated curriculum which she felt were inappropriate to the developmental process of learning in Kindergarten children.

CHAPTER IV

DATA ANALYSIS

The purpose of the current research study was to inform the early childhood community regarding the effects of systemic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings. As greater responsibility and increasing pressure is imposed on early childhood teachers to focus on a subject-centered curricula and accountability standards, less time is afforded to implementing developmentally appropriate practices; hence, the teacher-learner pedagogical relationship is constrained. The main goals of this study were to examine the perceptions of teachers regarding: (a) the impact of systemic constraints on the teacher/learner pedagogical relationship, (b) how the role of the teacher and the role of the learner is fostered or compromised in relation to institutional systemic constraints, and c) the impact of curricular decisions made by teachers in relation to developmentally appropriate practices and systemic constraints.

Data analysis consisted of two main phases. In the first phase, *each* individual case was analyzed, coded, and reported. In the second phase, cross-case analysis was employed to merge all cases and provide a more in-depth, comprehensive understanding of the research questions.

Phase I

In the first phase, Groenwald's (2004) 4-step explication process was employed to transform the data of *each* individual case study into interpretation by: 1) bracketing and reduction; 2) delineating units of meaning; 3) clustering units of meaning to form

themes; and 4) summarizing each interview, validating it and where necessary, modifying it.

First, the researcher bracketed his personal views and biases in order to avoid the researcher's interpretations from entering the participants' worldview. Units of meaning from the research data were generated from the recordings and transcriptions with an openness to emerging themes. Second, each interview transcript was carefully examined for emerging themes and categorized into units of meaning by color coding as recorded in Tables 3 – 14. Then the emerging codes were numbered 101-126, tallied and the number of occurrences were recorded (See Table 15).

Table 3

Ana – Arbor Elementary "The Teacher"

Coding	Units of Meaning
101 Red-Love Learning	Love Learning
102 Maroon-Creativity	I can be creative
103 Gray-Reach Learners	To reach all learners
104 Orange-Unfair Testing	To push what is on the test, injustice
105 Pink-Injustice	An injustice, frustrated with academics
106 Pine Green-Push Test	Tests pushed onto you
107 Aqua Green-Push System	They want this push in order to have students academically prepared
107 Aqua Green-Push System	The push, the push
107 Aqua Green-Push System	The push can only go so far
108 Blue-Push Students	The push is two-fold – if you are going to be a good teacher, you are not going to let your students fall back
109 Salmon-Change	Tests…change frequently
109 Salmon-Change	Let's change to something else
109 Salmon-Change	Leave things the way they are

Table 4

Beth – Bright Elementary "The Teacher"

Coding	Units of Meaning
110 Black-Rise	To make them rise
103 Gray-Children Learn	All children can learn
111 Yellow-Nurture/Maternal	The role is to nurture
111 Yellow-Nurture/Maternal	Not just teaching, but mothering and showing the caring side
112 Lime Green-FAIR is fair	Fair testing is fair
112 Lime Green-FAIR is fair	Fair testing is supportive
113 Violet Purple-Blame	The teacher can't be blamed
108 Blue-Push Students	But I know we have to do what we need to do to get them to the point where they need to be
108 Blue-Push Students	I'm gonna do what I need to do
108 Blue-Push Students	We don't what to leave anyone of them behind
108 Blue-Push Students	I'm going do what I have to do anyway
114 Dark Brown-End of year	By the end of the year you see the progress
115 Bronze Yellow-Administration	Never take away from the children to do something for the leadership role

Table 5

Coretta – Casa Elementary "The Teacher"

Coding	Units of Meaning
116 Light Blue-Child centered	The child at the center of education
117 Cerulean-Non-child	Sometimes we can't be child-centered
118 Red Orange-Social skills	Foster their social skills
118 Red Orange-Social skills	Being left out…social skills
107 Aqua Green-Not DAP	Pressure to prepare for 1st grade
109 Salmon-Change	Changing the ways we use to do things
108 Blue-Push students	So we do what we have to do to help the child along
108 Blue-Push students	Can't let them down
107 Aqua Green-Not DAP	It's a lot of stress…might be teaching them things that I might find inappropriate
107 Aqua Green-Not DAP	Develop needs important
115 Bronze Yellow-Administration	Administrative-Before or after school

Table 6

Diane – Davis Elementary "The Teacher"

Coding	Units of Meaning
101 Red-Love learning	Love for learning
107 Aqua Green-Not DAP	Not developmentally appropriate
107 Aqua Green-Not DAP	Not developmentally appropriate
107 Aqua Green-Not DAP	Not comfortable with direction were going
112 Lime Green-FAIR is fair	Useful tool but not comfortable- how we use the information
112 Lime Green-FAIR is fair	Fair test-some things assessed a little earlier than the children are prepared for
115 Bronze Yellow-Administration	Before/After school/During planning time
118 Red Orange-Social Skills	I feel it stops other things-the social
118 Red Orange-Social Skills	Role is to socialize

Table 7

Ana – Arbor Elementary "The Learner"

Coding	Units of Meaning
119 Orchid-Learner responsibilities	Learner many responsibilities
120 Slate-Engagement	Engaging to students
111 Yellow –Nurture/Maternal	Nurture/Maternal-Feelings should be accounted
108 Blue-Push students	Give 100% to the student
108 Blue-Push students	I am with them 24/7
121 Green Blue-Interaction	I do like a lot of interaction
107 Aqua Green-Not DAP	They are not developmentally ready
107 Aqua Green-Not DAP	Shouldn't be pushed in this manner
107 Aqua Green-Not DAP	We push them more
122 Magenta-Time pressure	Time is limited
122 Magenta-Time pressure	You do the best with the time you have
107 Aqua Green-Not DAP	DAP vs. standardized tests
107 Aqua Green-Not DAP	DAP vs. Reading (tests)
123 Yellow Orange-D.I.	Differentiated instruction (pull groups)
123 Yellow Orange-D.I.	Differentiated instruction (pull groups)
123 Yellow Orange-D.I.	Differentiated instruction (pull groups)
123 Yellow Orange-D.I.	Differentiated instruction (pull groups)

Table 8

Beth – Bright Elementary "The Learner"

Coding	Units of Meaning
108 Blue-Push students	Get them ready
124 Mauve-Motivation	Willingness to learn
118 Red Orange-Social skills	Social skills important
118 Red Orange-Social skills	Social skills
122 Magenta-Time pressure	Time/Pace
122 Magenta-Time pressure	Time/Pace
122 Magenta-Time pressure	Time/Pace/Rushed
108 Blue-Push students	I believe they can learn
108 Blue-Push students	I know what I have to do and do it
122 Magenta-Time pressure	Never enough time
108 Blue-Push students	You do what you have to do
108 Blue-Push students	Push is two-fold

Table 9

Coretta – Casa Elementary "The Learner"

Coding	Units of Meaning
123 Yellow Orange-D.I.	Open to new learning experiences
111 Yellow-Nurture/Maternal	Safe/warm, maternal, nurturing
118 Red Orange-Social skills	Social skills are important, but learning the basics are important
121 Green Blue-Interaction	Interaction, too
122 Magenta-Time pressure	Rush, tight schedule
122 Magenta-Time pressure	Schedule, rush

Table 10

Diane – Davis Elementary "The Learner"

Coding	Units of Meaning
120 Slate-Engagement	Engagement and participation
107 Aqua Green-Not DAP	DAP-Still struggling vs. those reading AR
123 Yellow Orange-D.I.	Need more one on one
111 Yellow-Nurture/Maternal	You see the uncomfortable
122 Magenta-Time pressure	When we had more time we had less pressure
122 Magenta-Time pressure	Losing my teachable moments
122 Magenta-Time pressure	Diminishes how you interact with kids
107 Aqua Green-Not DAP	DAP vs. "What I am being told what to do" – give you a different mindset
108 Blue-Push students	The best you can do
123 Yellow Orange-D.I.	Differentiated instruction necessary
123 Yellow Orange-D.I.	Adjust/Adapt

Table 11

Ana – Arbor Elementary "Kindergarten Curriculum"

Coding	Units of Meaning
124 Mahogany-Academic centers	No creativity in centers, replaced by academic centers
125 Bubblegum-State mandate	Scheduling comes from the state mandate
122 Magenta-Time pressure	Schedule inhibits teaching
126 Harvest Gold-1st grade	Compliance to teach the 1st grade curriculum
126 Harvest Gold-1st grade	I'm not a Kindergarten teacher anymore
108 Blue-Push students	I'll do anything to motivate those learners to move up
107 Aqua Green-Not DAP	DAP vs. High Stakes Testing
107 Aqua Green-Not DAP	Too much push
123 Yellow Orange-D.I.	Need to adjust/adapt in order to succeed

Table 12

Beth - Bright Elementary "Kindergarten Curriculum"

Coding	Units of Meaning
124 Mahogany-Academic centers	Before-Fun Centers / Now – Reading FCAT
125 Bubblegum-State mandate	Scheduling comes from administration/People Over Them
122 Magenta-Time pressure	Strictness of time
126 Harvest Gold-1st grade	They expect them to come there knowing certain things
107 Aqua Green-Not DAP	DAP vs. high stakes
108 Blue-Push students	Make sure the support is there…do what is best for the child
107 Aqua Green-Not DAP	They want things done they want them ready
107 Aqua Green-Not DAP	A little bit difficult
123 Yellow Orange-D.I.	Grouping to differentiate instruction
107 Aqua Green-Not DAP	Overwhelmingness of trying to do everything

Table 13

Coretta – Casa Elementary "Kindergarten Curriculum"

Coding	Units of Meaning
124 Mahogany-Academic centers	Academic Centers
125 Bubblegum-State mandate	Scheduling-From State to teacher
122 Magenta-Time pressure	Dictated by time
122 Magenta-Time pressure	You're working on something engaging and you have to cut it off
108 Blue-Push students	We do whatever it takes to help them move forward
107 Aqua Green-Not DAP	Those who have never attended preschool are at a disadvantage
126 Harvest Gold-1st grade	Expectations today are different
123 Yellow Orange-D.I.	Adapt
122 Magenta-Time pressure	It is a new mindset
108 Blue-Push students	Good teachers evolve
108 Blue-Push students	Dedication

Table 14

Diane – Davis Elementary "Kindergarten Curriculum"

Coding	Units of Meaning
126 Harvest-1st grade	But to me this more like the first grade curriculum that I taught 20 years ago
124 Mahogany-Academic centers	Academic centers- library, phonics
124 Mahogany-Academic centers	Computer center, Starfall, Success Maker, AR
123 Yellow Orange-D.I.	Differentiated activities in ALL centers
125 Golden Yellow-State mandate	Documents – lesson plans
122 Magenta-Time pressure	Can't be spontaneous and engaging
126 Harvest Gold-1st grade	Expectations two fold: State and from 1st grade teachers
107 Aqua Green-Not DAP	DAP-some kids are ready, some are not
111 Yellow-Nurture/Maternal	Nurturing, personal touch
122 Magenta-Time pressure	FAIR TEST-Time consuming
122 Magenta-Time pressure	FAIR TEST-Taxing on kids
118 Red Orange-Social skills	Not having much social interaction
118 Red Orange-Social skills	Kitchen, block place gone
111 Yellow-Nurture/Maternal	Interpersonal connection not a mommy figure anymore
111 Yellow-Nurture/Maternal	Children need to be children
126 Harvest Gold-1st grade	More expectations more structure
108 Blue-Push students	I'm amazed they can write
108 Blue-Push students	You have to have finesse
108 Blue-Push students	I think they love it

Table 15

Number of Occurrences

Coding	Ana	Beth	Coretta	Diane	Total Number of Occurrences
101 Red-Love learning	1	0	0	1	2
102 Maroon-Creativity	1	0	0	0	1
103 Gray-Reach learners	1	1	0	0	2
104 Orange-Unfair testing	1	0	0	0	1
105 Pink-Injustice	1	0	0	0	1
106 Pine Green-Push test	1	0	0	0	1
107 Aqua Green-Push system	10	4	4	6	24
108 Blue-Push students	4	11	5	4	24
109 Salmon-Change	4	0	1	0	5
110 Black-Rise	0	1	0	0	1
111 Yellow-Nurture/Maternal	1	2	1	4	8
112 Lime Green-FAIR is fair	0	2	0	2	4
113 Violet Purple-Blame	0	1	0	0	1
114 Dark Brown-End of year	0	1	1	0	2
115 Bronze Yellow-Administration	0	1	1	1	3
116 Light Blue-Child centered	0	0	1	0	1
117 Cerulean-Non-child	0	0	0	0	0
118 Red Orange-Social Skills	0	2	3	4	9
119 Orchid-Learner responsibility	1	0	0	0	1
120 State-Engagement	1	0	0	0	1
121 Green Blue-Interaction	1	0	1	0	2
122 Magenta-Time pressure	3	5	5	6	20
123 Yellow Orange-D.I.	5	1	1	4	11
124 Mahogany-Academic centers	1	1	1	2	5
125 Bubblegum-State mandate	1	1	0	0	2
126 Harvest Gold-1st grade	2	2	1	3	8

Third, the researcher clustered the units of meaning to determine central themes of each individual case. In the last step, the researcher summarized the emerging themes of each interview case. Then, the top 10 (ten) in total number of occurrences were selected and recorded as seen in Table 16. Lastly, the researcher conducted a 'validity check' by having participants review each of their interviews, and modify transcripts if necessary.

Table 16

Top 10 in Total Number of Occurrences

Coding	Numbers of Occurrences
107 Aqua Green-Push system	24
108 Blue-Push students	24
122 Magenta-Time pressure	20
123 Yellow Orange-D.I. (Differentiated Instruction)	11
118 Red Orange-Social skills	9
111 Yellow-Nurture/Maternal	8
126 Harvest Gold-1st grade	8
109 Salmon-Change	5
124 Mahogany-Academic centers	5

Phase II

In the second phase, cross-case analysis of all cases was conducted. As recommended by Stake (2006), when conducting a multiple case study, cross-case analysis should be employed in order to extract general and unique themes from *all* the data sources and determine interpretation of commonalities among all cases. Stake grants permission to use several Worksheets for data analysis if used for professional and/or educational purposes. These worksheets may be adapted as the researcher deems appropriate. Using Worksheet # 2 (See Figure 3), the research questions or topics of the

study are listed as Themes. Stake (2006) advises that Themes can be written as research questions or as topics of the study depending on how the researcher wishes to express them.

Figure 3

Research Questions

Worksheet 2. The Research Questions or Topics of the Multicase Study

Question 1: What are Kindergarten teacher's perceptions regarding systemic constraints on the teacher/learner pedagogical relationship in an era of *No Child Left Behind* and *Race to the Top*?

Question 2: How are the roles of the teacher and the roles of the learner fostered or compromised in relation to institutional systemic constraints?

Question 3: How are the Kindergarten curriculum and developmentally appropriate practices responsive to systemic constraints?

Next, Worksheet #3 (See Figure 4) was completed for each case including code numbers for case identification, case synopsis, uniqueness among other cases, and expected utility for developing Themes. Subsequently, the researcher determined the prominence of the Themes in each of the cases. The more frequent the theme appeared in each case, the more prominent or relevant the case became. Each theme was rated (H) high prominence, (M) medium prominence, and (L) low prominence. Continuing with Worksheet # 3 (See Figure 4), the researcher determined the Utility or usefulness of each Theme and each case report. The Utility of each case for each Theme was rated as follows: (H) high utility, (M) middling utility, and (L) low utility. This process continued until all themes were rated based on the estimated utility of the cases. These estimations were reported on Worksheet #4 (See Figure 5).

Figure 4

Analyst's Notes while Reading a Case Study

Worksheet 3 Case ID Ana, Arbor Elementary

Synopsis of case: Ana, an Hispanic female teacher was interviewed at Arbor Elementary, which is 95% Hispanic. The interview setting was conducted in the teacher's office on May 27th, 2010 from 2:05pm-3:05pm. No situational constraints were reported during the interview.
Uniqueness of case situation for program/phenomenon: Relevance of case for cross-case Themes: Theme 1 (107 Aqua Green) High Theme 2 (108 Blue) High Theme 3 (109 Salmon) High Theme 4 (111 Yellow) Low Theme 5 (112 Lime Green) Low Theme 6 (118 Red Orange) Low Theme 7 (122 Magenta) Middling Theme 8 (123 Yellow Orange) High Theme 9 (124 Mahogany) Low Theme 10 (126 Harvest Gold) Low
Expected utility of this case for developing Themes Theme 1 (107 Aqua Green) High Utility Theme 2 (108 Blue) High Utility Theme 3 (109 Salmon) High Utility Theme 4 (111 Yellow) Low Utility Theme 5 (112 Lime Green) Low Utility Theme 6 (118 Red Orange) Low Utility Theme 7 (122 Magenta) Middling Utility Theme 8 (123 Yellow Orange) High Utility Theme 9 (124 Mahogany) Low Utility Theme 10 (126 Harvest Gold) Low Utility

Worksheet 3 Case ID Beth, Bright Elementary

Synopsis of case: Beth, an African American female teacher, was interviewed at Bright Elementary, which is 90% African American, 5% Creole, and 5% Hispanic. The interview setting was conducted in the faculty/staff conference room on May 25th, 2010 from 8:00am-9:00am. No situational constraints were reported during the interview.

Uniqueness of case situation for program/phenomenon: Relevance of case for cross-case Themes: Theme 1 (107 Aqua Green) High Theme 2 (108 Blue) High Theme 3 (109 Salmon) Low Theme 4 (111 Yellow) Low Theme 5 (112 Lime Green) Low Theme 6 (118 Red Orange) Middling Theme 7 (122 Magenta) High Theme 8 (123 Yellow Orange) Low Theme 9 (124 Mahogany) Low Theme 10 (126 Harvest Gold) Low
Expected utility of this case for developing Themes Theme 1 (107 Aqua Green) High Utility Theme 2 (108 Blue) High Utility Theme 3 (109 Salmon) Low Utility Theme 4 (111 Yellow) Low Utility Theme 5 (112 Lime Green) Low Utility Theme 6 (118 Red Orange) Middling Utility Theme 7 (122 Magenta) High Utility Theme 8 (123 Yellow Orange) Low Utility Theme 9 (124 Mahogany) Low Utility Theme 10 (126 Harvest Gold) Low Utility

Worksheet 3 Case ID Coretta, Casa Elementary

Synopsis of case: Coretta, a Haitian female teacher, was interviewed at Casa Elementary, which is 90% African American, 8% Haitian, and 2% Other. The interview setting was conducted in the teacher's classroom on May 28th, 2010 from 2:15pm-3:17pm. Two (2) situational constraints were reported. First the interview was re-taped because the 1st interview was inaudible. Second, there were several interruptions from the loudspeaker and visitors.
Uniqueness of case situation for program/phenomenon: Relevance of case for cross-case Themes: Theme 1 (107 Aqua Green) High Theme 2 (108 Blue) High Theme 3 (109 Salmon) Low Theme 4 (111 Yellow) Low Theme 5 (112 Lime Green) Low Theme 6 (118 Red Orange) Middling Theme 7 (122 Magenta) High Theme 8 (123 Yellow Orange) Low Theme 9 (124 Mahogany) Low Theme 10 (126 Harvest Gold) Low

Expected utility of this case for developing Themes

Theme 1	(107 Aqua Green)	High Utility
Theme 2	(108 Blue)	High Utility
Theme 3	(109 Salmon)	Low Utility
Theme 4	(111 Yellow)	Low Utility
Theme 5	(112 Lime Green)	Low Utility
Theme 6	(118 Red Orange)	Middling Utility
Theme 7	(122 Magenta)	High Utility
Theme 8	(123 Yellow Orange)	Low Utility
Theme 9	(124 Mahogany)	Low Utility
Theme 10	(126 Harvest Gold)	Low Utility

Worksheet 3 Case ID Diane, Davis Elementary

Synopsis of case:
Diane, an Anglo American female teacher, was interviewed at Davis Elementary, which is 98% Hispanic, 2% Other. The interview setting was conducted in the teacher's office on June 1st, 2010 from 2:16pm-3:25pm. No situational constraints were reported during the interview.

Uniqueness of case situation
for program/phenomenon:

Relevance of case for cross-case Themes:

Theme 1	(107 Aqua Green)	High
Theme 2	(108 Blue)	High
Theme 3	(109 Salmon)	Low
Theme 4	(111 Yellow)	High
Theme 5	(112 Lime Green)	Low
Theme 6	(118 Red Orange)	High
Theme 7	(122 Magenta)	High
Theme 8	(123 Yellow Orange)	High
Theme 9	(124 Mahogany)	Low
Theme 10	(126 Harvest Gold)	Middling

Expected utility of this case for developing Themes

Theme 1	(107 Aqua Green)	High Utility
Theme 2	(108 Blue)	High Utility
Theme 3	(109 Salmon)	Low Utility
Theme 4	(111 Yellow)	High Utility
Theme 5	(112 Lime Green)	Low Utility
Theme 6	(118 Red Orange)	High Utility
Theme 7	(122 Magenta)	High Utility
Theme 8	(123 Yellow Orange)	High Utility
Theme 9	(124 Mahogany)	Low Utility
Theme 10	(126 Harvest Gold)	Middling Utility

Figure 5

Ratings of Expected Utility of Each Case for Each Theme

Worksheet 4

	Case A	Case B	Case C	Case D
Utility of Case:				
Original Multicase Themes				
Theme 1	**H**	**H**	**H**	**H**
Theme 2	**H**	**H**	**H**	**H**
Theme 3	H	L	L	L
Theme 4	L	L	L	H
Theme 5	L	L	L	L
Theme 6	L	M	M	H
Theme 7	**M**	**H**	**H**	**H**
Theme 8	H	L	L	H
Theme 9	L	L	L	L
Theme 10	L	L	L	M

Note. Bold Face means that the theme is prominent in this particular case study.

After all cases had been rated, the researcher carefully examined the ratings and determined which cases were highly relevant for each Theme. Next, the researcher merged the Findings from each of the cases to generate Assertions. Taking from the Findings of Worksheet 3 from each case, the researcher rated its importance as follows: H- high importance, M- middling importance, and L- low importance. These ratings were recorded on Worksheet 5 (See Figure 6).

Figure 6

Matrix on which to Make Assertions from the Merged Findings

Worksheet 5
Ratings of Importance

	Case A Ana	Case B Beth	Case C Coretta	Case D Diane	Assertions
Theme 1	**H**	**H**	**H**	**H**	**H**
Theme 2	**H**	**H**	**H**	**H**	**H**
Theme 3	H	L	L	L	L
Theme 4	L	L	L	H	L
Theme 5	L	L	L	L	L
Theme 6	L	M	M	H	M
Theme 7	**M**	**H**	**H**	**H**	**H**
Theme 8	H	L	L	H	M
Theme 9	L	L	L	L	L
Theme 10	L	L	L	M	L

Note. A High mark means that the Theme is of high importance in this particular case study and relevant to the theme. Followed by M = middling importance; and L = low importance.

Next, the researcher ranked each of the merged findings, by asking, "How important is this merged finding for this theme?" and recorded as follows: H- high importance, M- middling importance, and L- low importance. The merged findings ranked highest were considered in composing assertions for the final report. These final cross-case assertions were composed using Worksheet 6 (See Figure 7), which was the impetus of the report.

Figure 7

Multi-Case Assertions for the Final Report

Worksheet 6

Theme #	Assertion	Evidence in Which Cases
1	**Theme 1 Developmentally Appropriate Practices vs. High Stakes Testing** Developmentally appropriate practices in the Kindergarten setting are compromised in a high stakes testing environment.	A, B, C, D
2	**Theme 2 Instructional Pacing vs. the Dynamics of the Teacher/Learner Pedagogical Relationship** The instructional pacing of the curriculum has changed the dynamics of the Kindergarten classroom.	A, B, C, D
3	**Theme 3 Push-Down Curriculum vs. Push to Achieve Potential** As a result of high stakes testing, academic skills are emphasized resulting in a "push-down" curriculum in Kindergarten settings; however, the teacher, even under pressure desires the best for the learner, and pushes them to achieve their potential.	A, B, C, D

This phase of the study which focused on the analysis of the interview transcripts concludes with an interpretation section that presented the assertions and findings from the data collection and data analysis. Not only did interpreting the data provide a better understanding of the research questions, it also provided the researcher the opportunity to expand existing knowledge and understanding of the phenomenon being investigated. The next component of data analysis served to further support the findings.

Document Review and Analysis

For purposes of triangulating the data, this research project required the review of documents such as curriculum guidelines, lesson plans and class schedules. The researcher chose to utilize a checklist in order to track the availability of each document for review. Furthermore, content analysis of each document took place in order to determine the presence of certain words or concepts within each document (Table 6). By determining that the concept was present, the researcher was then able to make inferences about the message within the text in order to examine the content of the communication. The documents were coded within categories that allowed for the researcher to summarize findings in relation to the thematic codes extrapolated from the interviews conducted with each teacher. By using this technique, the researcher developed a series of categories or a coding frame, which was based on a theoretical framework and the interview findings. The documents were then coded against these categories, which would allow the researcher to lead to conclusions about common themes, classroom procedures, or ideas expressed during the interview phase.

Table 17 summarizes findings from the document analysis. The emphasis is on academics and instructional pacing. The scripted guides are used by the teachers in their daily instruction. One main finding from the document analysis is that the lesson plans are aligned to content standards, which is the basis for all learning that takes place in the Kindergarten classroom. Thus, no opportunity is given for teachers to plan learning experiences within play based centers. In fact, it is evident that the plans reflect teacher-directed instruction with very rigid pacing guidelines.

Table 17

Document Analysis

Subject	Curriculum Guidelines	Lesson Plans	Class Schedule
Ana	X	X	X

Ana - Analysis of Documents:

- Curriculum guide in binder provided by district office (3-inch binder)
- Copy of weekly lesson plan provided. Emphasis on science and reading.
- Copy of class schedule provided with emphasis noted on academic learning.
- Packet for weekly home learning was provided for the week, which demonstrates an emphasis on academic skills that should go beyond school time and include home.

Subject	Curriculum Guidelines	Lesson Plans	Class Schedule
Beth	X	X	X

Beth - Analysis of Documents:

- Curriculum guide shared with researcher. Same guide shared by Teacher A. Teacher noted listing of standards for K grade level.
- Lesson plans were shared with researcher. Math lesson plans and reading lesson plans were shown – researcher noted that they were Houghton Mifflin produced.
- Copy of class schedule provided with emphasis noted on academic learning.

Subject	Curriculum Guidelines	Lesson Plans	Class Schedule
Coretta	X	X	X

Coretta - Analysis of Documents:

- Curriculum guide was shared with researcher, it was on her desk along with her lesson plans.
- In reviewing lesson plans, teacher noted team approach to grade-level planning.
- Teacher pointed to daily academic schedule on the wall by her desk. (No copy provided).

Subject	Curriculum Guidelines	Lesson Plans	Class Schedule
Diane	X	X	X

Diane - Analysis of Documents:

- Curriculum guide was placed on the desk for the researcher; she noted size of document and the challenge to address all standards in one academic year.
- Lesson plan highlights the minute-by-minute account of the instructional pacing (Appendix J).
- Copy of class schedule provided (Appendix I). Emphasis is on academics, no time dedicated to child-centered play, non-academic centers. Minimal recess time allotted.

Observation Data Analysis

The researcher conducted two observations of each teacher in their Kindergarten settings. Using the observation protocol (Appendix F), which the researcher developed, the researcher documented four areas with specific relevance to this study: The Physical Ecology of the Setting, The Social Ecology of the Setting, The Formal/Academic Instruction of the Setting and the Enrichment Activities of the Setting. Observation notes were typed in a document with two columns. The first column is a direct transcription of observations made by the researcher in the setting using the Observation Protocol. The second column documents the coding of interpretations made by the researcher (See Appendix H).

The results of the findings confirmed the academic nature of the Kindergarten setting. This was evident in several ways. First, the coding confirmed that the physical ecology of the setting has shifted from a social, child-centered learning environment to a more teacher-directed and academically focused environment. This was demonstrated by the lack of play activities and play related centers. Furthermore, the observations confirmed that if centers were present, in all four classrooms they were all of an academic nature (i.e. phonics center, reading center, listening station, writing center, math center, science center).

Second, the coding confirmed that the social ecology of the setting has shifted from a socially interactive early childhood experience to a more teacher-directed Kindergarten. This was evident in teachers following a scripted, prescribed curriculum guide, affording less time for child initiated learning experiences. During the observation periods, the researcher noted limited opportunities for students to engage in cooperative

learning experiences (See Appendix J). The vast majority of time observed in each setting was teacher-directed instruction, with students completing independent work in mandated practice workbooks. All observed settings indicated that teachers were following the district guide and they were using the district approved textbooks and workbooks.

Third, the formal/academic instruction of the setting indicated that there is a strong emphasis on reading and language arts skills in the Kindergarten. This was evident in every classroom, as the researcher observed word walls, spelling words, vocabulary lists, Fry's 100 words list, and phonics rules posted in each of the settings. The focus is on preparing young children for first grade, with a strong emphasis on reading readiness. Also, rote memorization of Dolch words/Fry words was expected in every setting, as part of the preparation for the first grade year. An interesting note made by the researcher was the fact that two of the classroom teachers observed were following the exact pacing guide for their reading lessons. Both teachers were reading the story *Henny Penny* as required by the district issued curriculum guide.

The last area to be observed was the enrichment activities in the setting. The coding revealed that enrichment opportunities were limited in these four settings. The daily schedule was dictated by the mandated academic focus of the curriculum. In only one of the four settings did the researcher observe an art-based enrichment activity. The researcher acknowledges that the observation time he had in each of the classroom settings was limited, however the schedules indicate that physical education activities, music activities and art activities were limited by the academic focus of the settings.

Emergence of Themes

Three (3) distinct Assertions or Themes emerged from Stake's (2006) cross-case analysis: developmentally appropriate practices in the Kindergarten versus high stakes testing, instructional pacing of the Kindergarten curriculum versus dynamics of the classroom, and the push-down curriculum in Kindergarten versus the push to achieve learner potential. These three (3) Assertions or Themes were highly prominent in all four (4) cases and are the focus of Chapter IV.

The first theme that emerged was **developmentally appropriate practices in Kindergarten versus high stakes testing.** Developmentally appropriate practices in the Kindergarten setting are compromised in a high stakes testing environment. This theme explained how participants experienced tension between what they perceived to be developmentally appropriate in Kindergarten teaching and learning in a climate that is based on high stakes testing. The researcher found that the developmental nature of Kindergarten education has decreased as an emphasis on academics has increased. However, even though developmentally appropriate practices are compromised, teachers have been able to adapt a developmentally appropriate curriculum to a high stakes accountability standards-based environment by providing differentiated instructional experiences to their students.

The second theme that emerged was **instructional pacing of the Kindergarten curriculum versus the dynamics of the classroom**. The instructional pacing of the curriculum has changed the dynamics of the Kindergarten classroom. This theme revealed that as a result of an emphasis on academic instruction in Kindergarten, the fast paced daily schedule has impacted the dynamics of how teachers teach and how children learn in the classroom. The researcher found that as academic instruction increased in

Kindergarten education, less time has been afforded for play, creativity, and spontaneity in the classroom. Hence, the academic daily schedule dictates the dynamics of teaching and learning in the classroom. Furthermore, it was found that the teacher's "teachable moments," spontaneity and engagement on topics of interest were constrained during instruction as a result of the prescribed, paced curriculum.

The third theme to emerge was the **push-down curriculum in Kindergarten versus the push to achieve learner potential.** As a result of high stakes testing, academic skills were emphasized resulting in a "push-down" curriculum in Kindergarten settings; however, the teacher, even under the pressure of the "push-down" curriculum, desired the best for her students and *pushed* them to achieve their potential. This theme revealed that mounting pressures were stemming from the expectations of Kindergarten children to be ready for first grade not only socially, but academically as well.

Explanation of Themes

Theme 1: ***Developmentally appropriate practices in Kindergarten versus high stakes testing***

All four (4) teachers agreed that developmentally appropriate practices in the Kindergarten classroom have been compromised as a result of being in a climate of high stakes testing. To the dismay of the teachers, the developmental nature of Kindergarten education has decreased as a high stakes environment is emphasized in early childhood settings. Ana elaborated on this point:

> I don't see it. Okay I really don't see it to be developmentally appropriate for 5 year olds…if we were in a wonderful…uhh…beautiful…environment where I would only receive students from a Pre-K that are ready I would

> say then, yes…curriculum goes along with the testing and testing goes along with the materials and everything is perfect, but it doesn't happen like that, so…the push for those standardized tests…children who are coming from grandma's just do not have any kind of experience…we have students who have never seen pencils…or scissors…still in this day and age because they are afraid that they are going to cut themselves…or for whatever reason…you start with so many different varieties of learners that umm…maybe they should use standardized tests a little further down the road.

Coretta echoed the same concern as above:

> I don't think that kids are benefiting from it. There are other areas that are being left out…the social…the physical…testing has become the new norm. Some of the standards and pressures placed on teachers are not helpful in giving students the proper head start. It's a lot of stress because I might be teaching them things that I might find inappropriate. It's not the right place to do that because it's a development stage.

Diane expressed the frustration she witnessed as her young students struggled with the pressures of the annual FAIR Test in Florida Kindergartens as a result of high stakes testing and accountability standards. She explained:

> I think developmentally some kids are just not ready for that…there are certain things and I think that's a huge frustration…don't get me on a soap box but I had children this last implementation of FAIR who looked at the reading story that they were expected to read and put their head down and burst into tears…and it is not what you'll see back there for in our reading book… the sentences and the pictures…it was a page of text…and it overwhelmed them and I don't think it does support in any which way um…some parts of it does but um…what I didn't like about FAIR…don't know if that has anything to do with anything…um…it would start at a higher level and then if the child couldn't…if they weren't successful then it would go to an easier story and an easier story and I think once a child gets frustrated it's very hard to recoup that enthusiasm when seeing one and more and saying ok read this honey and I'm timing it and tell them that and for me it's not very conducive.

In order to negotiate these challenges, all teachers concurred that employing differentiated instruction was necessary. These strategies were implemented in the

classroom in different modalities including facilitating small group instruction, providing learning centers for skill practice and remediation, and using the assistance of another teacher and/or paraprofessional. Ana stated:

> Well, we do differentiated instruction, that has helped us tremendously umm…calling up groups, your different group of everyday helps you to see in which areas what they need to achieve what, so while they are doing whole group activities, you can call them up in order to substantiate these problem areas that they have or in our situation which is very beneficial while he's (teacher) teaching I can bring up the low ones or the ones that are struggling.

Ana also expressed the benefits of using technology (instructional software) to assist with differentiated instruction to practice basic skills. She explained:

> We do *Voyager* in order for them to…to again just practice the skills…and we have *Waterford* which is a computer program for ESOL students so they also rotate onto that…so we do, we bombard them with quite a few different things…but the fact that they can have us one to one or a one to smaller group setting works very well.

Beth also expressed her satisfaction of the benefits of small groups in order to adapt to a developmentally appropriate curriculum. She commented:

> Well I think repetition is important and um…even though we don't like…we…we say…we may not all like the grouping…but I like the small grouping…cause you can get to those children that really need the help and those are excelling well you can get to them and give them everything they need. So I…I like…I like…I think the repetition is important and I think that the grouping is important…you know I…I don't mind doing it so…at first it was a chore having to do groups but now I see the benefit.

Diane also used small groups to provide differentiated instruction by having students rotate in learning centers. It is important to note that learning centers in today's Kindergarten classroom are much more academic than before *No Child Left Behind*. During the observation period of data collection, the researcher noted the academic nature of learning centers in the Kindergarten classrooms. Typical play centers as seen in most Kindergarten classrooms before *No Child Left Behind* and *Race for the Top* have been replaced by reading centers, math centers, and science centers in order to comply with the accountability mandates and the pressures of high stakes testing. Diane described how her Kindergarten students rotate to centers that focus on academic skills:

> Yes, they do rotate. One group will be computers, one group will be the library, one group will be the phonics activities and working with words. For example, while at the computer center students can work on Starfall. They

> have actually all kinds of Starfall things I think…they have a math one as well…I've been focusing on phonics…reading stories…um…learning games…they cover the gamut…which I like because the children can choose and they always gravitate toward what they're comfortable with in their learning level…um…we also have available to use Success Maker and Accelerated Reader…I find children aren't quite ready for that until the end of the year. In the phonics center, the phonics activities that we have with the series are geared toward the benchmarks that we are doing that week. When they go to the Library Center, it is mainly for them to maybe look at books. They also have reading response sheets that are leveled…differentiated.

Beth reiterated the same scenario as above but also noted how learning centers are different in today's classroom:

> Centers were more fun then like the library and the block area…and the painting area. Everything is focused around the reading…you know improving reading skills…improving comprehension…you know preparing for the…getting their minds ready to know those things…you know…that they need to know for when they get to third grade…for the FCAT… it's a lot different

> now…we spend lots of time in these areas and we spend…basically we spend…with those children the lower kids…we have to work with them to pull them up.

Differentiated instruction was also achieved with the help of paraprofessionals assisting the classroom teachers with personalized instruction in order to adapt a developmentally appropriate curriculum to a high stakes accountability standards-based environment. Beth explained:

> This year I was able to get a para and I was able to get a whole lot in than I usually do. I think that anything that I needed to do I was able to do more this year because of my para. It helps me do what I need to do…the developmental part…and I am grateful to have her for the help.

Beth also expressed the difficulties of trying to implement developmentally appropriate practices without the assistance of a paraprofessional. Teacher "B" stated:

> I can see from the past years I've worked and struggled to get everything done. I always feel at the end of the year…I feel that I fell short of something that I needed to do, but now I'm confident…I feel good that…you know…I got everything done because I have her there as the helper to help me and assist me.

Theme 2: ***Instructional Pacing versus the Dynamics of the Teacher/Learner Pedagogical Relationship***

The instructional pacing of the Kindergarten curriculum has changed the dynamics of the teacher/learner pedagogical relationship. This theme revealed that as a result of an emphasis on academic instruction and academic pressure the instructional pacing of the daily schedule has impacted the dynamics between the teacher and the learner in the Kindergarten classroom. All four (4) participants agreed strongly that the daily schedule dictated the Kindergarten curriculum. Coretta explained:

> We follow the curriculum. As you saw earlier, (lesson plans) we have a lot to cover…Hour by hour…minute by minute. The day is dictated by time. Our daily schedule is much more structured than before. Ten years ago our day was so much more relaxed.

Beth echoed the same concern as she reflected how the pace of the Kindergarten, when she first became a teacher was significantly different than the pace of today's Kindergarten. She recalled:

> When I first started, it was an easier pace. We had a schedule that we made. We made the schedule and it wasn't 'so let's get right to it'. We did little things…we flowed in the day…you know…we knew we had certain things we had to do, but now you have to make sure that certain things are done. We have many, many things to do. The pace…the pace…the pace of the Kindergarten was different than let's say the pace of the Kindergarten now.

The constraints of time during the day were clearly observed by the academic nature of the teachers' schedules, lesson plans, and curriculum guides. For example, Diane's daily schedule captured a portrait of a typical day in Kindergarten which emphasized academic instruction throughout the day. A daily block schedule of mathematics, reading, language arts, science, and social studies leaves only one day a week for recess. (See Appendix I). Furthermore, the rituals of naptime, playtime, and snack time are non-existent in the daily schedule. This is evident as the daily schedule is ruled by the constraints of time.

Moreover, the weekly pacing guide included prescribed lesson plans with minute-by-minute time intervals up to one hundred twenty minutes (T=120 minutes). For example, during a reading lesson, the researcher observed how Teacher "D" followed the pacing guide minute by minute (See Appendix J). The opening routine took place from 10:35 am to 10:45 am which included reading around the room: calendar, daily message, and phonemic awareness. The researcher observed that phonemic awareness was practiced by reading "Jack and Jill" and playing a word game. From 10:45 am – 11:00 am the teacher conducted a read aloud by reading the book "Run Away" followed by working on story structure: beginning, middle, and end. From 11:00 am to 11:10 am the teacher read the story again emphasizing the action words of the story. After the second reading, the teacher asked Who, What, Where, Why questions. From 11:10 am to 11:30 am the teacher conducted a phonemic awareness lesson on the beginning sound of /Jj/. From 11:30 am to 11: 40 am the teacher wrote and illustrated the animals found in the story. Finally, from 11:40 am to 12:30 pm students wrote words independently beginning with the sound of /Jj/ while the teacher met with her guided reading groups. The same

exact pacing minute by minute took place every day during the four observations periods. The researcher observed the teacher trying her best to keep not only herself on task, but also her students as well in order to achieve the many academic skills required each day.

As evident by the teachers' daily schedules, pacing guides, and lessons plans, the instructional pacing allowed for little deviation from the prescribed academic curriculum. As a result of academic pressure, a new teacher/learner dynamic has emerged in the Kindergarten classroom. Diane explained her perspective:

> I think when we had less pressure, I think we were all more relaxed in terms of how we functioned here in the classroom in terms of just how much time we spent on centers and how much time we had for individual reading groups…I think the dynamics has changed because I think there's more academic pressure.

Diane continued to explain how this new, emerging dynamic in the Kindergarten classroom has impacted the teacher/learner pedagogical relationship which she referred to as her 'teachable moments'. Diane gave clarity to what this meant:

> I have a problem with losing my 'teachable moments'…as we used to call them…and going with an idea or an interest and just taking off and doing a thematic unit…and it's more than the freedom; it's engaging the kids in things that you know they're tuned into rather than, 'Oh, I know we have to cover this and I know that we're going to assess, this and I know I have to get this done in the pacing guide' in the

> …let me get my dander up here…in the first…you know…nine weeks…and it's that kind of thing that I miss.

Diane continued explaining how the interaction with her students has compromised her beliefs regarding what is essential to the way children learn. She expressed with frustration her dilemma:

> I have a problem with it…I have a problem every year…I see this…I'm at the computer all the time…looking at the standards and looking at the newer standards and the Next Generation and I have a …I have a problem feeling, 'My God, I've got to get all this information into these kids by the end of the year' and I think that really diminishes how you interact with your kids.

Coretta also shared the same sentiment regarding the changing dynamics of the Kindergarten:

> It can be frustrating at times. For example, you're working with the kids on something that is engaging and you have to cut it off and move to the next activity or subject. We can't be ourselves…everything is a rush. It is a new mindset. We do what we have to do because it is required of us; however, it doesn't make it right. We're teaching them to help them get ahead academically but other areas are being neglected. So the way we are teaching today is different…the way children are learning is different.

Ana also expressed how the spontaneity between the teacher and the learner is compromised:

> I'm not able to go off on my tangents…I'm very conscious of that because I know in terms of observations and so forth they do expect us to follow that to a tee…I know my administrators understand that that isn't necessarily always happening or always possible…um…but I think it really impacts the way I…I uh…present things…I can't go off on tangents and such much as I would like to and …and…engage the kids…something spontaneous…I miss that part of Kindergarten.

Theme 3: ***Push in the Kindergarten versus the push to achieve learner potential***

The Theme of "push" in the Kindergarten has emerged in two ways. First, the push-down curriculum has infiltrated the Kindergarten classroom resulting in teachers focusing on academic skills. The "push-down" curriculum stems from the expectations imposed by preparing Kindergarten children for first grade. Not only are Kindergarten children being prepared for first grade, they are also introduced to the first grade curriculum as early as January. Second, the Theme of "push" also emerged highly as being prominent in all teachers interviewed, when expressing that the teachers would "push" themselves *and* their students to do whatever it took to achieve their maximum potential.

When sharing her views regarding, the expectations of first grade teachers as related to readiness skills in Kindergarten, Ana commented:

> They expect them to come there knowing certain things like you know…making sure they know how to write their name…they need to know the alphabet and the sounds…they know their numbers up to 20…because it helps them…because…it's like there is a whole other jump from ours and like each grade everybody needs to know what they need to know to get to the next grade and you have to be prepared so that you can do what you need to do to help them and I think it's important and they expect that…they expect them to be ready for their area…you know…cause if they're not then they are going to be behind and they are going to be trying to catch up…what we should have done…or what we could have done…or what the children could have done…so they can do what they need to do…it's I think…it's…they expect that. And it's important to because they can do what they need to do.

Diane also described the new academic expectations in Kindergarten as a direct result of the push-down curriculum:

> Well you know I think they're as focused on the expectations from the state as we are in K…I know that they expect them to be reading…they expect the decoding to be reading…they expect the decoding to be there. We initiated the 100 Fry words that we normally didn't…you

> know…that's something new. I mean kids need to be reading. Having taught first grade…now I know it's very different…I've taught second grade so I can imagine that's basically what first grade is like.

Because of the academic expectations resulting from the push-down curriculum, teachers perceived their role as Kindergarten practitioners to be very different in today's climate. In a moment of authentic realization, Ana vividly portrays her perspective:

> I'm not a Kindergarten teacher anymore. I'm a first grade teacher, where before I used to be able to play the guitar, and to create centers and do all this…and we don't do that anymore. I get perturbed because even though we push and even though we build the students to where they're supposed to be, and even this year we took first grade material and brought it into Kindergarten and since January we've been doing first grade curriculum which I'm totally against because of the fact that these are Kindergarten students…and yes the schools want it, but I feel a lot of compliance. What if one parent one day tells me, 'you know you are a Kindergarten teacher…you should be teaching Kindergarten curriculum not first grade'…what are we gonna do? I mean if this is coming from the First grade teachers, and our principal because they want them

> so ready for the FCAT that they are willing to run over everything else, so we do it.

Coretta used different terms to describe the changing role of the Kindergarten teacher. She described the new 'mindset' in Kindergarten teaching and learning:

> It is a new mindset. We do what we have to do because it is required of us; however, it doesn't make it right. We're teaching them to help them get ahead academically but the other areas are being neglected. So the way we are teaching today is different…the way children are learning is different.

Diane also expressed her view on how the teacher/learner pedagogical relationship has changed as a result of the push down curriculum in the new Kindergarten:

> I'm not a mommy figure anymore. To me it seems to be something very basic missing that I try very hard to compensate for in the day to day structure…a far cry from what it used to be…and how that affects the children I don't know. I'm hoping I'm compensating…but it's…I think that level of now being as relayed and that flow…I think takes a toll in other ways.

In order to achieve the expectations and pressures of the push-down curriculum Kindergarten teachers found solace in the support of their colleagues. Diane described how she found support in the "meeting of the minds" with her colleagues:

> We try for once a week…the latter part of the year, it's been less because there's so many activities going on…but um…basically that's what we've done…and we're always on the phone with each other…touching base so that we're all on the same page and we know what's going on. It's also an important check and balance because you focus so much on getting through your day and getting all these (showing lesson plans to researcher) as you plan. It helps to see where other people are…'Oh, you've forgotten this' or 'let's put this in it'…and it's nice to have the meeting of the minds and have everybody's input.

Ana reported that dividing the planning of lessons among all grade level teachers alleviated the pressures of the "push-down" curriculum. Also, articulation among the Kindergarten teachers helped them achieve their weekly goals. Ana expanded on how this worked:

> I like it…we all like it…I do the math…one teacher is doing the social studies and one is doing the science…we generate reading through the program and we add anything extra that we need to add to that…but we like doing it…everybody taking a part of the schedule. We sit down and we talk and converse about what we do. We then meet with the leaders…the reading leader…the math and science

> leader…we meet with them and we give them our lesson plans and they give us different things that we can use.

The Theme of "push" also emerged as teachers pushed themselves and their students to succeed. As earlier noted, the "push-down" curriculum has created tension and pressure to prepare Kindergarten children for first grade. These expectations stemmed from teachers having to cover not only the Kindergarten curriculum, but the first grade curriculum as well. In an environment of high stakes testing and accountability standards, the push-down curriculum imposed upon the way teachers teach and children learn; however, under the imposed circumstances, the teacher supports the learner and they do what is best for the child. This perspective is apparent in the comments from Coretta:

> It seems to me that it is creating pressure…pressure…on us…pressure on the kids…preparing them for standardized tests…getting them ready for 1st grade…it's changing the ways we used to teach children…it's so much more structured…very little leeway…however, it is mandated…so we do what we have to do to help the child along.

Beth also shared the same perspective as above:

> We don't want to leave any one of them behind…we need to do what we need to do to help them. So I just feel that we need to do what we should do to keep that child from being left behind. Everybody has to…all the stakeholders

> need to be working together to pull them up. It just can't be….you know…as from what I see…we can't just blame the parent…the teacher just can't be blamed. Everybody needs to work together to pull the child up and to get them where they need to be. I'm just one of those teachers…I may fuss and carry on but I'm gonna do what I need to do for the child cause I can't sit there and let a child sit in my class and not do what I need to do for them.

In the midst of institutional systemic constraints that stemmed from the push-down curriculum, all teachers remained resilient and optimistic. This sense of resiliency and optimism is astutely expressed by Beth:

> Sometimes I might get rushed, you know, but I'm always doing what I need to do and it's not going to affect them…it's going to help them…I can see the good in it…you know…sometimes I might say 'urgh'… but then I'm like ok we're gonna do this…you know so…I see the good in it…it doesn't hurt…it doesn't hinder me.

Ana also expressed the importance of being optimistic and passionate about her teaching practice in order for students to succeed:

> I see it with all the other grade levels as well, umm…and I think it's too much push. You know…it's like your athletes they run the mile in so many minutes…I mean how much more can you push a human being? Whether they're ready

> or not they're pushing them, you as a teacher have to adapt. And if you are passionate about your students, if you do want your students to succeed you go with that adaptation. You go with that change because if you do not, they're not…they're not going to succeed. And you want to save them from that kind of frustration or whatever they're going to go through in first grade so you push them.

Coretta succinctly expanded on this point:

> I think it comes from being dedicated to what you do. In times of change, your dedication to the profession and to your students goes a long way. Some teachers have many years of experience, but are not dedicated to the profession or to their students. These expectations have changed what we used to do, to what we do now. But as a teacher who has seen so many changes over the years, you adapt to those changes…as the system evolves, you evolve as a teacher as well. I think good teachers do that.

Diane provided a positive outlook about today's current climate of teaching and learning and a hopeful message that brings closure to Theme 3. She articulately stated:

> I want to say something very positive. I'm amazed at what they can absorb. Despite the fact that I feel…I mean…perhaps it's not as drastic as I'm perceiving but because I have had the time in the classroom where it's

changed so dramatically…perhaps these results are wonderful… you can tell me…but I hope they leave everyday enjoying what they do…and I ….I get good feedback…I love school…'we do something different everyday'…and you know…that's what we live for as educators.

CHAPTER V

DISCUSSION OF THE FINDINGS

The final chapter answers the three research questions posed in Chapter III. In addition, this chapter includes a discussion of the Themes as related to the research questions derived from the findings of the data analysis. It also provides a reflection on the findings that captures and paints a portrait of the "new" Kindergarten. The chapter concludes with recommendations for further study in the area of Early Childhood Education, specifically as it relates to Kindergarten teaching and learning.

Purpose of Study

The purpose of the research study was to inform the early childhood community regarding the effects of systemic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings. As greater responsibility and increasing pressure is imposed on early childhood teachers to focus on a subject-centered curricula and accountability standards, less time is afforded to implementing developmentally appropriate practices; hence, the teacher/learner pedagogical relationship is constrained.

Significance of the Study

This study emerged from a need to better understand the implications of systemic constraints on the teacher/learner pedagogical relationship in early childhood education. How early childhood teachers respond to the influences of systemic constraints on teaching practice is important because it impacts the teacher's belief system, classroom autonomy, and ultimately, the teacher/learner pedagogical relationship. In an era of accountability (*NCLB, Race to the Top*) high stakes testing and standardization, it is crucial that teaching and learning be facilitated in a meaningful, constructivist

environment that is immersed in the pedagogy of relationships that foster the developmentally appropriate needs and interests of the child. This can be achieved by allowing the teacher to maintain autonomy over classroom decision-making and implement developmentally appropriate practices in a time when they are experiencing systemic constraints from accountability mandates (NAEYC, 2009).

Summary of Methodology

The design for this study was a qualitative, multiple case study approach. Data generation was threefold including interviewing the Kindergarten teachers, conducting field observations of the Kindergarten teachers interacting with the learner, and examining relevant classroom artifacts such as curriculum guides, lesson plans, and daily schedules. All of the participating teachers were interviewed once in their schools, using a protocol that was developed by the researcher. The questions from the interview protocol focused on three (3) areas including (a) The Role of the Teacher, (b) The Learner, and (c) The Kindergarten Curriculum which captured the perspectives of public school Kindergarten teachers regarding the impact of systemic constraints on the teacher/learner pedagogical relationship.

After the completion of the interviews, observations of each teacher were conducted interacting with their students in the educational setting. Four (4) distinct areas were observed: 1) The Physical Ecology of the Setting, 2) The Social Ecology of the Setting, 3) The Formal/Academic Instruction Time of the Setting, and 4) The Enrichment Activities of the Setting. Then, the researcher examined relevant classroom documents, which informed the researcher regarding how these documents influenced their teaching practice.

Data analysis was then employed using Groenwald's (2004) 4-step explication process to determine the central themes of *each* individual case. Subsequently, Stake's cross-case analysis was conducted to determine interpretation of commonalities among *all* cases. The final analysis rendered three (3) highly prominent assertions or themes whose description and interpretation as related to the study's research questions is the focus of this chapter.

Limitations

In order to deal with subjectivity, several dependability and credibility procedures were employed. For ensuring dependability, an audit trail and 'member checks' were conducted (Marshall & Rossman, 2006; Stake, 1995). An audit trail and member checks confirmed the rigor of fieldwork and minimized biases (Patton, 2002). Also, as recommended by Yin (2003b), triangulation was employed which offered the best approach when working with case study data. To attain, assurance of data results and interpretation, triangulation was achieved by reviewing participant interviews, focused observations, and relevant classroom artifacts including curricular guidelines, lesson plans, and class schedules.

This study was limited in several ways. First, only public school Kindergarten teachers were considered in this study. Conducting research with private school Kindergarten teachers may provide different findings than those presented in this study. Second, the study may also be limited in the number of male participants, since all participants in the current study are female. Last, even though the current study had a small sampling size of participants, qualitative case study research emphasizes careful

selection of participants which will provide thick description and thorough interpretation of the study (Merriam, 2009; Patton, 2002).

Research Questions

The main objective of this study was to examine and describe the perceptions of Kindergarten teachers regarding the effects of systemic constraints on the teacher/pedagogical relationship in public Kindergarten settings. The research questions were as follows:

1. What are Kindergarten teachers' perceptions regarding systemic constraints on the teacher/learner pedagogical relationship in an era of *No Child Left Behind* and *Race to the Top*?
2. How are the roles of the teacher and the roles of the learner fostered or compromised in relation to institutional systemic constraints?
3. How are the Kindergarten curriculum and developmentally appropriate practices responsive to systemic constraints?

Summary of Emerging Themes

After the completion of the data analysis which included categorizing into units of meaning by color coding and recording the number of occurrences for emerging themes, Stake's multiple cross case analysis was conducted to generate prominent themes common among all cases which resulted in the following three main themes:

1. **Theme 1: Developmentally Appropriate Practices vs. High Stakes Testing**
   Developmentally appropriate practices in the Kindergarten setting are compromised in a high stakes testing environment.

2. **Theme 2: Instructional Pacing vs. the Dynamics of the Teacher/Learner Pedagogical Relationship**

   The instructional pacing of the curriculum has changed the dynamics of the Kindergarten classroom.

3. **Theme 3: Push-Down Curriculum vs. Push to Achieve Potential**

   As a result of high stakes testing, academic skills are emphasized resulting in a "push-down" curriculum in Kindergarten settings; however, the teacher, even under pressure desires the best for the learner, and pushes them to achieve their potential.

CONCLUSIONS

The Aesthetic Whole: Portrait of the New Kindergarten

Sarah Lawrence (2002), in her groundbreaking work on portraiture, created a method of inquiry that merges aesthetics and empiricism as a way of capturing and interpreting the complexities of human experience. Lawrence elaborates on how art is similar to portraitures.

> In painting, the aesthetic aspects of production that can contribute to the expressive content include the use of line, shadow, color, texture, delineation, and placement of forms on the canvas, as well as the relationship that persists among these aspects, color to color, line to line, shadow to shadow, and form to form. Expressive content is achieved through thoughtful attention to each aesthetic aspect as well as to the relationship among them. In the methodology of

> portraiture, the aesthetic aspects of production that can contribute to the expressive content include the use of keen descriptors that delineate, like line; dissonant refrains that provide nuance, like shadow; and complex details that evoke the impact of color and the intricacy of texture. The forms that are delineated convene into emergent themes and the interrelationship of these themes is woven through the connections of their content against the backdrop of their shared context. (p. 29)

As such, this researcher attempts to create an aesthetic whole by developing a portrait of the "new" Kindergarten as manifested in the current study's research questions and explicated in the concluding pages of Chapter V. The data analysis drawn from the research questions *paints* a picture of the current climate in Kindergarten classrooms today. Specifically, the questions of the study attempt to illuminate the perceptions of Kindergarten teachers regarding systemic constraints on the teacher/learner pedagogical relationship.

This view of the "new" Kindergarten is framed and presented by the researcher in order to create interpretation of the main themes of the study and expand understanding of the phenomenon through the existing literature. Similar to the work of the artist, Lawrence (2002) eloquently describes interpretation and the role of the researcher:

> Interpretation as a cognitive activity involves recognizing, sorting, and organizing perceptions toward a cohesive construction of understanding. This activity of discerning

> the qualities of a subject that are necessary for understanding is a kind of active search for connections and coherence. Because interpretation is an activity so strongly identified with the arts, the methodology of portraiture as a process of interpretive description seems a priori akin to artistic activity. In portraiture, the researcher—the artist—interprets the subject of the portraits internally by searching for coherence in what she observes and discovers. The researcher represents that interpretation through the construction of the portrait intentionally employing aesthetic aspects in order to convey meaning. The reader—the perceiver—makes sense of the subject that is portrayed through his or her active interpretation of the portrait. This new interpretation of the subject on the part of the reader or perceiver can be thought of as a kind of reinterpretation. With each reinterpretation, it is as if the portrait is being recreated. (p. 35)

The portrait of the "new" Kindergarten revealed that the Kindergarten model is at a crossroads and experiencing a paradigm shift (Gullo, 2006). According to the teachers of the study, the Kindergarten model has shifted from a social learning space to an academically focused environment as a result of today's current climate of accountability in teaching and learning. The portrait of the new Kindergarten begins to manifest itself in the first research question.

The First Research Question

The first research question of the study asked, "What are Kindergarten teachers' perceptions regarding systemic constraints on the teacher/learner pedagogical relationship in an era of *No Child Left Behind* and *Race to the Top*?" The perceptions of the Kindergarten teachers in this study revealed that the systemic constraints imposed on them as a result of the push-down curriculum has impacted the way teachers teach and the way the learner learns. Adcock's and Patton's (2001) study examined the views of early childhood teachers regarding how early academic reading wars, and high stakes testing has affected teaching practice. After visiting their classrooms the researchers identified three groups of teachers: the "Advocates" the "Resistors," and the "Traditionalists" (p. 197).

The "Advocates" believed that the 'teacher knows best' and are adamant in teaching in a way that is 'good' for the learner. They remained strong in their belief that child-centered curriculum and practice is best for young learners. Their beliefs for doing what is right for children were aligned with seeking schools that matched their philosophy of teaching and learning. If a school district did not advocate for a child-centered curriculum including hands-on learning and play-related opportunities, the teacher would move to another school district that did. The "Resistors" resisted the systemic constraints imposed on them by "wiggling around the system" and working "underground" to provide an environment that would meet the needs and interests of their students (p. 200). The "Traditionalists" advocated for developmentally appropriate practices; however, when observed by the researchers in their classrooms, the teachers' interaction with students was found to be more teacher directed.

As Reeve (2006) points out regarding the importance of engagement:

> During class, students can be curious, proactive, and highly engaged, or they can be alienated, reactive, and passive. Just how engaged students are during instruction depends, in part, on the supportive quality of the classroom conditions in which their learning takes place. (p. 225)

In the current study, the Kindergarten teachers believed that the *dynamics* of the pedagogical relationship between the teacher and the learner have changed as a result of systemic constraints. Teachers from the study perceived that the push-down curriculum imposed pressure on teachers to cover an academic curriculum throughout most of the day. The teachers believed that the increased time spent on academic instruction on the prescribed curriculum constrained the dynamics of the Kindergarten teachers' 'teachable moments'. One teacher described her 'teachable moments' as "going with an idea or an interest and just taking off with it." Another teacher described it as "not being able to go off on tangents in the way I present things and engage kids." Another, teacher described her 'teachable moments' with frustration when you're working with the kids on something engaging and you have to cut it off and move to the next activity or subject." Instead the 'teachable moments' are brushed aside as teachers focused on the scripted, pacing guide thinking about "we have to cover this" and "I know we're going to assess this."

The perceptions of the teachers revealed that the spontaneity or playfulness of the Kindergarten environment has also been compromised. Moments for songs, movement,

fun centers, and play-related activities have been eroded from the daily routines of Kindergarten life. One teacher recalled:

> I think school should be a more open environment…I think it should be more realistic to what a five year old needs. I remember in the past we used to have a kitchen area, we used to be have this whole beautiful area where they had puppets, storybook characters…I would play the guitar…ask me how many times I can play the guitar now…because of the fact that they need to read, they need to write, do math. I try to bring in creativity…you do as much as you can…but your time is so limited.
>
> The prescribed curriculum has become the center of instruction. Our daily, schedule is much more structured. We used to have unlimited time in our centers. We were able to spend quality time on activities and special projects. Now there is a sense of rush…a push to get things done quicker.

The Second Research Question

The second research question asked, "How are the roles of the teacher and the learner fostered or compromised in relation to institutional systemic constraints?" First, the perceptions of the teachers revealed that the role of the Kindergarten teacher was not compromised as a result of institutional constraints. The teachers believed that the institutional constraints that they encountered stemmed from the expectations of the

"push-down" curriculum resulting in a daily instructional schedule that was focused on academic subjects in reading, writing, math, and science. However, the teachers believed that even under the mounting pressures of the push-down curriculum resulting from teaching mostly academic subjects, demonstrated a high level of resilience and self-efficacy believing in their ability to help their students succeed.

Second, unlike the Kindergarten teachers whose role did not appear to be compromised, the teachers believed that the role of the Kindergarten learner was compromised as a result of institutional constraints. As Kindergartners experience the increasing academic demands of the push-down curriculum, less time was afforded to play and play-related opportunities during the daily class routine. Thus, the second research question revealed two very important components: 1) the role of the teacher and the teacher's sense of self-efficacy and 2) the learner and child-initiated play in today's Kindergarten. Both of these components are explicated below as related to the relevant literature, specifically in support of how a teacher's high sense of efficacy is crucial when dealing with the pressing demands imposed by institutional constraints. Furthermore, the role of the learner will be examined in support of play and play-related activities in Kindergarten as seen in the current research.

Self-Efficacy of Teachers

Participants of the study consistently reported that the push-down curriculum has imposed increasing demands on the teacher to cover more academic subjects especially in the area of reading. These demands stemmed from Kindergarten teachers preparing students for first grade. As earlier noted in Chapter IV, Kindergarteners are introduced to the first grade curriculum as early as January. As a result, students are expected to know

the alphabet, the sounds of the letters, and how to decode words. All participants reported that Kindergarten students must know the initial 100 Fry words, which before *No Child Left Behind*, were usually learned in first grade. However, in the current climate, Kindergarten children are expected to be reading by the time they enter first grade; thus, the 100 Fry words must be mastered.

Under mounting pressures of the push-down curriculum to prepare students for first grade, all teachers in the current study were able to maintain autonomy and their integrity in teaching by believing in their capabilities to overcome situational constraints in order for their students to succeed and learn.

Bandura (1993) defines self-efficacy:

> The impact of most environmental influences on human motivation, affect, and action is heavily mediated through self-processes. They give meaning and valance to external events. Self-influences thus operate as important proximal determinants at the very heart of causal processes. People make causal contributions to their own functioning through mechanism of personal agency. Among the mechanisms of agency, none is more central or persuasive than people's beliefs about their capabilities to exercise control over their own level of functioning and over events that affect their lives. (p. 118)

Woolfolk (2008) further explains teachers' sense of self-efficacy:

> Student learning is affected most directly by the hours they spend on appropriate tasks in the classrooms. Teachers are the first line of defense against ignorance. We will never have the perfect curriculum or teaching strategy, but teachers who set high goals, who persist, who try another strategy when one approach is found wanting – in other words, teachers who have a high sense of efficacy, and act on it – are more likely to have students who learn. (p. 361)

The teachers participating in this study viewed the obstacles of the push-down curriculum as a challenge. Through their dedicated and committed high sense of self-efficacy, they were still able to achieve their goals and the goals of their students. As one teacher commented:

> If you are passionate about your students, if you want your students to succeed you go with that adaptation, you go with that adaptation, you go with that change because if you do not, they're not…they're not going to succeed. And you want to save them from that kind of frustration or whatever they're going to go through in first grade, so you push them.

Collective Teacher Efficacy

Another aspect of teacher self-efficacy is collective teacher efficacy. Bandura (1993) explains:

> Teachers operate collectively within an interactive social system rather than as isolates. The belief systems of staffs create school cultures that can have vitalizing or demoralizing effects on how well schools function as a social system. Schools in which the staff collectively judge themselves as powerless to get students to achieve success convey a group sense of academic futility that can pervade the entire life of the school. School members who collectively judge themselves capable of promoting academic success imbue their schools with a positive atmosphere for development. (p. 141)

Participants in the study reported that working collectively as a group to support one another, to meet goals for the grade level and school level, and prepare lesson plans promoted teacher efficacy and optimism in helping overcome the obstacles or systemic constraints of the school setting.

As one participant stated:

> Working with one another helps you stay afloat. You can go to your colleagues who also have good ideas…so I like that, cause you learn yourself and then…then you pass it to the kids. Working as a team on the same goals gives us all the encouragement we need to help our students succeed.

The second part of the second research question revealed that the role of the Kindergarten learner is compromised as a result of institutional systemic constraints. The

Kindergarten model is at a crossroads and experiencing a paradigm shift (Gullo, 2006). As the Kindergarten model shifts from a social learning space to an academically focused environment as a result of today's current climate of accountability, so does the role of learner shift to that of an academic learner. As Kindergarten children focus on academic subjects during most of the day, less time is afforded to play and other social opportunities.

Miller and Almen (2009) report that:

> Kindergartens are now under intense pressure to meet inappropriate expectations, including academic standards that until recently were reserved for first or second grade. These expectations and the policies that result from them have greatly reduced and in some cases obliterated opportunities for imaginative, child-initiated play in Kindergarten. (p. 6)

The American Academy of Pediatrics (2007), supports the benefits of play during the daily routine of young children in school to enhance social-emotional development:

> Play is integral to the academic environment. It ensures that the school setting attends to the social and emotional development of children as well as their cognitive development…to help children adjust to the school setting and even to enhance children's learning readiness, learning behaviors, and problem solving skills. Social-emotional learning is best integrated with academic learning; it is

> concerning if some forces that enhance children's ability to learn are elevated at the expense of others. Play and unscheduled time that allow for peer interactions are important components of social-emotional learning. (p. 183)

Despite the benefits associated with play as a part of the academic environment, play time as been greatly reduced in Kindergarten classrooms today. As observed by the researcher's current study, children remain in their seats most of the day in order to cover the academic subjects of reading, math, science and social studies. Hence, learners are spending most of the day in teacher-directed activities. Teachers reported that barriers to play in Kindergarten classrooms today are because the curriculum does not integrate it, and that there is very little time during the day for it. Furthermore, play centers such as the dramatic play center, the kitchen center, the blocks area, and the art center have been replaced by academic centers such as the phonics center, the math center, and the writing center; reducing opportunities for play, free choice, exploration, discovery, and creativity. One study participant believed that:

> Play is a dynamic, active, and constructive behavior- is an essential and integral part of all children's healthy growth, development, and learning across all ages, domains, and cultures. Play is a powerful, natural behavior contributing to children's learning and development and that no program of adult instruction can substitute for children's own observations, activities, and direct knowledge.

The Third Research Question

The third research question asked, 'How are the Kindergarten curriculum and developmentally appropriate practices responsive to systemic constraints?' The portrait of the new Kindergarten teacher, as indicated by the teachers of the study, revealed that there is a tension between what the teacher perceives to be developmentally appropriate practice and what is expected of them as a result of the push-down curriculum in a high stakes environment. To negotiate these challenges, the teachers participating in this study used differentiated instruction in the classroom in different modalities such as small group instruction, providing learning centers for remediation, and using another teacher or paraprofessional.

According to Tomlinson (2005) differentiated instruction is a "philosophy of teaching purporting that students learn best when their teachers effectively address variance in students' readiness levels, interest, and learning profile preferences" (p. 263). As one teacher from the study commented on the importance of differentiated instruction in today's current climate:

> Differentiated instruction has been a Godsend. You as the teacher always know that you have to call certain kids outside the bar and do whatever you can to bring them up…so differentiated instruction really helps out…and you do see the growth, you do see that growth with all your levels.

Tomlinson (2005) identified the essential tenets needed to achieve differentiation effectively. These tenets are as follows:

1. teachers provide a learning environment that is safe and challenging
2. instructional modalities include whole class, small group, and one-on-one
3. learning goals are clear and focused
4. pre-assessment and formative assessment inform the instructional plans of teachers
5. teachers use flexible strategies to meet the diversity of students' needs
6. classrooms "become communities of learning in which students share with the teacher responsibility for respect, optimum operation, and maximum individual growth" (p. 263)

According to Tomlinson (2003), teachers respond to differentiated instruction by meeting the needs of the learner with invitation, opportunity, investment, persistence, and reflection. These different elements come together to meet the diversity of achievement levels and interests of the learner:

Invitation:

- I respect you as a learner and as a human being.
- I want to know you and make time for you.
- I believe in your uniqueness.
- When I listen to you, I learn.
- The classroom is yours too and we need you here.

Opportunity

- I have important things to cover with you today.
- These things are worthy and valuable.
- I may ask you to do things at times that are challenging.

- The things I ask you to do will open new doors to help you become all you can be.

Investment

- I give my all to make this place work for you.
- It gives me pleasure thinking about what we do here.
- I want you to succeed and grow to your fullest potential.

Persistence

- When one way doesn't work, we will find another way to help you.
- Let's work together to find out what works best.
- You will always have my support

Reflection

- I observe and listen carefully to your needs.
- By observing and listening to your needs I can learn how to help you better.
- I always ask, "How can I make things better?"

The portrait of the New Kindergarten teacher has emerged; one that exemplifies the traits of quality differentiation by inviting students to be part of the learning process, providing the necessary opportunities to help them achieve their goals as an investment in their future and with a persistence to get the job done. Furthermore, the researcher acknowledges that professional development in the area of differentiated instruction has been provided to many public school teachers. As such, teachers are likely to attribute their ability to meet the needs of young children to D.I. theory, when in fact it may be just a reflection of good old-fashion developmentally appropriate teaching. As George (2005) states, "It is quite impossible to imagine that real, permanent, productive learning

experiences, let alone those simple ones connected to state standards, could happen in any other context other than one in which differentiation of instruction figures prominently" (p. 191).

Reflections on the Findings:

Teacher as Artist and Child as Creator of Knowledge

My journey as a researcher has come full circle. As I write my concluding thoughts, I reflect on my scholarly journey, thinking how it has impacted me academically, as well as personally. As the aesthetic whole reaches completion, I have a deeper, more profound understanding of myself, such as the artist has with a work of art. Lawrence (2002) explains how the "self" is:

> At play in all parts of the implementation of the methodology-forging relationships, determining context, searching for coherence, defining expression, and balancing a unified representation. Furthermore, self is imprinted on the lens through which the subject of the portrait is interpreted and thereby on the vision attained. Just as we see self-guiding the artist's hand as it is imprinted on the artist's canvas, we hear self guiding voice as it is imprinted on the portrait. Through voice, self is heard explicitly in the context, language, and content of the portrait, and implicitly in the orchestration of the aesthetic whole. (p. 35)

As with a painting, when one finally finds meaning in a work of art it becomes a transforming experience. A similar experience is manifested when the researcher reaches a level of self-understanding or transformation. Lawrence (2002) elaborates on this experience:

> Making and finding meaning through art is a transformative experience. Once we have encountered seeing and thinking in the aesthetic realm, our ability to think, and see more generally is altered. The alternative that portraiture provides raises a reflective glass to the stories that shape lives, pedagogy, and institutions. In so doing, portraiture illuminates and acknowledges the importance of these phenomena. (p. 36)

The Answer to the Question

Transformation of my work as a researcher became my epiphany when the answer to the question was revealed.

Once Upon a Time…

Froebel created a masterpiece, an artwork known as: the Kindergarten, or Child's Garden…

Among the tears, the fears, the ancient ruins, the dance of children was at stake…

Among the great galleries of paintings, Froebel is still alive…

The spirit of Froebel remains in those dedicated teachers…

The mothers of the world, the Mother Teacher who never gave up on the children of the world…

You are the true artist…

Creating your craft…

The Art of teaching children, the creators of knowledge and wisdom.

The artist's canvas is incomplete, as many more children will go before the artist's hands, the Mother Teacher, to love, to nurture, to mold the child into a human being.

As one teacher commented at the end of the interview: "Why do you make it sound so negative?"

That was my epiphany…That was the Answer to the question.

Policy Recommendations

The use of standardized tests may be an inappropriate approach with very young children. Assessment of children should be based on a holistic approach including cognitive, social, emotional, physical, and creative development. The use of standardized testing in early childhood may lead to retention in a given grade level. Testing can also lead to inappropriate labeling such as learning disabilities or attention disorders. It is recommended that teachers use alternative methods of assessment, including teacher observations and the assessment of children's work.

Implications for Practice

The current study has revealed several important implications for practice. First, the Kindergarten is evolving. More and more children are attending a full day Kindergarten model. This full day experience for young children speaks to the academic nature of the Kindergarten today. No longer is Kindergarten the place for children to slowly ease into the school experience. Second, the early childhood environment is

changing and we are seeing a rigid schedule imposed on five year old children that does not take into account teachable moments driven by young children. Third, and most significantly, the Kindergarten is now the first grade because of the expectations coming from high stakes testing. This is a result of the academic expectations resulting from the push-down curriculum.

Implications for Teacher Education

As a teacher educator and curriculum leader, the researcher's study has revealed several significant implications. Unfortunately, today's Kindergarten is dictated by the pressures of high stakes testing. Because of continual systemic constraints imposed on teachers, it is crucial for our pre-service teachers to have a thorough grounding and understanding of assessment and evaluation in schools today. Pre-service early childhood teachers should be trained to administer assessment tools, learn to interpret data from these tools, and design intervention activities that meet the learning needs of students. In other words, teachers need to use assessment tools not as a barrier, but a way to improve teaching and learning.

The amount of time spent on play and recess has limited the ways that children interact in early childhood classrooms today. Teacher educators must show future teachers the importance of play and play-related activities. A good start would be by showing teacher candidates how hands-on activities in all subjects can enhance the experiences needed for young children to interact, engage, and thrive in their physical, social, and emotional development.

A significant finding of the current study was how teachers maintained a high level of efficacy even under the most daunting systemic pressures in classrooms today.

The present research focused on experienced teachers and the impact of systemic constraints on the teacher/learner pedagogical relationship. We must educate our new, inexperienced teachers how to deal with the pressures stemming from the current climate of high stakes testing. It is essential that we share research on how a teacher's sense of self efficacy is crucial to teaching and learning today.

Recommendations for Future Studies

Maturana's (2002) work in cognition and education explains that the maternal relationship must continue once the child enters school and continues this relationship with his/her teacher in a pedagogical setting. That is, the central task of education is to attend to, foster, and guide children in their growth as self-respecting, socially and ecologically conscious and responsible human beings. Maturana expands on his thoughts:

> Education has to do with the soul, the mind, the spirit with the relational or psychic space we live and we want our children to live. Education is not concerned with the particular things that our children may have to do in the realization of the psychic space that they will live, this is a matter of knowledge, learning and teaching. Moreover, education has to do with becoming human beings and the kind of human beings that we become while learning and teaching, has to do with the acquisition of the operational abilities needed to live in the particular domain of existence in which one is a human being. In these circumstances, it is the tasks of the educators to use teaching, any teaching, as a

> means for educating in the creation of the living space that will lead the student to become a self-respecting and socially conscious responsible human being.

So, if this is the most critical and significant force that binds the child to the "other," then what is the maternal relationship between mother and child and how is it achieved? Eventually this force will be transformed to the teacher/learner relationship in the classroom. A future study on how this relationship is manifested in the classroom and how it is practiced in teaching and learning in an era of accountability, standards, and testing would make for a worthwhile investigation.

Another area worthy of studying is how the testing environment is impacting Kindergarten children emotionally and psychologically. Even though this was not the focus of the current study, it was implied by the teachers in several instances during the interviews that children's behavior may be influenced by a testing environment. As one teacher commented regarding the scheduling requirements that guide her decisions about allocation of time for various activities:

> I think we need to get the important things out of the way first such as reading and math so that you can keep their mind…keep their minds flowing because they can drop out on you after a while. They really want you to keep with the time.

In another instance during the interview of one of the participants, the conversation turned to the behavior of children staying focused during long periods of academic instruction:

> Well, their attention spans are…are…it's not fair… it is not fair and I think you have to have a little finesse about it you know…being aware of that and change…keep changing activities…trying to approach from different ways…give them some movement…give them some different ways of getting the information.

It was interesting to note during the researcher's observation period in the classrooms, how difficult it was for some children to stay focused during long periods of academic time without breaks, recess, and or playtime. Certainly, a research study that specifically focuses on the impact of accountability on the development of the whole child would be welcome by the early childhood community, where social/emotional development is highly valued.

Finally, examining different Kindergarten settings such as charter schools or private schools would be of benefit for future study. The current study's focus was public Kindergarten classrooms. It would be interesting to examine if charter school Kindergarten teachers are experiencing the same systemic constraints as their public school K-teacher counterparts. Also, how are private school Kindergartens fairing in an era of accountability, standards, and testing? Is the teacher/learner pedagogical relationship fostered or compromised in the current climate? Expanding future studies in this area would be beneficial.

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Appendix A

- *What are Kindergarten teachers' perceptions regarding systemic constraints on the teacher/learner pedagogical relationship in an era of No Child Left Behind?*
- *How are the roles of the teacher and the roles of the learner fostered or compromised in relation to institutional systemic constraints?*
- *How are the Kindergarten curriculum and developmentally appropriate practices responsive to systemic constraints?*

Kindergarten Teachers' Perceptions
Interview Protocol

Date: _____

Time at start of interview: _____

Interviewee Name: _____

Interviewee Gender: _____Male _____Female

Interviewee Ethnicity: _____

Interviewee Position: _____

Interview Setting: _____

A. THE TEACHER	**Observations**
1. How long have you been teaching? What was your training? How long have you been teaching Kindergarten? How long at this school? Describe the demographics of your school.	
2. What is the mission statement of your school?	
3. What is your teaching philosophy?	
4. Does your philosophy align with your school's mission statement?	
5. In your opinion, what is the role of the teacher in early childhood education?	
6. What is your personal definition of high stakes testing and of accountability standards?	

A. THE TEACHER (continued)	**Observations**
7. What are your views on the *No Child Left Behind Act?*	
8. Do you feel that high stakes testing and accountability standards have affected the way you instruct students in your class? If yes, how? If no, how have these always been a part of the way you teach in the early childhood classroom?	
9. Are there certain administrative/operational/managerial activities in which you must regularly engage that you believe detract from your time to address the learning needs of your students?	
10. Are there particular aspects of accountability (re: high stakes testing) that you believe may support your efforts to meet the learning needs of your students?	

B. THE LEARNER	**Observations**
1. In your opinion, what is role of the learner in early childhood education?	
2. What do you consider to be essential elements in the early childhood classroom in order to maximize learning? How do these get operationalized in your classroom?	
3. What are some examples of the ways that you interact with your students?	
4. How does your daily routine with your students foster or compromise your beliefs regarding what is essential to the way children learn?	
5. Do you believe that high stakes testing has affected children's learning in your class? If so, how? If not, why do you suppose this is true? In either case, on what do you base your opinion?	

B. THE LEARNER (continued)	**Observations**
6. What institutional challenges seem to most impact your students' opportunities to engage in developmentally appropriate activities?	
7. What practices/ strategies do you employ to negotiate these challenges? How successful do you feel you are?	

C. THE KINDERGARTEN CURRICULUM	Observations
1. What percentage of classroom academic time is devoted to readiness skills?	
2. What percentage of classroom enrichment time is devoted to activities such as centers, play, and free time?	
3. What scheduling requirements guide your decisions about allocation of time for various activities? Who establishes these requirements?	
4. How does the schedule structure you're expected to follow support or inhibit your teaching?	
5. What are the expectations of 1st grade teachers as related to readiness skills?	
6. In what ways does a developmentally appropriate curriculum support the efforts of high stakes testing and accountability standards?	

C. THE KINDERGARTEN CURRICULUM (continued)	**Observations**
7. In what ways does a high stakes testing–focused curriculum support the developmental needs of the kindergarten child?	
8. How have you personally been able to adapt a developmentally appropriate curriculum to a high stakes /accountability standards- based environment? If so, what specific strategies or practices have you found to be most effective? If not, what barriers have you encountered? How have you been able to overcome these (or have you)?	
9. How has the "push-down" curriculum affected the Kindergarten setting?	
10. In your opinion, how has the context (ecology) of the kindergarten classroom changed in the last 5 years?	

Would you like to add anything else that you think is relevant.
Thank you.

Interview 'End' Time: _____

Interviewer Name: _____

BARRY UNIVERSITY
ADRIAN DOMINICAN SCHOOL OF EDUCATION

Appendix B

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Miami Shores, FL 33161-6695 **phone** 305-899-3700
toll free 800-756-6000, ext. 3700 **fax** 305-899-4708

INVITATIONAL LETTER TO PARTICIPANTS

Date (to be inserted)

Dear Kindergarten Teacher:

My name is Javier Gonzalez and I am a doctoral student in the Curriculum and Instruction Doctoral Program at Barry University. I am presently working on my dissertation. The topic is: Perceptions of Kindergarten Teachers Regarding Systemic Constraints on the Teacher/Learner Pedagogical Relationship. In order to gather information on this topic, I intend to conduct semi-structured, in-depth interviews with Kindergarten teachers within public elementary schools in Miami Dade County. Furthermore, each participant will be observed interacting with his or her students in the educational setting two times over a period of two weeks. I will need to select participants who are presently Kindergarten teachers who meet the following criteria regardless of their ethnicity and age:

- Presently a Miami Dade County Public School Kindergarten teacher
- Minimum of seven years of teaching experience of which two years must be at the Kindergarten level

The aim of the research is to collect data regarding how Kindergarten teachers perceive the effects of systemic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings. This study may help to understand the implications of systemic constraints on the teacher/learner pedagogical relationship in early childhood education.

Data collection will be collected from semi-structured, in-depth interviews which will be audio-taped with your permission. Furthermore, each participant will be observed in the educational setting. If you decide to participate, I request that you contact me as early as possible at **jagonzalez@mail.barry.edu** or by telephone at 305-899-3758 between the hours of 8:00 am and 9:00 pm.

As a research participant, information you provide will be held in confidence to the extent permitted by law. Any published results of the research will refer to the interviewee's perceptions by pseudonym only. The interview protocol and the audio-taped interview data will be kept in a locked file in the researcher's office until completion of the transcription. While your interview will be audio-taped, a transcription will be made from the tape by the investigator within a month of the interview. Subsequently, you will be given the opportunity to review the transcript with the investigator at a mutually convenient time for purposes of verification, amendment, and completeness. Upon your satisfaction concerning the transcript, the tape will be destroyed. Your signed consent form will be kept separate from the data. All transcribed data, the observational data and any documents attained relevant to classroom practice

will be destroyed after a period of five years. The estimated total time commitment will be one hour for the interview, four (4) hours of observations over a period of two weeks, and a follow-up meeting for verification of transcript data, and examination of relevant classroom documents.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on you as a teacher. There are no known risks to you for participating in this study and no direct benefits. Although there are no direct benefits to you, the results of the study may better inform early childhood practice.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Javier Gonzalez, at (305) 759-8916, my dissertation committee chair, Dr. Lilia DiBello, at (305) 899-4827, or the Institutional Review Board point of contact, Barbara Cook, at (305)899-3020.

Sincerely,

_____

Javier Gonzalez

BARRY UNIVERSITY

ADRIAN DOMINICAN SCHOOL OF EDUCATION

11300 NE Second Avenue
Miami Shores, FL 33161-6695 **phone** 305-899-3700
toll free 800-756-6000, ext. 3700 **fax** 305-899-4708

Appendix C

Informed Consent Form

Your participation in a research project is requested. The title of the study is 'Perceptions of Kindergarten Teachers Regarding Systemic Constraints on the Teacher/Learner Pedagogical Relationship'. The research is being conducted by Javier Gonzalez, a student in the Curriculum and Instruction Doctoral Program at Barry University, who is seeking information that will be useful in the field of early childhood education. The aim of the research is to collect data regarding how Kindergarten teachers perceive the effects of systemic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings. In accordance with this aim, the following procedures will be used:

Each participant will be interviewed once for approximately one hour using a semi-structured, in-depth interview format. The interview will be audio-taped only with your permission and it will be conducted at a convenient location agreed upon between us. You also have the right to refuse to be audio-taped and to withhold answers to any question(s) you wish, to withhold participation, and to drop out at any time. Refusal to be audio-taped will not eliminate you from the study. Furthermore, each participant will be observed interacting with his or her students in the educational setting four (4) times over a period of two weeks. There will be no video taping of the educational setting during the observations. We anticipate the number of participants to be four. The interview process and observations will be completed prior to June 2010.

If you decide to participate in this research, you will be asked to do the following:

1. Sign this consent form prior to beginning the interview.
2. Indicate on the space provided on the consent form if you agree to be audio-taped.
3. Indicate on the space provided on the consent form if you agree to be observed in the educational setting. Please note, consent forms will be required from the parents of the students in the Kindergarten setting.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on you as a teacher. There are no known risks to you for participating in this study and no direct benefits. Although there are no direct benefits to you, your participation in this study may help to understand the implications of systemic constraints on the teacher/learner pedagogical relationship in early childhood education.

As a research participant, information you provide will be held in confidence to the extent permitted by law. Any published results of the research will refer to the interviewee's perceptions by pseudonym only. The interview protocol and the audiotaped interview data will be kept in a locked file in the researcher's office until completion of the transcription. While your interview will be audiotaped, a transcription will be made from the tape by the investigator within a month of the interview. Subsequently, you will be given the opportunity to review the transcript with the investigator at a mutually convenient time for purposes of verification, amendment, and

completeness. Upon your satisfaction concerning the transcript, the tape will be destroyed. Your signed consent form will be kept separate from the data. All transcribed data, the observational data and any documents attained relevant to classroom practice will be destroyed after a period of five years.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Javier Gonzalez, at (305) 759-8916, my dissertation committee chair, Dr. Lilia DiBello, at (305) 899-4827, or the Institutional Review Board point of contact, Barbara Cook, at (305)899-3020. If you are satisfied with the information provided and are willing to participate in this research, please signify your consent by signing this consent form.

Voluntary Consent

I acknowledge that I have been informed of the nature and purposes of this experiment by _____ and that I have read and understand the information presented above, and that I have received a copy of this form for my records. I give my voluntary consent to participate in this research. You may schedule me to do the interview and, subsequently, to be observed in the educational setting by the researcher. I do/do not agree to be audio-taped. I do/do not agree to be observed in the educational setting.

_____ _____

Signature of Participant *Date*

_____ _____

Researcher *Date*

BARRY UNIVERSITY

Appendix D

ADRIAN DOMINICAN SCHOOL OF EDUCATION

Barry University
Parental Informed Consent Form

Your child's teacher has elected to participate in a research study. The title of the study is 'Perceptions of Kindergarten Teachers Regarding Systemic Constraints on the Teacher/Learner Pedagogical Relationship'. The research is being conducted by Javier Gonzalez a student in the Curriculum and Instruction Doctoral Program of Barry University's Adrian Dominican School of Education, and is seeking information that will be useful in the field of Early Childhood Education. The aim of the research is to collect data regarding how Kindergarten teachers perceive the effects of systemic constraints on the teacher/learner pedagogical relationship in public Kindergarten settings.

In accordance with this aim, each participating teacher will be interviewed once for approximately one hour using a semi-structured, in-depth interview format. Furthermore, each teacher participant will be observed interacting with his or her students in the educational setting four (4) times over a period of two weeks. The interview process of the teachers and classroom observations will be completed prior to June 2010. We anticipate the number of teachers participating in the study to be four.

There will be no interaction between your child and the researcher. The researcher is merely there to observe the interaction between the teacher and the learner.

The consent to be a research participant is strictly voluntary and should you decline to allow your child to participate or should your child choose to drop out at any time during the study, there will be no adverse effects on you or your child.

There are **no** risks or benefits in participating in this study. Although there are no direct benefits to your child, his/her participation in this study may help our understanding of improving early childhood education programs.

As a research participant, the observations will be held in confidence to the extent permitted by law. Any published results of the research will refer to the group only and no names will be used in the study. Data will be kept in a locked file in the researcher's office. Your signed consent will be kept separate from the data. All data will be destroyed after all data collection has been transcribed.

If you have any questions or concerns regarding the study **or** your child's participation in the study, you may contact me, Javier Gonzalez at (305) 899-3758, or my dissertation committee chair, Dr. Lilia DiBello at (305) 899- 4827 or the Institutional Review Board point of contact, Barbara Cook at (305) 899- 3020. If you are satisfied with the information provided and are willing to allow participation in this research, please sign, your consent by signing this consent form.

Voluntary Consent

I acknowledge that I have been informed of the nature and purposes of this research by _____ and that have **read** and understand the information presented **above,** and that I have received a copy of this form ***for*** **my** record.

I give **my** voluntary consent to allow my child to participate in this research.

_____	_____
Signature of Parent	Date
_____	_____
Signature of Researcher	Date

Appendix E

Confidentiality Agreement

As a member of the research team investigating _____,
I understand that I will have access to confidential information about study participants. By signing this statement, I am indicating my understanding of my obligation to maintain confidentiality and agree to the following:

- I understand that names and any other identifying information about study participants are completely confidential.
- I agree not to divulge, publish, or otherwise make known to unauthorized persons or to the public any information obtained in the course of this research project that could identify the persons who participated in the study.
- I understand that all information about study participants obtained or accessed by me in the course of my work is confidential. I agree not to divulge or otherwise make known to unauthorized persons any of this information unless specifically authorized to do so by office protocol or by a supervisor acting in response to applicable protocol or court order, or public health or clinical need.
- I understand that I am not to read information and records concerning study participants, or any other confidential documents, nor ask questions of study participants for my own personal information but only to the extent and for the purpose of performing my assigned duties on this research project.
- I understand that a breach of confidentiality may be grounds for disciplinary action, and may include termination of employment.
- I agree to notify my supervisor immediately should I become aware of an actual breach of confidentiality or situation which could potentially result in a breach, whether this be on my part or on the part of another person.

_____	_____	_____
Signature	Date	Printed Name

_____	_____	_____
Signature	Date	Printed Name

Appendix F

Observation Form **Code:**

Date:
Time:
Institution:
Observer Name:
Observation Setting:

1. The Physical Ecology of the Setting

2. The Social Ecology of the Setting

3. The Formal/Academic Instruction of the Setting

4. The Enrichment Activities of the Setting

Appendix G

Assent Script

Hello. My name is Javier Gonzalez and I am a student at Barry University. I would like to tell you a little bit about my work. I am going to be observing you and your teacher working together in your classroom. I will be spending two days with you and your teacher. I will take notes in my notebook because I hope to learn a little more about how kindergarten children learn, so I can be a better teacher. If it's ok for me to spend a little time learning about kindergarten in your classroom with you and your teacher, I need you to raise your hand and say 'yes' it is ok.

_____
Teacher Witness – Name Printed

_____
Teacher Witness Signature

_____
School

_____
Date

_____
Principal Investigator

Appendix H

Ana Observation 1

Date: 5/24/10 **<u>The Physical Ecology of the Setting</u>:**	**Notes based on Observational Data Collected**
• 36 students, 2 teachers, ESOL levels 1 - 3 • 6 tables, 6 per table, each group by color: purple, blue, yellow… • Word wall • Rug Center • Teacher desk, Reading table • "Spring has Sprung" bulletin board • 5 computers (center) • Theme--Solar System, planets displayed from ceiling • Bulletin Board for helpers • Power Rules: (Power Ranger figures) Examples--"Raise your hand before talking", "Work is done quietly and correctly" • Houghton Mifflin Reading Practice book • book Center: Different genres of books • Bathroom in the hallway • Teacher Cabinets: Labeled 'Manuals', 'Teacher Books', 'Paper Goods', 'Paper', 'Glue', 'Paint' • Foss Science Kits (Kindergarten) • Lunch boxes neatly on shelf • Big Books • Each table: Tissue paper box, basket of books, box of colors, alphabet chart • Teacher Read Alouds in a box • Math Vocabulary chart: Skip count by 2's, 5's, 10's • Each student has a 1-inch binder • I. In this binder that goes home every day, the students have a pocket for h.w. (daily). This week: Consonant blends (L.A.), Writing 10's (Math) • II. Parent information pocket including: Reading log, field trip form, weekly letter to parents in English and Spanish: "Today we have started a new set of sight words. Please take time to practice with your child daily. The test for these sight words will be this Friday." (Sight words: other, them, there, use, when, then, all, how, many • III. List of Pre-Primer, Primer, First Grade Words • IV. Rules, Rewards, Consequences	*Reading was the emphasis, from the word wall, to reading table, book center, reading practice books* *Academic centers, no fun centers* *Academic environment* *Like a 1st grade classroom, not a Kindergarten* *Parent/Homework packet very academic: Reading logs, sight words, vocabulary lists*

The Social Ecology of the Setting: • Students called to rug by color -- 'Group Blue', 'Group Orange' • What was Journal about? 'Mr. M' asks the class. "The earth" students respond. Teacher-Student interaction about the journal morning topic. • Students very well-mannered, listening, attentive • Excellent transitions • Student held hands around the rug. Mr. M in the middle acting like the sun. • Students held globe acting like 'mother earth', rotating around the sun • Teacher explains this both in English and Spanish • Excellent hands-on interactive lesson! • Each table has a marble container for good behavior. Teacher places marble in container according to group behavior. Sometimes students place marble(s) for their group: "Group Blue is behaving very well! 10 marbles for Blue Group."	*Discipline essential in order to maintain the fast pace of the daily schedule* *Mainly teacher-directed, except for one interactive activity*
The Formal/Academic Instruction of the Setting: • Each teacher is in charge of planning one subject matter: math, reading, science, etc.. • Reviewing th, ch, sh, wh • Interaction on the rug: Teacher Ms. V and Teacher Mr. M • Big pictures used and labeled: "earth", "moon" • KWL chart prepared by T.A. • "What I Know" "What I Want to Know" "What I Learned" -Water -Schools on earth • Mr. M reads from book *Earth* • After orbit demo, class went back to their seats for activity to complete KWL chart at their desks while teacher facilitated discussion about the EARTH. • Mr. M writes sentences on 'What I Learned' while students copy on their activity sheet • Students will write a story about the earth including 5 sentences • Both teachers with each student read sentences from their 'th', 'ch', 'sh', 'wh' booklet. Examples: Mr. M is very thirsty. The rat can eat cheese. The shark can eat you. The whale can eat a shark.	*Emphasis on reading: phonics, KWL charts, read alouds* *Emphasis on writing skills, writing stories* *Independent work, rather than cooperative work* *Craft activity breaks up the pressure of academics*

• This one-on-one interaction between both teachers and students takes about 30 minutes. • Then teachers meet individually by table to review stories. • For example, teachers meet, with students who are having difficulty with English as they work together in Spanish. **<u>The Enrichment Activities of the Setting:</u>** • Art: Students will make their graduation craft (not observed). • Music: Students will practice their graduation song (not observed).	

Ana Observation 2

Date: 5/25/10 **<u>The Physical Ecology of the Setting</u>:**	**Notes based on Observational Data Collected**
• Stories of the Week Theme: Spring is here! --*3 Little Pigs* --*The True Story of the Three Little Pigs* --*Runaway* --*Splash*	*Reading, spelling emphasized*
• Words of the Week: kind, tell, ask, please, stop, write, much, that, light, around	
• Science/Social Studies: Living Things Animals Needs: Compare/Contrast	
• Math of the Week: --Understanding addition --Joining groups --Using the + sign --Using the = sign --Solving addition sentences	*Math literacy: vocabulary*
• Assessment ** Chapter 10 Test	*Chapter Test*
<u>The Formal/Academic Instruction of the Setting:</u>	
• Science • Writing about "My Planet" (5 sentences) • 12 Chapters • Unit 10 • Theme skills test • Blending and segmenting phonemes • Story structure: Beginning, Middle and End • Compare and Contrast • Story Structure: Plot • Initial Consonant: "J" circle (Jet, Jeez) • Blending -- "up" and "ut" words	*Language Arts: writing, vocabulary, spelling*
• High frequency words ("are", "he") 1. Theme skills test -- How long does it take to administer? 30 minutes 2. Write about the moon --Read about space --Practice 'wh' --Practice counting --Sing and play	*Rote learning of high frequency words*

Beth Observation 1

Date: 5/26/10	**Notes based on Observational Data Collected**
<u>The Physical Ecology of the Setting</u>: • 5 Tables with 4/5 students per table • Theme of the class: "Put your best foot forward." • 25 students • Bulletin Boards: --1. Word Wall: What used to be the board is now the word wall (A --> at, and, away) (B --> ball, bat, big, book) --2. Math Word Wall Equal, same, more, less --3. Alphabet A - Z board "It's Spring Time" Writing Samples Reading Samples Handwriting Samples -- I see a funny cat Math Samples ----------	*No fun centers, academic centers* *Word Walls*
<u>The Formal/Academic Instruction of the Setting:</u> • Math Lesson: --I have <u>eleven</u> balloons. --<u>Twenty</u> candles are red. --<u>Six</u> apples are green. • Review of calendar: How many days? • Count numbers 11 - 20, also 'eleven', 'twelve', 'thirteen', etc.	*Teacher-directed math lesson* *Room similar to a 1st grade environment*
<u>The Physical Ecology of the Setting</u>: • Computer Area • 4 Computers • Folders in boxes: --Reading --Mathematics --Content Area --Home Learning --Portfolios • 1 Bulletin Board for Art: Squares and Triangles to create construction paper houses. "Rectangle for Road" • Dolch Words on Chart Paper • Pre-Primer • Writing Center --Make new words. Short 'e' Short 'u' c - n - b - p - t - m - d	*Dolch Word* *Academic centers: Writing center, math center*

__ut __en __ut __en __ut __en • Math area (center) • Reading Center (ARea_ --Different genres -- fiction and non-fiction	*Academic center: Reading*
The Formal/Academic Instruction of the Setting: • On the rug: "Criss cross, apple sauce." to get students' attention. Teacher's assistant joined children on the rug. • Teacher read a story...*Henny Penny*...from the basal reader. • Asking prediction questions --What will happen next? --What do you think the fox will do? • At the end of the story: --How did the animals solve the problem about the fox? --Follow-up question: How did he escape? --Was this a happy ending? "Yes" --Follow-up -- Why? "They were able to escape." • After the story, they worked on Activity Sheet in Reading Practice Book -- Houghton Mifflin --"Place an 'X' on the pictures that are not part of the story."	*Henny Penny story, all teachers reading the same story, scripted* *Practice Sheets* *Social Interaction is more teacher directed*
The Social Ecology of the Setting: • Teacher-directed lessons: Counting numbers (see math) • Teacher read story from basal ALOUD then answer/question session (see Reading) • Teacher --> Student Yes • Student --> Student No __Individual Seat Work	*No enrichment, no playtime, no recess*
The Enrichment Activities of the Setting: • No Art • No Music • No P.E. • No Special Activities	

Beth Observation 2

Date: 5/27/10 **<u>The Formal/Academic Instruction of the Setting:</u>**	**Notes based on Observational Data Collected**
• Review on white board math vocabulary --set --equal (=) --together --all together --add (+) ----------	*Math literacy: math vocabulary*
• Students use their counters to solve add equations OOO + OOO = 3 + 3 = 6 Count "1, 2, 3 + 1, 2, 3 = 6" Students complete these while sitting on Blue perimeter of the rug. OO + OOO = 2 + 3 = 6 Student writes on the board. Class read aloud: "2 + 3 = 5" OOOO + OO = 4 + 2 = 6 Student writes on the board. "Now, boys and girls, count your cubes." Class counts: "1, 2, 3, 4, 5, 6." "6" "Does it make 6?" "Yes." Same procedures for: OOO + OOOO = 3 + 4 = 7	*Teacher-directed math lesson using manipulatives*
<u>The Formal/Academic Instruction of the Setting:</u> • Activity of tables with counter/cubes • Teacher passed out math work book (Harcourt Math) • Students create their own addition problems on yellow construction paper • They create two problems as teacher and assistant supervise • Students sit on blue line and say their problems that they	*Math Workbook* *Critical Thinking: students creating their own math problems*

wrote • Home Learning assignments discussed • A World of Animals Level K, Theme 10, Week 2 • Skills: Compare/Contrast **<u>The Enrichment Activities of the Setting:</u>** • Not observed (No special projects) **<u>The Social Ecology of the Setting:</u>** • All teacher directed.	*Following the District's Plan for home learning* *Practice Skills for home learning*

Coretta Observation 1

Date: 6/1/10 **<u>The Formal/Academic Instruction of the Setting:</u>**	**Notes based on Observational Data Collected**
• "Song of letters" • "The snake is in the grass." "S", "S", "S" sounded out by students • "N", "N", "N", "N" -- 'Net the fish." • "We click the castanets." "C", "C" sounded out • "Bring your ball and ball." "B" "B" sounded out • Smart Board for letter practice. • Letters of the week Ll Bb Cc • Using the vowels û - ē. "Which letter can we use to make a word?" • Short u -- cut Short e -- Ben but _en • "If I say "ut" hold one finger. If I say "en" hold up two fingers." • Children by groups to the rug. • "Today's reading will be about birds." The title of the book *Feathers for Lunch* from the theme: "A World of Animals"	*Teacher-directed phonics lesson* *Reading emphasized: phonics*
<u>The Physical Ecology of the Setting</u>: • Brightly lit, painted lime green walls, orange doors • Very clean and organized room • Water fountain/bathroom • computer center with 4 computers • Plastic containers for book bags • Dramatic Play Center -- props, masks, puppets, kitchen • Houghton-Mifflin *Splash* Big Book • Bulletin Board --"We Love Reading" -- Word Wall with Aa, away, an, at, are, ate, ask • Six tables x 3 students = 18 students • Each table contains box of crayons, writing n.b., reading book • Spelling words on the board • Spelling Group A: the, go, see, to, are, purple, blue, away, five, three • Math/Manipulatives Center -- Practicing shapes • Reading Center -- Listening station -- Books with different genres • Social Studies/Geography -- The Land Activity Sheet -- Draw "Mountain", "Valley", "Hill" and "Plains"	*No fun centers, no play- related centers* *Academic centers: math center, reading center* *Scripted reading lesson*

The Formal/Academic Instruction of the Setting: • Prediction of the cover of the book --What do you think the story is about?" (Teacher elicits responses from students.) • Teacher reads story. • Questions asked -- "Why can't the cat fly?" **The Social Ecology of the Setting:** • No, Teacher directed only **The Enrichment Activities of the Setting:** • No time	*Scripted reading lesson* *No social interaction* No time for recess, play, arts

Coretta Observation 2

Date: 6/2/10 **<u>The Formal/Academic Instruction of the Setting:</u>** <u>Reading/Language Arts:</u> <u>Writing (30 minutes)</u> • Have students take out their 'Expeditions' paper they wrote. • Let them spend 10 minutes proofreading for spelling, punctuation, complete sentences. Tell them to add more details to their paper. • After 10 minutes, have students (as many as you can) read their 'Expeditions' paper aloud to the class. <u>Reading (1 hour)</u> • Continue reading *Spanish Treasure Fleet: Lost and Found* • As students and you read the story together, ask the questions that correspond to each page (FL3, FL4, FL5, FL6, FL7) • As you read, conduct three types of reading: --Teacher reads a paragraph aloud --Student reads a paragraph aloud --Students read a page silently to themselves <u>Language Arts (30 minutes)</u> **<u>The Social Ecology of the Setting:</u>** • Mainly teacher-student interaction • Teacher-directed lessons during Language Arts period **<u>The Enrichment Activities of the Setting:</u>** • Not observed • Preparing for Kindergarten Graduation	**Notes based on Observational Data Collected** *Reading is the emphasis in Kindergarten* *120 minutes of reading/language arts* *No time for play, recess, or arts* *Teacher shared her lesson plans with me. Mainly academic* *Lesson plans in reading were prescriptive -- created by the District.*

Diane Observation 1

Date: 6/3/10 **<u>The Formal/Academic Instruction of the Setting:</u>**	**Notes based on Observational Data Collected**
• Morning announcements • Teacher -- "Let's go over our Fry Sight Words." Teacher points to each word as students repeat: 51. will 56. many 61. some 66. him 52. up 57. then 62. her 67. into 53. other 58.them 63. would 68. time 54. about 59. these 64. make 69. has 55. out 60. so 65. like 70. look • Teacher points to each month of the year: "January, February, March..." • Teacher points to each day of the week as students pronounce aloud: "Monday, Tuesday,..." • Academic time interrupted by school-wide Fire Drill • Review shapes: "circle, oval, rectangle, triangle, rhombus, hexagon, trapezoid" • Review colors: "white, red, blue, green, black..." • Review numbers: 1 - 30 • Count by 5's: "5, 10, 15, 20, 25, 30, 35, 40, 45, 50"	*Students must master the 100 Fry Words by the end of their Kindergarten year* *Math Literacy: vocabulary*
<u>Reading Center</u> • Phonics Library (Houghton Mifflin) • Voyager Passport Series (aligned with FL Benchmarks) • Fry's Sight Word Recording Sheet (K-level) • Weekly Benchmark: Cause & Effect • June & July Words: butterfly, bee, beach, pool, picnic, ladybug	*Academic centers: reading center, math center, science center, listening center, computer center*
<u>Math Center</u> • Math chart with fill in the blanks: 1,__,3,4,5,__,7,__,__,10	
<u>Science Center</u> • Science bulletin board with vocabulary: seeds, plants, seedling, soil, leaf, stem, roots, grow, flowers • Scientific Method: Question, Hypothesis, Materials, Procedure, Observation, Conclusion • Guided Inquiry in Science --Investigate which ramp is easier to use. • Science Books: *In Spring*, *At the Beach*	
<u>Listening Center</u> • Listening station with storybooks: *Have You Got My Purr?* • Table with 4 chairs • Tape recorder	

Computer Center • 6 computers and 6 chairs Bulletin Board: "Beary Good Manners" bulletin board with class list and happy faces according to student's behavior.	

Diane Observation 2

Date: 6/8/10	**Notes based on Observational Data Collected**
<u>The Social Ecology of the Setting:</u> (Morning) • Teacher and students share their weekend stories. --"I went to the pool." --"I went to the beach." --"I want to show my shell from the beach." • Teacher -- "Today we are going to read *Henny Penny*. We are going to talk about the plot: beginning, middle, ending." • "Please bring us your pizza money." • "We are going to do a weather chart." • "We are going to talk about graduation." • "In math we are going to go over our tally tables." • "Did everyone practice their Reading flashcards over the weekend?"	*Teacher "D" is reading the same story as Teacher "C"* *Teacher directed lesson*
<u>The Formal/Academic Instruction of the Setting:</u> (Morning) • Math --> Share and Pair • "Let's look at our tally tables." • Teacher uses overhead projector and screen • "Reading a Tally." ~~1111~~ ~~1111~~ 11 = 12 ~~1111~~ 111 = 8 ~~1111~~ ~~1111~~ ~~1111~~ = 15 • Students invited to the front of the room to separate Gummi Worms by colors • "You separate the blue gummi worms."	*Child-initiated activity*
<u>The Social Ecology of the Setting:</u> (Morning) • Pair and Share Math Activity • Teacher passes out activity sheet with "jelly beans" manipulatives • Each group removes "jelly beans" on to table. • They separate into colors. "Boys and girls separate by colors." • Each student separates/sorts by color --ex. Carlos sorts the blue jelly beans...4 blue Max sorts the green jelly beans...5 green • Teacher: "Remember, buddy system. Help each other." • Students: 4 blue = 1111 and 5 green = ~~1111~~	*Word Walls*

<u>The Physical Ecology of the Setting</u>: (Morning) • 15 tables x 2 students per table = 30 students • Bathroom in hallway shared by 2 classes • Teacher desk • Windows around two walls opened exposing light • One large wall with "Word Wall" A - Z --A: an, and, at, are --F: floor, for --R: run, read • Calendar on the board: --Today is Monday. --The weather is sunny. --Tomorrow is Tuesday. **<u>The Enrichment Activities of the Setting:</u>** • No enrichment activities.	*No time for recess, play-related activities*

Appendix I

TEACHER NAME:	CO-TEACHER NAME: "D"
ASSIGMENT/SUB.: MATH & SCIENCE	ASSIGMENT/SUB.: RDG & LANG. ARTS
ROOM NUMBER:	
TEACHING MODEL:	

SCHEDULE 2009-2010

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
8:30-8:45	MATHEMATICS					KINDERGARTEN
8:45-9:00						
9:00-9:15						
9:15-9:30						
9:30-9:45	SPANISH EVORA					
9:45-10:00						
10:00-10:15	LUNCH					
10:15-10:30						
10:30-10:45	READING AND LANGUAGE ARTS					
10:45-11:00						
11:00-11:15						
11:15-11:30						
11:30-11:45						
11:45-12:00						
12:00-12:15	WRITING					
12:15-12:30						
12:30-12:45	S.STUDIES			ART	ART	
12:45-1:00						
1:00-1:15	P.E.	RECESS	P.E.			
1:15-1:30						
1:30-1:45	SCIENCE	SCIENCE LAB	SCIENCE		MUSIC	
1:45-2:00				MUSIC		
2:00-2:15	PLANNING TIME					
2:15-2:30						
2:30-2:45						
2:45-3:00						

Appendix J

KINDERGARTEN LANGUAGE ARTS LESSON PLAN
Theme Ten- "A World of Animals"
Week 1 (05/17/2010 – 05/21/2010)

<table>
<tr><th>Time in Minutes</th><th colspan="3">INSTRUCTIONAL ACTIVITIES</th></tr>
<tr><th></th><th>DAY ONE</th><th>DAY TWO</th><th>DAY THREE</th></tr>
<tr><td>5
10</td><td>Opening Routine
Reading around the room: Calendar, Daily Message, Phonemic Awareness – Phoeneme Substitution – Read "Jack and Jill" on page 43 of Higglety Pigglety. Then play a word game. We're going to change a sound to make a new word. Listen: Jack. If we take away /j/, what is left? (/ack/) Now add /b/ to /ack/. What new word do we get? (back) Continue, having children change /k/ in cam to /n/ (name); then change /p/ in pail to /n/ (nail). Now tell children that they're going to play another word game. This time we're going to change the last sound of a word. Listen: Jill. What's the last sound? Let's change /l/ to /m/. What is the new name? (Jim) Help children change /l/ to hill tot /t/ (hit); final /k/ in Jack to /m/ (jam).</td><td>Opening Routine
Reading around the room: Calendar, Daily Message, Phonemic Awareness – Phoeneme Substitution: Picture Cards <u>hen, pig, dog, cat, and goat.</u> Then play a word game. Using the picture names, have children substitute initial sounds to make new words. Have them change /h/ in hen to /p/ (pen); /d/ in dog to /j/ (jog); /g/ in goat to /b/ boat. Now tell children that they're going to change the last sound of each animal name. Hold up the Picture Card pig. Say: What are the sounds in this animal name? Right, /p/ /i/ /g/. Let's change /g/ to /t/. Whats the new word? (pit) Continue with other animal names. Change dog to doll; cat to can; goat to goal; hen to hem.</td><td>Opening Routine
Reading around the room: Calendar, Daily Message, Phonemic Awareness – Phoeneme Substitution – Read "Giraffes Don't Huff" on page 42 of Higglety Pigglety. Now let's change one sound to make a new word. Listen: huff. Take away /h/. What is left? (/uff/) Now add /p/ to /uff/. Whats the new word (puff) Continue with buff, cuff, muff, ruff. Now let's change the last sound in some of the words from the poem. Listen: huff. Lest change /f/ to /t/. What is our new word? (hut) Continue with other words from the poem. Children practice substitution as they change green to greet; huff to hub and hum.</td></tr>
<tr><td>15
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35</td><td>Teacher Read Aloud
Oral Language/Comprehension
<u>Read Aloud: "Run Away!"</u>-Tell children that in this book they will hear about some wild animals that live in the woods. Talk about types of woodland animals, including the wolf and coyote shown on the first page.
Strategies to focus: Question
Comprehension Focus: Story Structure: Beginning, Middle, End</td><td>Reading the Big Book
Oral Language/Comprehension
<u>Big Book</u>: "Splash!" (Build Background by asking children how they cool off when they are hot. Then discuss how different kinds of animals might stay cool.)
Read the story pointing out the growth in the animals and plants.
<u>Strategies to focus:</u> Question
Comprehension Focus: Story Structure: Beginning, Middle, End</td><td rowspan="2">Reading the Big Book
Oral Language/Comprehension
Big Book: "Splash!"
Reread the story emphasizing the animal naming words. Pause for discussion points. Help children identify events in the beginning, middle, and end of the story and identify the capital letter at the beginning of a sentence.
<u>Strategies to focus:</u> Question
Comprehension Focus: Story Structure: Beginning, Middle, End</td></tr>
<tr><td>40
45
50</td><td>Responding to Story/Summarizing
Listening to the story- This story uses vivid action words to tell how the animals move. Read aloud with expression, and allow time at each page for children to picture the action. Read slowly when the animals are resting and slightly faster when they are rushing.
Responding-Personal Response:
Ask: <u>What happened at the beginning og the story? What was the Little Rabbit's problem? What three animals followed Little Rabbit in the middle of the story? Why? What did Coyote, Wolf, and Bear find out at the end of the story? Nowadays what does Little Rabbit do when he hears wind in the trees? What do others do?</u>
Weekly Benchmark Activity – Practice Book pg. 283-284</td><td>Responding to Story

Personal Response: As you read the selection aloud, add drama and build anticipation by emphasizing the pauses between pages. Encourage children to use the language of the story as they react to it. Ask: <u>What animals did you see in the story? How did all the animals feel at the beginning? What did they baby elephant do for them in the middle of the story? What was your favorite part of the story?</u></td><td>Responding to Story
Use these prompts to help children retell the story: <u>Who can name the animals in the story? What was the animal's problem at the beginning? What did Baby Elephant do in the middle of the story? How was the problem solved? What were the animals doing at the end of the story?</u>
Literature Circle
Have small groups discuss the kinds of animals and what they did in the water. Children can tell what they would do to cool off in the water
Practice Book pg. 289</td></tr>
<tr><td>55
60
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75</td><td>Phoemic Awareness/Beginning Sound /Jj/
1. Alphafriend Riddle: Jumpin Jill – T12
2. Pocket Chart: display and explain the sound /j/
3. Alphafriend Audiotape: Jumping Jill Song /j/
4. Alphafolder: look at scene and name all /j/ pictures
5. Summarize: What is our Alphafriend's name? What is her sound? What words in our Alphafriends Song start with /j/?
Listening for /j/
Compare and Review /r/ and /z/: Display Reggie Rooster and Zelda Zebra opposite Jumping Jill. Show picture cards <u>jam, jar, jeep, jug, rake, rock, rug, zigzag, zip, zipper.</u> Thumbs up for /j/ sound and thumbs down for /r/ and /z/ sounds.
Introduce –ug- Word Family
Weekly Benchmark Practive Book pg. 285-286
High Frequency Word
Display work cards <u>a, I, go, see, the, to;</u> Read "One, Two, Three, Four, Five" pg. 22 of Higglety Pigglety together. Ask Did you hear some of these words in the poem? I did. Let's see which Word Cards you can match to the words in the poem. Redistribute the word cards and continue until everyone has a turn.</td><td>Phonemic Awareness/Initial Consonant /j/
<u>1.</u> <u>Develop:</u> sign Jumping Jill's song listening for and repeating the /j/ word they hear and raise their hand each time they hear the sound /j/
<u>2.</u> <u>Connect:</u> display Jumping Jill card and ask children what letter they see and what sound it makes
<u>3.</u> <u>Pocket Chart:</u> display Jumping Jill along with letter cards r and z. Display picture cards in random order and have children place them under the right letter.
<u>4.</u> <u>Penmanship:</u> Practice Book pg.287 (Blackline Master pg. 166)
High Frequency Word
<u>New Word:</u> this, that
<u>Teach:</u> Tell children that today they will learn to read and write a words that they will often see in stories. Say this, that and use them in context.
<u>Word Pattern Board:</u> Post the words and remind children to look there when they need to remember how to write the word.
<u>Practice:</u> Build sentences and invite children to take turns reading the sentences, focusing on the new words that and this.
Practice Book pg. 288
Apply: Practice reading the for in Phonics Library Story: "Ken and Jen"</td><td>Phonics
Blending Short /u/ Words
1. <u>Review:</u> sing/read Jumping Jill and listen for the /j/ sound and jump when they hear the sound of /j/
2. <u>Short /u/:</u> tell children that they'll build a word within j, and the /u/ from Umbie Umbrella
3. Blending Routine 1: letter cards j, u, and g and have children blend and pronounce it with you. Show letter cards j, u, and g, and have students blend and pronounce it with you. Do the same with bug, tug, hug, dug, mug.
4. Mixed Practice: display pet, rat, jet, and zip and have children blend the words, modeling blending as needed. Remind children to hold each sound until they say the next one. Continue as children blend these words: jam, Liz, rim.
Display the sentence <u>I see a bug.</u> Have children read it, blending the sounds for bug.
Practice Book pg. 290
Reading
Phonics/Decoding Strategy
Book: Phonics Library "Ken and Jen"
Have children read silently and then read aloud. Have children reread the story looking at each letter as they sound out the words. Ask children to think of things they might see at the beach that rhyme with dug (jug, bug).</td></tr>
<tr><td>80
85
90</td><td>Vocabulary Development/Oral Language
Using Exact Naming Words-Pantomime a walk through the woods. Pause to see the animals from "Run Away!" Write and illustrate the animals from the woods found in the story and write the sentences "I go to the forest to see a ___?"</td><td rowspan="2">Vocabulary Expansion
Comparing Information: Tell children that they can learn new information from what they read. Read the poem. "Giraffes Don't Huff" on pg. 42 of Higglety and Piggletty and ask children to listen for new information. On the board draw a chart with do's and don't of the animals found in the story.</td><td>Exploring Words/Building Words
Display letter cards a, b, d, g, h, I, J, j, m, n, p, r, t, u, and w. Put the letter card u and g. Have the students make words with the other letters (i.e. bug, rug, mug, jug, tug, dug; and other –um, -un, and –in words).</td></tr>
<tr><td>95</td><td>Independent Writing/Shared Writing
Have children write and illustrate words with beginning sound of Jj.
Teacher will meet with Guided Reading Groups while students engage in PHONICS CENTER: Theme 10, Week 1, Day 1</td><td>Independent Writing/Shared Writing
Participate in a shared writing activity. Have students think of words and sentences for an informational report. For example: We know a lot about elephants. Elephants are big animals. Elephants are gray. Elephants have trunks. Elephants like to squirt water.
Teacher will meet with Guided Reading Groups while students engage in literacy center activities.</td></tr>
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