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Kindergarten Teachers' Developmentally Appropriate Beliefs and Practices and Their Perceptions of Children's Kindergarten Readiness: Comparing the Beginning and the End of the School Year

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KINDERGARTEN TEACHERS’ DEVELOPMENTALLY APPROPRIATE BELIEFS AND PRACTICES AND THEIR PERCEPTIONS OF CHILDREN’S KINDERGARTEN READINESS: COMPARING THE BEGINNING AND THE END OF THE SCHOOL YEAR

by

Rachelle Ernest Wright

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE in

Family, Consumer, and Human Development

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2010
ABSTRACT

Kindergarten Teachers’ Developmentally Appropriate Beliefs and Practices and Their Perceptions of Children’s Kindergarten Readiness: Comparing the Beginning and the End of the School Year

by

Rachelle Ernest Wright, Master of Science
Utah State University, 2010

Major Professor: Dr. Shelley L. Knudsen Lindauer
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This study examined 180 matched pretest/posttest surveys of kindergarten teachers’ perceptions of the transition children experienced upon kindergarten entry. Investigations of changes in the percentages of children perceived as not being ready for kindergarten and percentages of children who were rated as having had a very successful, moderately successful, or difficult transition from the pretest to the posttest were conducted. Additionally, changes in teachers’ developmentally appropriate beliefs and practices from the beginning of the school year (pretest) to the end of the school year (posttest) were explored. Further analyses were conducted to find differences and associations between teacher and classroom demographics and changes from pretest to posttest.

Teachers’ developmentally appropriate beliefs were statistically significantly
higher at the beginning of the school year (pretest) as compared to the end of the school year (posttest). Conversely, teachers’ developmentally appropriate practices were statistically significantly higher at the end of the school year (posttest) when compared to the beginning of the school year (pretest). Even with the increase in teachers’ developmentally appropriate practices at the end of the year, consistent with previous research, teacher’s beliefs were found to be more developmentally appropriate than their reported practices.

Study findings indicated that teachers reported a significantly higher percentage of children as having had a difficult transition at the beginning of the school year when compared to the end. At the beginning of the year, teachers rated 21.9% of children as having had a difficult transition, compared to 17.4% of children at the end of the school year. Some teachers reported 100% of the children in their class had a difficult transition at both the beginning and end of the school year. Overall, just under 60% of children were perceived as having some problems with kindergarten entry.

Findings also indicated that teachers reported a significantly higher percentage of children were not ready for kindergarten entry at the beginning of the school year than at the end of the school year. Teachers perceived 27% of children were not ready for kindergarten at the beginning of the school year, with 22.4% of children rated as not ready at the end of the school year. Again, some teachers perceived 100% of their children as not being ready at both the beginning and end of the school year. Limitations, implications, and suggestions for future research were discussed.
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CHAPTER I
INTRODUCTION

Kindergarten has evolved in many ways since its introduction to the United States in 1856. When kindergarten began, the original philosophy focused on the whole child, the mind, body, and soul, and the active process of learning by doing. It was a place for children to develop the personality, discipline, and social skills required to thrive in school and society (Jeynes, 2006). Kindergarten was a transitional period when children prepared to go to school. Teachers helped children prepare for school by encouraging self-expression, helping them get along with others, and have fun learning (Bryant & Clifford, 1992).

Change came to kindergarten when it was integrated into the public schools in the late 19th century. The transition to public schools was laced with tension between kindergarten and first grade teachers. First grade teachers complained that the children coming into their classrooms could not pay attention or follow directions and kindergartens began to lose some of their old identity. However, both compromised in small ways to smooth over the integration. Kindergarten teachers began to concentrate on discipline and neatness, and first grade teachers attempted to coordinate some of their content with kindergarten and relaxed some of the rigid routines (Bryant & Clifford, 1992). Kindergarten curriculum continued to be modified as the years passed.

As a view of today’s kindergartens comes into focus, there have been, and continue to be, significant changes. Federal involvement, such as the No Child Left Behind (NCLB) Act of 2001, has given academic content a much more prominent role in today’s kindergarten classrooms than social or emotional concepts (Hyun, 2003). In
attempts to level the playing field of kindergarten achievement and help children meet expectations, kindergarten has become a watered-down version of first grade (Bryant & Clifford, 1992).

Federal and state educational mandates, coupled with other factors, have led to pressure for schools to teach more children increased information at an earlier age (NAEYC, 1990). In addition, more and more teachers are feeling pressure to use direct instruction and teach to a test rather than use a child-centered approach to teach their students (Jeynes, 2006). The transition from home to kindergarten is an important milestone in a child’s life and can be very stressful for young children, especially when demands are put on the children that are difficult to meet (NAEYC, 1990).

Teachers report that many of the children entering their classrooms have specific problems during the kindergarten transition. The level of competence that a child displays in academic, social, and emotional skills in kindergarten is a key predictor in later school success (Rimm-Kaufman, Pianta, & Cox, 2000). It is, therefore, imperative that children have a successful transition to school. Children in developmentally inappropriate (DI) classrooms showed more overall stress, particularly during transitions, times of waiting, and workbook or worksheet activities. Some forms of stress include nail biting, physical hostility or fights, tremors or tics, and nervous laughter. In contrast, developmentally appropriate (DA) classrooms, which meet the needs of individual children, promoted self-esteem and positive feelings toward school, produced less overall stress in children (Burts et al., 1992).

Developmentally appropriate practice continues the original approach of a child-centered or whole-child curriculum allowing children to learn by doing and have fun
while learning. It also helps teachers to focus on social and emotional development as well as cognitive development. When a teacher understands the developmental stages of a child and takes that information into account, that teacher is better able to meet the child’s needs and a smoother transition occurs (Copple & Bredekamp, 2009).

Much attention has been placed on the child being prepared for school, while the school and home environment are just as much of an integral part of a successful school transition.

The current construct of readiness unduly places the burden of proof (of readiness) on the child… many of the criteria now used as readiness measures are based on inappropriate expectations of children’s abilities and fail to recognize normal individual variation in the rate and nature of development and learning. (NAEYC, 1990 p. 21)

The focus should shift from measuring the child’s level of readiness to the level of readiness that his or her environment displays. In short, it is important to not only ensure that children are prepared for kindergarten, but that kindergartens are prepared for children (Nelson, 2005).

Utah has 40 public school districts and 501 public elementary schools with at least one kindergarten class at each school (Public School Review, 2009). The number of teachers, kindergarten students, and parents, just in Utah, who are involved in the transition to school shows the importance of working for a positive introduction to school. It is important to understand the expectations of each of the individuals involved and the appropriateness with which those expectations are met. Teachers and parents do not always agree on the expectations that children should be held to upon entering
kindergarten (Esparza, 1998). This incongruence between the two parties most involved in a child’s education can be an added stressor as the child begins school. Identifying kindergarten teachers’ views of the transition period is one step toward resolving discrepancies between teachers’ and parent’s expectations of the skills necessary for successful kindergarten entry.

This study explored Utah kindergarten teachers’ perceptions about children’s transition to kindergarten, as well as their beliefs and experiences with developmentally appropriate practice. It examined if there were significant changes between teachers’ perceptions of developmentally appropriate beliefs and practices and their perceptions of problems that children experience upon kindergarten entry at the beginning of the school year compared to the end of the school year. It also explored if there were significant differences between teachers’ perceptions of the percent of children who were not ready for kindergarten at the beginning of the school year (pretest) as compared with the end of the school year (posttest). The research questions that guided this study are as follows:

1. Do kindergarten teachers’ developmentally appropriate beliefs change from the beginning of the school year (pretest) to the end of the school year (posttest)?

2. Do kindergarten teachers’ developmentally appropriate practices change from the beginning of the school year (pretest) to the end of the school year (posttest)?

3. Do kindergarten teachers’ perceptions of the percentage of children who were not ready for kindergarten change from the beginning of the school year (pretest) to the end of the school year (posttest)?
4. Do kindergarten teachers’ perceptions of the percentage of children who had a difficult, moderately successful, or a successful transition to kindergarten change from the beginning of the school year (pretest) to the end of the school year (posttest)?
CHAPTER II

LITERATURE REVIEW

History of Kindergarten

Kindergarten has gone through a long evolution since its inception in the mid-1800s. Even today there are still changes taking place across the United States; changes that act as a catalyst for debates on what should be happening in kindergartens. However, when one returns to the roots of kindergarten, it is easy to see the core beliefs about the education of young children and what kindergarten was truly designed to do.

The idea of kindergarten began in Germany in 1837. Fredrick Froebel was the man who envisioned the philosophy behind kindergarten. He pictured four- and five-year-olds as too immature and generally not ready to be required to fulfill the demands and academic rigidity of elementary education (Jeynes, 2006). However, he saw pre-first grade education as essential in helping children become “virtuous human beings” and finding school success in subsequent years of education. The ultimate goal of early childhood education was growth and maturity, a belief that grew out of his emphasis on integrity over knowledge. Kindergarten, literally meaning “garden of children” in German, shows the concept that guided Froebel’s curriculum. Froebel believed that kindergarten curriculum should be developed and dedicated to developing the mind, the spirit, and the body all at the same time through play, outdoor experiences, music, movement, spontaneity, creativity, and independence (Bryant & Clifford, 1992). Froebel based his educational principles on unity or inner connection. He recognized the unity of an individual’s physical, intellectual, and spiritual powers and much of his curriculum
was developed with this in mind (Brosterman, 1997). He also recognized the importance of self-activity or free choice, “the spontaneous impulse of the child to explore and act motivated simply by intellectual curiosity” (Brosterman, 1997, p. 32).

The establishment of kindergarten was founded on play. Froebel acknowledged the essential role that play has in the way that children develop and often referred to it as the child’s work. Froebel’s goal in educating young children was to harness the natural activity of young children, thereby gaining the key to successfully making learning easier and knowledge more long lasting (Brosterman, 1997). He had discerned early on that play was not trivial, it was the most important thing that young children do and in an essay wrote:

*Play is the purest, the most spiritual activity of man at this stage, and is at the same time, the [imitation] 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 that is good. The whole man is developed and shown in the plays of childhood.* (Froebel, 1887, p. 55)

Much of the kindergarten philosophy and curriculum has direct roots to this view of play. The recognition that Froebel gives play and his view that children were not just small unknowing creatures opened doors of acceptance for future researchers to study children near the end of the nineteenth century (Brosterman, 1997).

Great educators and theorists had influenced Froebel in his philosophy for educating young children. Froebel went to teach at Pestalozzi’s school in 1805 and was greatly influenced by his experiences there. “Many of Froebel’s ideas including his motto, ‘Let us live in an exemplary fashion for the benefit of our children’ are directly
traceable to Pestalozzi’s influence” (Brosterman, 1997, p. 22). Froebel gained a lot from his time teaching at that school and it seemed to spark his own individual knowledge of how children learn. An example of his individual understanding or theory of the progression of learning is shown in the subtle differences when comparing it to Pestalozzi’s theory of the progression of learning. “Pestalozzi’s teaching progressed as ‘things before words, concrete before abstract’…. For Froebel teaching in the kindergarten was closer to “forms before things before words” (Brosterman, 1997, p. 22).

Froebel was also influenced by the ideas of the theorist, Rousseau. As Froebel developed his kindergarten curriculum, he recognized the value of Rousseau’s notion of education through action and direct observation. This helped Froebel to form his concept of the kindergarten gifts. In forming the children’s garden, Froebel was able to implement and put into motion the revolutionary early educational system where teachers were no longer information dispensers but guides. He developed ideas and objects of teaching that allowed for Rousseau’s idea that “the child’s willpower becomes the agent of his education, as he learns by doing” to take hold and be put into practice (Brosterman, 1997).

Cognitive instruction in the kindergarten focused on training the senses and academic subjects inherent in nature. Froebel believed in the role of academics in the kindergarten classroom if presented in a certain way, what would today be called developmentally appropriate (Jeynes, 2006). Froebel recognized that exuberant curiosity is children’s most important learning asset. He developed twenty gifts and occupations to harness and direct this natural impulse and to maintain the impression that class work was mostly fun and games (Brosterman, 1997). He defined “occupations” as activities for
children that used materials for practice in various phases of a skill and “gifts” in turn, furnished the ideas for those activities (Jeynes, 2006).

The gifts and occupations were the foundation of Froebel’s kindergarten curriculum. Children moved through the series of gifts once they had mastered the exercises and objects they were currently working on. Each gift taught a skill that would be a prerequisite for the subsequent gifts. The first gift was six different-colored woolen balls to teach similarity, discriminations, and perception. Next a wooden sphere, cube, and cylinder to teach time, space, form, and motion. After that, moving on to a large cube divisible into eight smaller cubes to teach relationships and elementary mathematical concepts (Bryant & Clifford, 1992). The children would progress to the final gift and occupation in the sequence, which was called peas work. This employed peas softened in water or small balls of wax as connectors for small sticks or toothpicks. Arriving at the end of the sequence was never a definitive end, but also a return to the beginning. This served as summations of all those skills preceding (Brosterman, 1997). Through these gifts children were able to learn in hands on ways and by handling objects from the real world they were able to explore, create, and learn.

In 1840, Friedrich Froebel opened the first universal German Kindergarten at Blakenburg, and, by the beginning of 1851, he had opened a training institute for kindergarten teachers. However, later that same year the Prussian court, fearing democratic insurgence, issued a decree prohibiting the teaching of kindergarten (Brosterman, 1997). Nevertheless, the banning arm of the Prussian court could only reach so far. The influence of Froebel’s kindergarten had already spread; it was well on its way to becoming a common institution throughout the world.
Froebel’s kindergartens had developed quite a following of teachers dedicated to furthering his ideas and philosophy of educating young children. “In 1859, Froebel’s protégé, Bertha von Marenholtz-Bulow, compiled a short list of “natural needs of earliest childhood” that would be satisfied with the kindergarten method:

The kindergarten method satisfies 1. The need for physical movement, through gymnastic games that develop the limbs; 2. A child’s need to occupy oneself in a plastic fashion, through exercises that produce manual dexterity and develop the senses; 3. A child’s need to create through small tasks that develop one’s artistic faculties; 4. A child’s need to know or natural curiosity, engaging in observing, examining, comparing (which is how intellectual development is brought about); 5. A child’s tendencies to cultivate and care for, through gardening and carrying out small tasks, which result in the development of the heart and conscience; 6. The need to sing, through games and songs, which produce the development of feelings and esthetic taste; 7. The need to live in society, through life in the kindergarten community: this mode of existence produces social virtues. 8. The deepest need of the soul: to find the reason behind things, to find God. (Brosterman, 1997, p. 30-31)

Others who were enthralled with the ideas of Froebel included the sisters Bertha and Margarthe Meyer, who first met Froebel in 1849. The elder sister, Bertha, was instantly converted to the ideas of the kindergarten. After she married, she and her husband opened kindergartens in Germany for two years before they immigrated to England. Margarthe soon joined them there to work in the kindergarten, and there she met her future husband, Carl Schurz, with whom she immigrated to Watertown,
Wisconsin. In 1859, she established the first American kindergarten (Brosterman, 1997). Three years later, Margarthe met Elizabeth Peabody who was an immediate kindergarten convert. She opened the first English-speaking kindergarten in Boston in 1860. Elizabeth Peabody was also instrumental in opening the first public school kindergarten by 1873 in St. Louis. Kindergartens spread quickly, and by the 1880s there were hundreds of public kindergartens in schools throughout the United States (Bryant & Clifford, 1992).

**Current Kindergarten**

Kindergarten in the United States has significantly transformed since its establishment in 1856. The roots of today’s ideal educational philosophy can be traced to Vanderwalker, who, in 1908, gave the “new psychology” of William James and G. Stanley Hall credit for redirecting the educational world to the belief that “education is a process of development rather than a process of instruction; that play is the natural means of development during the early years; (and) that the child’s creative activity must be the main factor in his education” (Bryant & Clifford, 1992, p. 148). Today, developmentally appropriate kindergarten classrooms still allow for this type of philosophy of education focusing on play and developing the whole child (Copple & Bredekamp, 2009). However, federal and state educational mandates, coupled with other factors, have led some teachers to move far from this ideal where direct verbal instruction and completely structured learning is mainly what occurs within classrooms (Bryant & Clifford, 1992). Bryant and colleagues found that only 20% of kindergarten classrooms assessed met even minimal standards of developmental appropriateness (Bryant, Clifford, & Peisner, 1991).
It seems that, for most children, the kindergarten experience consists of a lot of time with rote learning, worksheets, and didactic instruction (Huffman & Speer, 2000).

One main cause for the diversion from developmentally appropriate practices in many of America’s kindergartens is the No Child Left Behind Act of 2001 (Hyun, 2003). In January 2001, George W. Bush signed the act in an attempt to reform the nation’s schools. Through this mandate, four principles were to take place during the reform: stronger accountability for results, expanded flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been (quantitatively) proven to work (Fact Sheet, 2001).

Standardized testing is not formally mandated to begin until the third grade, however, pressure to ensure that children are prepared to earn passing scores on the high-stakes tests has caused an increased emphasis on the development of academic skills in the earliest years of schooling, a phenomenon termed by some as the “accountability shovedown” (Goldstein, 2007, p. 380). Currently all states have some standardized assessment of kindergarten students; this assessment most frequently occurs at the end of the kindergarten year, but it also takes place during and before entering kindergarten (Jeynes, 2006). There may not be formal demands coming from governmental mandates on kindergarten teachers to expect children to continually raise their level of performance and learn more information earlier, but there is frequently pressure coming from teachers of upper grades and administrators afraid of losing funding calling on kindergarten teachers to change their tactics to less appropriate ways of teaching in order to improve test scores (Fromberg, 2006). Jeynes (2006) commented on the issue of testing being the spotlight of educators’ concerns when he wrote, “focusing so much on test scores will
only undermine educational outcomes in the long run… ironically current practice
likely undermines the goals it seeks to achieve and removes the moral and social
foundation necessary for future personal and social success” (p. 1953).

The pressure to perform on yearly tests, and to teach more children increased
information at an earlier age, has caused some teachers to use methods of teaching
frequently in conflict with developmentally appropriate practice. Direct instruction and
“teaching to the test” have become the commonplace strategies in many classrooms
(Jeynes, 2006). Teachers have become merely deliverers of information and children are
the receivers, thereby causing learning and success to be limited to performance on
standardized tests (Hyun, 2003). “Rather than ‘leveling the playing field’ for students,
this narrow definition [of success] is more likely than ever to leave historically
disadvantaged children even further behind” (Hyun, 2003, p. 121).

Qualified Teachers

Having qualified teachers employed in schools is a crucial part of a child
receiving a superior education. Since enacting the No Child Left Behind Act, the
definition of a qualified teacher has come into debate. A report from the Secretary of
Education indicates that “verbal ability and content knowledge are the most important
attributes of highly qualified teachers” (Cochran-Smith, 2002, p.379). The definition or
criteria that a quality teacher must meet, under the NCLB, is to have a Bachelor’s degree,
have full state endorsement or licensure and prove that they know each subject they teach
(New No Child Left Behind Flexibility, 2004). In an attempt to meet the quality demands
of No Child Left Behind, alternate route programs in which potential teachers of young
children need only pass the state teacher licensing exam, have become the “model” option (Hyun, 2003). The state licensing tests measure specific content and pedagogical skills, and knowledge for beginning teaching practice, however, there is nothing in the tests to gauge an individual’s disposition toward teaching or potential for success (Frequently Asked Questions About The Praxis Test, 2009). This streamlined approach has put teachers who were previously not qualified to teach young children into classrooms. The new definition of a “quality teacher” has been diluted to a point that it has the potential to immediately change unqualified teachers into qualified teachers.

Cochran-Smith (2002) commented on this issue of passing a test to become a qualified teacher when she wrote,

A teacher who is ‘unqualified’ because of no experience in the classroom, no courses in pedagogy, no knowledge of cultural differences, no study of how people learn, no knowledge of human development, and so on, may with the stroke of the pen that institutionalized the new federal definition be instantaneously transformed into a ‘highly qualified teacher,’ provided he or she passed a state teacher test. (p. 381)

As evidence of this precautionary statement, some teacher endorsement structures are changing from grades 1-6 to K-6 with no additional preparation in the area of kindergarten. Thus, teachers are instantly certifying to teach younger children without the training and understanding of developmentally appropriate practices and how younger children learn best (Hyun, 2003). This change contradicts the “view of a great many early childhood educators that the kindergarten year is worthy of special focus in its own right, not merely as the first of elementary school” (Copple & Bredekamp, 2009, p. xi).
The discussion of quality teachers and the broad definition of what makes teachers qualified as articulated by the No Child Left Behind Act have direct implications for young children. Aside from learning pure academics, children also learn social and moral skills in school—what many term the hidden or implicit curriculum. In her article, Hyun (2003) commented, “Teacher educators… are increasingly troubled by this new definition, which will directly affect the hidden curriculum that usually has a stronger impact on learners’ learning than the explicit curriculum” (p. 120). As a result of teachers who are suddenly considered qualified, children may not gain all that they could from the underlying non-academic curriculum which may have longer beneficial effects for the child. This underlying non-academic curriculum includes teaching the child as a whole person, recognizing and meeting individual needs, and furthering children’s social and emotional development in addition to their cognitive development.

McClelland, Acock and Morrison (2006) substantiated claims that children’s learning-related skills, including self-regulation and social competence, contribute to early and later school success. Teachers need to understand more than just the content they are authorized to teach; they need to know how children learn and develop, how to teach and understand the whole child, and how to accommodate children from different backgrounds in one classroom. An unqualified adult hired to teach young children may find their practices lending toward direct instruction, rote memorization activities, and other inappropriate strategies more so than a teacher who understands the importance of using teaching strategies within the realm of developmentally appropriate practices (Hyun, 2003).
Pressure to “succeed” and perform well on tests starts the moment a child enters the youngest grade, kindergarten. Children enter kindergarten with a wide variety of experience and backgrounds, and with varying skill levels. The responsibility and pressure teachers feel can be understood when one recognizes that they are required to teach the children a wide range of skills set forth by the core curriculum. States expect kindergarten teachers to teach their students not only to develop a strong sense of self and to read and write, but many other skills as well. The state of Utah has developed a core curriculum that specifies certain skills that must be attained by the child before entering the next grade. Each grade, kindergarten included, has core standards with objectives that must be met under each standard.

Schools are expected to make “adequate yearly progress” set forth by the No Child Left Behind Act. To ensure that these principles are realized, a course of action has been set forth for every state to follow. Each state is responsible for creating its own standards and tracking progress toward these standards. States set minimum levels of student performance improvement. As a baseline for these expectations, a state’s starting point is based on the performance of its lowest-achieving demographic group or the lowest-achieving schools in the state, whichever is higher. The bar is then set and each school’s level of achievement must meet the standard after two years to show that they are making adequate yearly progress. The bar is then raised at least once every three years (Questions and Answers on NCLB, 2004). To track achievement, tests are given to every child, every year. “School districts and schools that fail to make adequate yearly progress toward statewide proficiency goals will, over time, be subject to improvement, corrective action, and restructuring measures aimed at getting them back on course”
If a school fails to make adequate yearly progress for two consecutive years, it will be labeled as needing improvement and parents are then given the option to transfer their child to a higher performing school at the district’s expense.

If a school does not meet expectations for three years, the school must also offer supplemental educational services, such as tutoring or remedial classes to low-income families one again using the district’s money (Executive Summary, 2001). If a fourth year of low performance occurs, the school must also take corrective action such as replacing certain staff or implementing a new curriculum. The fifth year a school does not make adequate yearly progress, they must initiate plans to restructure which may include reopening as a charter school, replacing all or most of the school staff, or turning over school operations to the state or to a private company with a demonstrated record of effectiveness (Questions and Answers on NCLB, 2004). Some experts believe it is counterproductive to reduce or mandatorily redirect funding for a struggling district when extra funding could help bolster the quality of the education that failing students need (Hyun, 2003).

The No Child Left Behind Act has many implications for kindergarten teachers, preschool teachers, and their students. “The current national K-12 standards and standardized assessment-driven education movement have begun to directly impact educators who work with children before they enter kindergarten. Many states are working on, or have already developed, standards for the preschool/prekindergarten level” (Hyun, 2003, p. 123). As of 2007, 75% of the states have developed standards for the years before kindergarten and the remaining states are in the beginning stages of
developing their own early standards (Copple & Bredekamp, 2009). The pressure brought on by the NCLB Act has caused many teachers to shift their focus from developmentally appropriate practices to more inappropriate ways of teaching young children. Entering school introduces children to new challenges and changes, many of which can be exacerbated and made more stressful by being in a developmentally inappropriate classroom. When a teacher is unable to focus on the whole child, things such as higher stress levels (Burts et al., 1992) and lower performance and decreased social interactions (Huffman & Speer, 2000) may occur, all of which stem from developmentally inappropriate practices.

**Developmentally Appropriate Practice**

Having an understanding of the widely acknowledged standards for high-quality practice in early childhood education, known as developmentally appropriate practice, is foundational to the study of factors influencing teachers’ instructional preferences. Professionals who endorse a developmentally appropriate type of instruction demonstrate a child-centered approach, focusing on the development of the physical, social, emotional, and cognitive needs of their students (Parker & Neuharth-Pritchett, 2006). Developmentally appropriate practice (DAP) follows the construct of objectives first laid out by Froebel (1887) in meeting the needs of young children previously noted. This philosophy has guided professionals in the field of early childhood development long before it was formally termed developmentally appropriate practice in the 1980s.

The National Association for the Education of Young Children (NAEYC) published the official definition of developmentally appropriate practice and provided the
following positions of rationale for the position statement: “Children’s experiences during early childhood not only influence their later functioning in school but also can have effects throughout life” and “the preschool years are an optimum time for development of fundamental motor skills, language development and other key foundational aspects of development that have lifelong implications” (Bredekamp & Copple, 1997, p. 6). The statement gives even more startling research as evidence of the need to promote high-quality early-childhood programs in stating that only 15% of programs are providing good quality support for children’s health and social and cognitive development (Cost, Quality, & Child Outcomes Study Team, 1995 as cited in Bredekamp & Copple, 1997, p. 6). It goes on to show that children from low-income families who participated in high-quality preschool programs were significantly less likely to have been assigned to special education, retained in grade, engaged in crime, or have dropped out of school. The longitudinal studies, in general, suggest positive consequences for programs that used an approach consistent with principles of developmentally appropriate practice (Berreuta-Clement et al., 1984; Lazar & Darlington, 1982; Frede 1995; Miller & Bizzell 1984; Schweinhart, Barnes, & Weikart 1993; Schwienhart & Weikart 1996; Schweinhart, Weikart, & Larner 1986 as cited in Bredekamp & Copple, 1997, p. 6).

One can see that a child’s early experiences shape them in fundamental ways that should not be overlooked. The writers further substantiate the position of creating uniform standards of high quality for more children by providing research that show “children who attend good-quality child care programs demonstrate positive outcomes
and children who attended poor-quality programs show negative effects” (Bredekamp & Copple, 1997, p. 6). Researchers are probing for ways to increase the positive outcomes in children and to inform and guide educators in the field of early childhood. The authors affirm that “a growing body of research indicates that more developmentally appropriate teaching in preschool and kindergarten predicts greater success in the early grades” (Charlesworth et al., 1993; Frede & Barnett, 1992; Marcon, 1992 as cited in Bredekamp & Copple, 1997, p. 7).

The need for more early childhood programs has increased for a number of reasons, one of which is the growing recognition that early childhood experiences are beneficial to child development. Moreover, parents are enrolling their children in early childhood programs earlier. There has been an increase in both parents working outside of the home, with an increase in single mothers working outside of the home as well (Fromberg, 2006). Ninety-six percent of children five and six years of age attended school in 2002, compared to 84% in 1965 and 70-80% of these children have had one year of preschool. In addition 45% to 55% of these children have had two years of preschool experience compared to only 20.5% in 1970 (U.S. Department of Commerce, Bureau of the Census, 2002, as cited in Fromberg, 2006). Recognizing the increasing trend of more children participating in programs, NAEYC has continued to define circumstances and integrated principles that comprise developmentally appropriate practice.
Definition of Developmentally Appropriate Practice

Developmentally appropriate practice (DAP) recognizes and allows for the enormous normal variability both among children of the same chronological age and within individual children. Teachers must adapt to such variety within and among the children they teach. NAEYC’s definition of developmentally appropriate practices incorporates many dimensions of knowledge which guide policies and curriculum.

Those who implement DAP work within the framework of three significant types of knowledge. This knowledge includes what is known about how children develop and learn namely “age-related characteristics that permit general predictions about what experiences are likely to best promote children’s learning and development” (Copple & Bredekamp, 2009, p. 10). Also, knowledge of individual strengths, interests, and needs of each child in the group, the information practitioners obtain about each child has “implications for how best to adapt and be responsive to individual variation” (p. 10). Finally information about the social and cultural contexts in which children live, specifically the “values, expectations, and behavioral and linguistic conventions that shape children’s lives at home and in their communities” (p. 10). It is important for educators to understand those details in order to provide learning experiences that are meaningful, relevant, and respectful for each child and family (Copple & Bredekamp, 2009). An understanding of these principles brings with it a perception that all of these factors affect the way a child learns and, in turn, should affect the curriculum taught. Educators must also acknowledge that these principles of development are dynamic and
continuously changing for the child which requires the teachers to continue to learn
and develop as time goes on.

In a developmental approach to curriculum design decisions about what should be
learned and how it would best be learned depend on what we know of the
learner’s developmental status and our understanding of the relationships between
early experience and subsequent development. (Katz, 1995, as cited in
Bredekamp & Copple, 1997, p. 9)

Developing appropriate ways of teaching children is a constant goal for educators.
NAEYC has gathered 12 guiding principles, from which the umbrella of DAP has been
developed, to aid teachers in designing suitable curriculum for young children. It is
important to include the list of these empirically based principles in this review in order
to give a clear understanding of the basis from which developmentally appropriate
practice is gleaned.

1. All domains of children’s development—physical, social, emotional, and
cognitive—are important and they are closely interrelated. Children’s development and
learning in one domain influence and are influenced by what takes place in other
domains.

2. Many aspects of children’s learning and development follow well-
documented sequences, with later abilities, skills, and knowledge building on those
already acquired.

3. Development and learning proceed at varying rates from child to child as
well as at uneven rates across different areas of each child’s individual functioning.
4. Development and learning result from a dynamic and continuous interaction of biological maturation and experience.

5. Early experiences have profound effects, both cumulative and delayed, on a child’s development and learning; optimal periods exist for certain types of development and learning to occur.

6. Development proceeds toward greater complexity, self-regulation, and symbolic or representational capacities.

7. Children develop best when they have secure, consistent relationships with responsive adults and opportunities for positive relationships with peers.

8. Development and learning occur in and are influenced by multiple social and cultural contexts.

9. Always mentally active in seeking to understand the world around them, children learn in a variety of ways; a wide range of teaching strategies and interactions are effective in supporting all these kinds of learning.

10. Play is an important vehicle for developing self-regulation as well as promoting language, cognition, and social competence.

11. Development and learning advance when children are challenged to achieve at a level just beyond their current mastery, and when they have many opportunities to practice newly acquired skills.

12. Children’s experiences shape their motivation and approaches to learning, such as persistence, initiative, and inflexibility; in turn these dispositions and behaviors affect their learning and development (Copple & Bredekamp, 2009, pp. 11-15).
The authors also acknowledge that “no linear listing of principles, including the one [above], can do justice to the complexity of the phenomena that is child development and learning. While the list is comprehensive, it certainly is not all inclusive” (Copple & Bredekamp, 2009, p. 10). However, the brief list gives clarity to what appropriate practices takes into account. Early childhood professionals draw on these fundamental ideas when making decisions about their practice. They have a responsibility to meet the needs of each child as well as considering the environment and socio-cultural contexts that a child brings to the classroom. Ensuring that a teacher functions within the framework of these principles sets them on course for implementing developmentally appropriate practice (DAP), thus, offering a quality early experience for young children.

**Effects of Developmentally Appropriate Practice**

The developmentally appropriate classroom has been shown to yield positive outcomes for children, and because early school experiences have an impact on later school success (Copple & Bredekamp, 2009), researchers have investigated the effects of developmentally appropriate classrooms, many times in comparison to developmentally inappropriate classrooms. Developmentally inappropriate classrooms generally include a majority of teacher-directed learning that involves rote memorization, drill-and-practice, lack of student choice, and lack of collaboration with peers. These strategies are directly tied to behaviorist theories of learning and leave little room for integration of content areas or hands-on, concrete learning experiences. Conversely, developmentally appropriate instruction is rooted in the cognitive learning theories of Piaget and
Vygotsky. These theories united produced the concept of constructivism, which suggests that learners construct their own knowledge based on interactions with their environment. In DAP classrooms, emphasis is placed on exploration of hands-on materials, integrated content areas, working with peers, and student choice (Parker & Neuharth-Pritchett, 2006).

Burts and colleagues (1992) investigated the effect of classroom types (DIP versus DAP) on observed activities and stress behaviors of 204 kindergarten children. Out of the 19 classrooms initially included in the study, 12 were chosen for further participation. Of those 12, six were classified as developmentally appropriate and six were developmentally inappropriate. Parental permission was obtained for 204 children, 103 of which were in appropriate classrooms (46 males, 57 females; 27 black, 76 white; 48 low SES, 55 high SES) and 101 children were in inappropriate classrooms (53 males, 48 females; 53 black, 48 whites; 54 low SES, 47 high SES). Gender, race, and SES differences were considered in regard to classroom type because it was believed that these factors would have an impact on how children react to stress and that encouraging school experiences can help diminish stressful experiences for children already under other forms of stress. The researchers sought to give empirical evidence that exposure to inappropriate curriculum can have deleterious affects on children.

Teachers filled out a questionnaire that in turn gave the researchers a ranking of the appropriateness of their classrooms. To verify their rankings, teachers were rated by at least two independent observers. The teachers who showed congruence between the observations and the questionnaire were selected to continue in the study. Discussion of the Burts and colleagues (1992) study shows that children in developmentally
inappropriate classrooms exhibited more overall stress behavior than did children in developmentally appropriate classrooms. Moreover, boys in developmentally inappropriate classrooms displayed more total stress behaviors than boys in developmentally appropriate classrooms, there was no significant effect of classroom type found for girls. More stress behaviors were observed in developmentally inappropriate classrooms during waiting, transition, and workbook/worksheet activities. Stress behaviors included nail biting, physical hostility/fights, tremors or tics, and nervous laughter. As the researchers speculated, SES and race were found to have an affect on children and their stress levels. Low SES white children exhibited less stress behavior than their low SES black peers, regardless of classroom type. Additionally, black children in developmentally inappropriate classrooms showed more stress during whole group, waiting, and group transitions than white children in the same type of classroom. The results of this research support the author’s contention that “developmentally inappropriate educational programs are potentially harmful to young children” (p. 315).

A later study conducted by Hart, Yang, Charlesworth, and Burts (2003) investigated the relationship between child stress and the developmental appropriateness of kindergarten teachers’ classroom practices. Results of the study showed child stress from being in inappropriate classrooms was related to growth of child aggression, hostility, and hyperactive/distractible behavior. Children in developmentally appropriate classrooms were shown to gain in math abilities much faster than those children in inappropriate classrooms. Hart and colleagues (2003) suggested that growth trajectories beginning in kindergarten carry on into third grade. Dunn and Kontos’s (1997) review of
the research on DAP indicates the “effectiveness of DAP in benefiting children’s motivation, attitudes about school, and level of stress” (as cited in Schmidt, Burts, Durham, Charlesworth & Hart, 2007, p. 291).

Developmentally appropriate practice has been shown to have an affect on how children relate to others. Schmidt and associates (2007) investigated the impact of DAP on kindergarten children’s interpersonal relations. Two private schools known to endorse opposite guidance policies (one positive, the other negative) were chosen. Both schools had predominately white middle- and upper-SES populations. A kindergarten teacher whose guidance strategies were parallel to the school’s philosophy was selected from each school. Observation and the use of the Checklist for Rating Developmentally Appropriate Practice in Early Childhood Classrooms as a measure of the type of guidance used in the classroom verified that “the two teachers contrasted sharply in their use of guidance strategies” (p. 293).

The teacher who used positive guidance (PG) worked at a school with 397 students, grades pre-K through 12. Her kindergarten class had 14 students and was one of three in the school. Activities incorporated building with big blocks, painting hand prints, and playing in a housekeeping center. Redirection was a frequently used strategy for misbehavior. “The teacher’s interactions with the children included offering children choices of activities, coaching children through conflict situations, and friendly conversation” (Schmidt et al., 2007, p. 293). The teacher employing negative guidance strategies (NG) taught in a school with 338 students, grades pre-K through 12. Her kindergarten class was the only one in the school and contained 23 children. Most of the activities in this classroom were teacher-directed and there was an inflexible teacher
determined time frame for independent activities. “The teacher frequently criticized the children’s behaviors in a tone of voice that conveyed authority” and when children disobeyed or did not follow directions their names were written on the board, they were sent to the principal’s office, or they lost recess privileges (p. 293). The first classroom clearly endorsed a child-centered approach, which is in line with developmentally appropriate practice, while the second relied mainly on a teacher-directed approach, consistent with inappropriate practice.

Three dyads of kindergarteners were selected from each classroom, and paired boy-boy, girl-girl, and girl-boy, for a total sample of 12. In order to get a more representative sample, zip-codes for each dyad were matched for each child in both classrooms. For example each child from the girl-girl dyad in the PG class would have the same zip-code as the NG class. The researchers designed a portable play-school the children could play in. The researchers then observed and recorded the children’s interactions over the course of three months. Findings revealed an overall decrease in positive social behaviors for the children in the negative guidance classrooms, but an increase in positive social behaviors from those children in the positive guidance group (Schmidt et al., 2007).

Children were also asked to answer hypothetical questions about what they would do in social situations. When the children from the positive guidance group were asked “What would you do if a friend got hurt on the playground?” They uniformly answered that they would try to help their friend by getting a Band-Aid, consoling him/her or staying with him/her until s/he felt better. When asked the same question, children from the negative guidance group uniformly answered that they would “go get the teacher”
Responses expose interesting underlying, non-academic skills being learned in the abundance or lack of appropriate models in each classroom. Children from the positive guidance group were learning to be more autonomous and problem solve, whereas the negative guidance group was dependent on the teacher for what to do. These attitudes carry over into the next question the researchers asked the children about class decision-making. PG children spoke of making rules as a class and voting on some activities. On the other hand, the NG dyads did not know what it meant to vote and recognized the teacher as the only one to make the rules, and that rules translated into “things they couldn’t do” (Schmidt et al., 2007, p. 298).

The authors contend that “negative classroom management techniques leave children void of the repertoire of skills needed to interact with peers successfully and to manage conflict” (Schmidt et al., 2007, p. 298). This research gives empirical evidence of how a teacher’s choices of guidance strategies influences children’s social and moral development. How children anticipate being treated and how they treat others is, in part, formed in early childhood settings. This research gives support for this idea and illustrates that DAP environments allow for children to be part of a “community of learners” where their ideas and opinions are valued (Copple & Bredekamp, 2009, p. 16).

Research on DAP has also been shown to have an impact on a child’s academic achievement. Huffman and Speer (2000) investigated this subject and the effects that DAP has on specifically at-risk kindergarteners and first graders attending urban schools. Their investigation included 113 children from 28 classrooms, with 66 in kindergarten and 47 in first grade. Most children were from low-income families with 71% of families
reporting earning less than $12,000 per year and 99% report being of an ethnic minority group.

Each child was given an academic assessment near the beginning of the school year and again near the end of the school year. The researchers used the Woodcock-Johnson Psycho-Educational Battery-Revised to test the children on letter and word identification, symbolic learning, mathematical calculations such as basic and advanced addition and subtraction, and ability to solve practical problems using simple counting and calculations (Huffman & Speer, 2000). Results indicated that children whose teachers used developmentally appropriate teaching strategies performed significantly higher on the assessment in the spring semester than the comparison group who were exposed to low DAP experiences.

The 28 classrooms that participated in the study were observed to determine the structure and teaching process of the classroom environment. Using the Assessment Profile for Early Childhood Programs, the classrooms were divided into two groups, low-DAP or moderately DAP; none of the classrooms were considered high DAP. Results of a repeated measure MANOVA showed statistically significant interactions for DAP level and semester, which points to the argument that DAP does improve children’s academic achievement, specifically for at-risk populations of children. Huffman and Speer (2000) assert that “this research…offers evidence that optimizing the quality of the learning context with methods grounded in knowledge of child development can increase children’s academic achievement” (p. 182).

In addition to the short-term positive effects of DAP on at-risk populations of children discovered by Huffman and Speer (2000), they also point to a study which
uncovered positive long-term effects of DAP that include higher rates of high school graduation, fewer arrests and acts of misconduct, and higher monthly incomes (Schweinhart & Weikart, 1997). In an article by La Paro, Rimm-Kaufman, and Pianta (2006) the importance of Huffman and Speer’s (2000) work is noted, “Taken together, these findings show the relation between children’s classroom experience and social and academic outcomes for children in the earliest years of school” (p. 190).

Exploration by La Paro and associates (2006) focused on the role of teachers and how emotional and instructional support and teacher sensitivity relate to teaching formats and children’s engagement. With knowledge of the influence that teacher practices have on a child’s school experiences and the subsequent academic and social outcomes, La Paro and colleagues aimed to discover the stability and change of classroom experiences through observational based measures. Researchers gathered longitudinal data from the NICHD Study of Early Child Care (1996). One hundred ninety-four children and their teachers were included in the study sample representing urban, suburban, and rural areas in Arkansas, North Carolina, and Virginia. Both kindergarten and first grade mean class sizes were 20, and had an average of one paid aide per classroom. The majority of kindergarten and first grade teachers were female (98% kindergarten, 97% first grade) and 95% of both kindergarten and grade teachers were White. Years of teaching experience ranged from .5 to 35 years (mean of 14 years) and 1 to 36 years (mean of 13 years) for kindergarten and first grade teachers, respectively. The sample included 95 male and 97 female children, 164 were White, 24 were African American, and 4 were from other ethnic groups.
Observations conducted give information about learning formats, teacher activities, child’s engagement, teacher sensitivity, classroom quality, and emotional and instructional support for learning. Researchers used an observational coding system to determine the quality of the classroom and analyzed the data to determine characteristics of stability and change that children experience in the quality of early education. The coding system used depicts a quality classroom as one including the teacher having planned activities, but the child (to a degree) deciding on his/her level of participation in those activities; the teacher interacts individually with the child as well as in small and large groups; child participates in reading aloud, writing in a journal, participation in a game, or talks with the teacher or a peer about the current activity; teacher uses a child-centered approach taking into account the child’s needs, moods, interests, and capabilities; pleasant conversation, spontaneous laughter, exclamations of excitement occur; children are allowed to take on responsibility and are given quality constructive verbal feedback that focuses on the process rather than the product and does not over-emphasize correctness (La Paro et al., 2006).

Results of paired *t* tests indicate a difference in learning formats between kindergarten and first grade. Kindergarten children spent more time in centers, free time, and transitions than first grade children. Kindergarten children were also exposed to more academic and social skills than were first grade children (21% versus 9% of the observational interval). Overall, children spent very little time being taught social skills. In addition, findings show a significant decrease in the amount of time children are taught social skills from kindergarten to first grade. Results indicated no differences in teacher responsiveness; both kindergarten and first grade teachers were rated as moderately high
in sensitivity and low in intrusiveness and detachment. Conversely, first grade teachers were rated lower than kindergarten teachers on evaluative feedback, instructional conversation, and supporting child responsibility in their classrooms (La Paro et al., 2006).

La Paro and colleagues’ (2006) study demonstrates that children experience more change and less stability as they transition between kindergarten and first grade. Children experience significantly more structured activities, more seatwork, less center time, less explicit academic teaching, without the increase in quality of instruction as they transition into first grade. In addition, first grade teachers have lower levels of developmentally appropriate beliefs and practices than kindergarten teachers. The researchers note the high degree of variability and lack of uniformity and stability in early childhood environments and the remarkable range of policies that affect the kindergarten climate. The authors raise the question of whether this shift toward more structure is useful and effective for children and if schools and teachers are prepared to help children achieve academic competence. They conclude by stating that high-quality instructional support for children should be a priority in order to ensure learning environments are well-suited to the learning needs of young children (La Paro et al., 2006).

**Teachers’ Developmentally Appropriate Beliefs Versus Practices**

Developmentally appropriate practices emphasize the developmental level and learning style of the whole child. NAEYC guidelines assert that “children learn actively through physical and social experiences to construct their own understanding of the world around them” (Parker & Neuharth-Pritchett, 2006, p. 66). One might presume that
teachers trained in appropriate early childhood teaching strategies would have strong beliefs in DAP and strive to provide physical and social experiences to benefit those children they teach. Nevertheless, observation and research have shown that many teachers claim to believe in DAP, but their actual practices are not consistent with what they believe to be the best practices. In other words some teachers talk the talk of developmentally appropriate practice, but are not necessarily walking the walk.

A study conducted by Parker and Neuharth-Pritchett (2006) provides an example of the gap that exists between beliefs and practices. The authors stated:

Research generally supports the use of developmentally appropriate practices with young children, however, there is often a discrepancy between what the research indicates and the philosophies of early childhood educators, which tend to be developmentally appropriate in nature, and their actual teaching practices, which tend to be developmentally inappropriate for young children. (p. 65)

These researchers were interested in teachers’ beliefs about instructional practices and the factors that shape the education they provide and those factors that might account for the inconsistencies in their beliefs and practices.

The context of Parker and Neuharth-Pritchett’s (2006) study is the current period of high-stakes testing and the accountability that has engulfed the United States. They assert that outside factors such as pressure from upper grades and curriculum constraints, are adversely affecting teachers’ choices in the experiences they offer their students. Children are spending less time at recess and the arts and are facing more didactic teaching and workbook-based reviews as their teachers strive to get them ready for the next grade. All of the kindergarten teachers in the study, regardless of their instructional
approaches, believed kindergarten is becoming more academic in nature. Each of these changes point to the issue of teachers finding it increasingly more difficult to implement developmentally appropriate instruction, even though they believe it to be critically important.

The 34 kindergarten teachers in the sample represented seven schools in a rural, southeastern U.S. school district. The total population of the area at the time of the study was 40,344 with African Americans making up 13.5% of the population, 19% were of non-European descent, and 13.3% of the residents lived below the poverty line. The participants’ experience ranged from 1 to 32 years with an average of 11.94 years, and an average of 7.57 years of teaching kindergarten. Of the 34 teachers, 18 had bachelor’s degrees and 16 had a master’s degree; all 34 were female; 33 were Caucasian and one was African American. The teachers were involved in surveys, interviews, and observations, and from these three groups of teachers were identified: child-centered (developmentally appropriate), teacher-directed (didactic), and mixed approach (using both techniques). The perceptions of each of these groups were discussed according to four factors that were thought to shape teacher’s instructional practices: the shift to a more academic kindergarten, the pressure from their peers, their perceptions of teacher-directed instruction, and their perceptions of child-centered instruction (Parker & Neuharth-Pritchett, 2006).

All of the teachers noted a significant change from a developmental focus to an academic focus. One teacher said, “I think it is what 1st grade used to be” (Parker & Neuharth-Pritchett, 2006, p. 71). Interestingly, it was discovered that teachers in the child-centered group felt they had control over their curriculum, but, on the other hand,
also reported feeling more pressure from first grade teachers to get the children ready to move on to the next level. Conversely, teacher-directed teachers did not report feeling pressure from teachers in upper grades and also reported feeling that they had no control over their curriculum. The authors conclude that “when teachers perceive they have the professional freedom to make instructional decisions, they will use child-centered, developmentally appropriate strategies” (p. 75). It is important to note that many teachers from the three categories of instructional practices felt that all students benefit from child-centered practices. Disappointingly, this belief did not translate into child-centered classrooms. One teacher described it best when she said, “I think all children benefit more from a child-centered approach, but we have to do teacher-centered to get them ready for 1st grade” (p. 75). The authors further contend that the more developmentally appropriate a classroom is, the more pressure the teachers feel and this is a cause for concern. This demonstrates the increased burden that many teachers feel to teach children more information at younger ages and many seem to resort to practices that are frequently in contrast to what they know is developmentally appropriate for young children.

Nelson and Smith (2004) investigated teachers’ perceptions of DAP and what effect this knowledge has on their practices. They demonstrated that teachers can benefit significantly from training and support on how to adopt developmentally appropriate beliefs and implement practices in line with those beliefs in the midst of resistance and adversity. After the 30 master’s students in Michigan completed courses designed to teach them about DAP and how to implement DAP in their classrooms, there was a significant shift toward developmentally appropriate practice. The driving force of this study came from the recent focus on academics in early childhood education and the goal
to help teachers meet the current standards using developmentally appropriate instruction in their classrooms. The researchers set out to show the effectiveness of a set of core courses intended to raise a teacher’s awareness and use of DAP.

The master’s students were first exposed to research and literature about DAP and its effectiveness. Students became familiar with the value and the theories behind their own teaching styles and practices. The next step in the program was an intensive curriculum workshop where students were exposed to developmentally appropriate activities, material, and methods. The master’s students then took this information and directly applied it in their classrooms. The last course taught the students to disseminate important information to impact people’s thinking, systematically analyze problems, and to be creative when solving problems in order to overcome obstacles to change in their schools. Each student completed a survey about their teaching practices before and after taking the sequence of courses. As the researchers anticipated, results show a significant increase in the frequency of using developmentally appropriate practices upon completion of the courses. Nelson and Smith (2004) noted that these results were consistent with other research on early childhood teachers’ practice (Parker & Neuharth-Pritchett, 2006). Teachers were more likely to respond that they employed developmentally appropriate practice in a self-report format. Observation of the teachers may reveal some incongruence, however. Nelson and Smith (2004) attributed any inconsistencies to environmental constraints that may prevent teachers from fully implementing DAP. The researchers declared, “These results provide evidence that we have helped our students increase their awareness and understanding of developmentally appropriate practice” (p. 77).
This study demonstrates an important step in aligning teacher’s belief with their practices. The researchers conclude with this statement:

There may be substantial environmental, cultural, and administrative constraints that prevent early childhood educators from practicing what they believe. Early childhood educators have a fair amount of content knowledge and understanding about developmentally appropriate practice. What they need to gain from professional development programs are confidence and support to do what is best for young children. (Nelson & Smith, 2004, p. 77)

Many teachers who believe in developmentally appropriate practices, but do not actually teach within those beliefs, attribute the inconsistency to the lack of confidence in knowing how to implement DAP, and viewed that implementation as more difficult (Parker & Neuharth-Pritchett, 2006). By being given the tools, understanding, and confidence in using DAP, teachers can enter the world of standardized high-stakes testing and marked achievement armed to protect a child’s right to learn in an appropriate environment.

Kindergarten Transition

Kindergarten is under attack from many angles, and probably the most criticized aspect is the role or duties kindergarten is expected to fill.

It is no longer expected to serve simply as a bridge between children’s early educational experiences and the rigors of ‘real school’ or allowed to function as a unique learning environment separate and different from the elementary grades that follow it. (Goldstein, 2007, p. 378)
Over and above the valued goals of helping children develop cognitively, socially, emotionally, and physically, kindergarten is now responsible for starting the process of preparing children to succeed on high-stakes standardized tests.

Kindergarten is now the springboard from which young children are expected to dive into demonstrating knowledge and learning on a one-size-fits-all test and observing that a good test score is the most important sign of success and the ultimate goal. This is surely not what any educator would want for any child. Nevertheless, the intense focus on testing that many children are experiencing in schools is not leaving room for much else (Fromberg, 2006; Parker & Neuharth-Pritchett, 2006). In today’s kindergarten climate, there seems to be a separation between what is appropriate practice and rigid academic skills. Some researchers suggest that there is room for both. “Froebel, the founder of kindergarten, supported a role for academics in the kindergarten classroom; however, he believed that they should be presented in what today would be called a developmentally appropriate way” (Jeynes, 2006, p. 1941). Even though kindergarten teachers’ ability to base their decisions about what to teach on what they know to be developmentally appropriate has been severely limited, many teachers have sought to rise to the challenge of meeting the new mandated standard by continuing to implement developmentally appropriate practices. Goldstein (2007) asserted “the multitude of publications describing ways to use DAP to teach mandated standards implies that many early childhood teachers are searching for strategies that will help them respond to the new expectations in responsive, effective ways” (p. 380).

An investigation by Parker and Neuharth-Pritchett (2006) has revealed that teachers make instructional choices from a variety of approaches, including teacher-
directed and child-centered. Nelson and Smith (2004) have shown that with proper support and instruction, teachers have the confidence to make appropriate decisions when implementing curriculum. Additionally, Graue (2006) maintained that teachers “can have standards for learning without standardizing [their] teaching” (p. 8). Fromberg (2006) offered further insight into the resolve of some teachers to stand up for what they know to be best for children:

Kindergarten teachers have responded in different ways to the focus during the past 5 years on tying teaching to specific state learning standards. Some administrators and teachers emphasize using scripted, ‘proven’ programs, the use of narrow skills, and memorizing information in order to prepare children to achieve high scores on standardized tests. Nevertheless, many kindergarten teachers meet state learning standards by continuing to include an emphasis on intellectual pursuits, building a democratic community, participating in the arts, constructions, socio-dramatic play and active experiences in an intense language environment where children have reasons to use literacy and mathematical skills. (p. 70)

The current context of early childhood education presents an enormous challenge for teachers. As Parker and Neuharth-Pritchett (2006) have shown, many teachers find themselves in similar situations of pressure, however, it is up to them to decide the effects the federal mandates will have on the nature of their classrooms.

Kindergarten teachers must recognize their own contributions to the system. They must become powerful advocates for themselves, their students, and their programs; this enables teachers to evaluate proposed changes in curriculum and
other practices that might put children’s development at risk. (Graue, 2006, p. 10)

Researchers have shown that it is possible to meet the standards set forth by government and administrators using developmentally appropriate practices.

A teacher choosing to implement developmentally appropriate practice despite pressure to teach increased academics is an example of a classroom that is ready for children. Much of the focus has been on making sure children are ready for kindergarten, while it is just as important for the child’s environment to be conducive to a child’s successful transition to school. Nelson (2005) conducted a study to ascertain the impact of ready environments on achievement in kindergarten. A stratified cluster sampling technique was used to insure representation from a variety of social class levels, regions, racial backgrounds, metropolitan areas, and school types and sizes, thus creating a nationally representative sample of 23,000 kindergarten children. Participants were rated on several aspects including: risk factors, home learning activities, preschool attendance, reading achievement, mathematics achievement, and approaches to learning. Approaches to learning assessments determined how motivated and interested a child was in learning. Two-way MANOVAs, were conducted, using the reading, math, and approaches to learning scores as the outcome variables. Each test explored the effects of being high-risk with one of the intervention variables (home learning activities and preschool attendance).

Results indicated that children from homes with high levels of learning activities scored higher on mathematics and reading than children from homes with no learning activities. Children in homes with learning activities also scored higher on the approaches
to learning assessments which indicates a higher level of persistence, motivation, and interest in learning. Moreover, children who attended preschool had higher math and reading scores than those children who did not attend preschool. In general, children with risk factors scored lower on math, reading, and approaches to learning than children with no risk factors. The author notes that “internal motivation to learn has an influence on achievement in all areas. Children who are intrinsically motivated to learn will persist when faced with academic challenges” (Nelson, 2005, p. 220). Parents are the first model of this and a teacher who understands and uses developmentally appropriate teaching techniques can build a bridge of communication between school and the child’s home in order to protect and cultivate the intrinsic motivation to learn. Lastly, not only is it important for children to experience a stimulating environment at home as they start to spend the majority of their days at school, it is imperative to ensure the environment at school is also providing developmentally appropriate experiences.

While most children are able to navigate successfully through the transition process, some children have not learned the self-regulation and social competence skills to ensure their success in school. Research has shown that children who enter school without these skills are at a much higher risk for peer rejection and low levels of academic achievement. A study conducted by McClelland and associates (2006) explored kindergarten learning-related skills and the effects on reading and math trajectories from kindergarten and sixth grade, with particular interest on how children with low levels of learning-related skills performed. The authors describe learning-related skills as a “set of skills that are important for children to achieve academically and include self-regulation and aspects of social competence (responsibility, independence, and cooperation)” (p.
472). Behaviors such as self-control, staying on task, organizing work materials, working independently, listening and following directions, and participating appropriately in groups are all examples of learning-related skills. Data were collected from 538 children in Greensboro, NC; 51% of the children were Caucasian, the other 49% were African American; 51% were male and 49% were female. Children entered the study at the beginning of kindergarten and were followed throughout elementary school, leaving the final sample size at 260 due to attrition. The children were tested on math and reading skills between kindergarten and sixth grade.

The initial hypothesis was that learning-related skills in kindergarten would influence math and reading capabilities throughout elementary school. Findings confirmed this hypothesis, showing that learning-related skills indeed had a unique effect on children’s reading and math scores and predicted growth in those scores between kindergarten and second grade after controlling for background variables, such as child IQ, age, ethnicity, and maternal education. Moreover, children with poor learning-related skills in kindergarten performed lower on measures of math and reading than higher-rated peers between kindergarten and sixth grade. The gap widened between kindergarten and second grade and then persisted, but did not widen, between third and sixth grade. The authors asserted the predictive nature of learning-related skills to academic achievement is especially critical in a climate that has increasingly focused on children’s cognitive and literacy skills in the assessment of school readiness, although [government] initiatives aim to increase academic success, it is important not to lose sight of the predictive role played by learning-related skills. (McClelland et al., 2006, p. 482)
As earlier research has shown, children must know much more than how to read. The results of this study show that there are important requisite skills to learning academic concepts and without those preparatory skills, children may not reach their full potential in the academic environment. Kindergarten needs to be a place where children are given the opportunities to learn and master learning-related skills in order to set them up to succeed throughout their schooling.

Stress can occur during the kindergarten transition for every child, even the most advantaged, especially when parents and teachers place demands on children that are difficult to meet (NAEYC, 1990). Unfortunately, teachers and parents sometimes disagree on what should be the priority of what is taught in kindergarten, which can cause more stress for the child. Knudsen-Lindauer and Harris (1989) examined the different expectations that teachers and mothers and fathers may have regarding what specific skills children should poses upon kindergarten entry and what specific skills should be emphasized during the kindergarten experience. One hundred forty-six kindergarten teachers and 436 parents (109 fathers and 109 mothers of girls, 109 mothers and 109 fathers of boys) participated in the study. The sample was obtained from two large school districts from a Western state and represented urban and suburban areas, a wide range of socioeconomic levels, and a relatively diverse ethnic population. The teachers’ ages ranged from 23 to 58 years of age; they were predominately Caucasian (96.4%), female (92.8%), and well-educated (62.5% had earned master’s degree), and 89% had children of their own. Parents’ ages ranged from 24 to 56 years and the majority were Caucasian (79.8%). Teachers were given a survey to fill out, and parent surveys (one survey for each father and one for each mother) to give to one girl and one boy randomly selected
from his or her class. The survey questions ascertained the expectations of skills the child needed to have before entering kindergarten and also asked the participants to rate the importance of different skills children should learn in kindergarten. The surveys were distributed in January so the “parents and teachers would have the necessary time to develop a frame of reference regarding their current experiences with kindergarten programming” (Knudsen-Lindauer & Harris, 1989, p. 54).

The researchers found that out of the thirteen skills and abilities listed, all three groups agreed that listening, feeling confident, and following directions were the most important skills and abilities a child should possess as s/he enters kindergarten. Priorities of teachers and parents then differed. Teachers ranked independence and curiosity as being more important, whereas, mothers and fathers believed counting, writing, and reading were more important skills to have when entering kindergarten. Despite similarities found in the ranking of skills before kindergarten entry, there were more significant differences found in the priorities of the skills that should be taught during kindergarten. Out of the ten skills listed to be ranked, all three groups rated listening and confidence as the top two most important skills. However, the differences began to arise with teachers believing that social/emotional skills were of peak importance while parents thought that intellectual skills were most important (Knudsen-Lindauer & Harris, 1989).

The incongruence between teachers’ and parents’ priorities in kindergarten may cause unnecessary stress on the child as they transition to school. If different skills are being emphasized at home and at school, the child may struggle to determine which skills are most important. The authors call for increased dialogue between teachers and parents, as well as parent education programs to create similar goals. “Continuity and clarity of
goals are imperative, not only between parents and teachers, but between mothers and fathers as well” (Knudsen-Lindauer & Harris, 1989, p. 59).

Not only is it important to increase dialogue between parents and teachers about what should and what is being taught in kindergarten, but also about perceived problems that teachers notice children may be having during the kindergarten transition. Work by Rimm-Kaufman and associates (2000) looked at teachers’ judgments of the types and frequency of problems children present upon entering kindergarten. Perhaps the most noteworthy finding of this study is

the fact that teachers perceive and report that almost half of entering kindergarten children demonstrate major or minor problems in adjusting demonstrates the qualitative shift as children leave preschool and enter kindergarten [and] the shifting expectations from socially oriented preschool goals to academically oriented kindergarten goals, an emphasis that has become greater in recent years as expectations for students’ performance have risen. (Rimm-Kaufman et al., 2000, p. 161)

The participants included a large, nationally representative sample of 3,595 kindergarten teachers. Of the teachers who responded, 46.5% had a master’s degree or higher, an average of 11.5 years of experience of teaching kindergarten, with 1.1 year of experience below kindergarten and 3.5 years above. The national sample of kindergarten teachers included 79.8% non-Hispanic White; 7% non-Hispanic African American and 5% Hispanic, with 9% indicating they were of other ethnicity. Classrooms consisted of an average of 22.2 students, of which 60.4% were non-Hispanic White, 18.4% were non-Hispanic African American, and 14.6% Hispanic children. About 50.3% of the children
in the included classrooms qualified for reduced-price or free lunch (Rimm-Kaufman et al., 2000).

Teachers were asked to fill out the Transitions Practices Survey (NCEDL) which gathered information about specific problems they observed and the prevalence of those problems in their current classroom of children. In addition, the survey asked teachers to indicate their general perceptions of how children transition to kindergarten. Teachers indicated that only 52% of children experienced a successful entry into kindergarten, while 32% of children had moderately successful entries characterized by some problems, and 16% of children had difficult entries to kindergarten characterized by serious concerns or many problems. Additionally “over one third of the teachers reported that about half the class or more entered kindergarten with specific problems, including difficulty following directions, lack of academic skills, disorganized home environments, and difficulty working independently” (Rimm-Kaufman et al., 2000, p. 155).

The highest ranking problem was difficulty following directions, with 46.16% of teachers reporting that half their class or more struggled with this problem as they entered kindergarten. The authors conclude that

the high rate of teacher-perceived adjustment problems may reflect a poor “fit” between children’s competencies and aspects of the kindergarten classroom context, including teachers’ expectations and classroom demands. These findings call attention to the need to better align children’s competencies, their home environments, and their kindergarten teacher’s expectations during this period of school entry. Furthermore, they highlight the importance that kindergarten teachers view children as individuals with distinctive sets of preschool
experiences, cultural values and skills rather than on a one-dimensional scale of “readiness.” (Rimm-Kaufman et al., 2000, p. 163)

Conclusion

Kindergarten has gone through many changes since Froebel organized the first garden of children. As kindergarten has evolved, more demands have been placed on teachers and children. These demands have added to the stress of the transition to school for teachers, parents, and children. This literature review has shown how using developmentally appropriate practices in the classroom can ease the stress of the transition process. A key piece of a successful transition is the teacher believing in DAP while also implementing those beliefs in the classroom. In order to meet the added demands placed on them, research has shown that many teachers who profess to believe in developmentally appropriate strategies resort to less appropriate ways of teaching children including a majority of time spent in didactic teaching situations. Researchers have also discovered teachers’ perceptions of the problems associated with a child’s transition to school. Findings have shown that early school experiences have short- and long-term effects on a child’s life. Knowing this, it is important to understand teachers’ perceptions of developmentally appropriate beliefs and practices and their assessment of how their students are adjusting to the kindergarten transition. Though some studies have looked into kindergarten teachers’ DAP beliefs versus practices and others that have looked into teachers’ perceptions of the success or failure of children navigating the kindergarten transition, there has not yet been a study that has explored the changes in all of those perceptions that may occur within the same academic year.
This study seeks to identify and address these issues by answering the following research questions. First, do kindergarten teachers’ developmentally appropriate beliefs change from the beginning of the school year to the end of the school year? Second, do kindergarten teachers’ developmentally appropriate practices change from the beginning of the school year to the end of the school year? Next, do kindergarten teachers’ perceptions of the percentage of children who were not ready for kindergarten change from the beginning of the school year to the end of the school year? Lastly, do kindergarten teachers’ perceptions of the percentage of children who had a difficult, moderately successful, or a successful transition to kindergarten change from the beginning of the school year to the end of the school year?
CHAPTER III
METODOLOGY

Participants and Procedures

Participants in this study included 180 kindergarten teachers from 36 Utah school districts. This study included the matched pretest/posttest data from all waves of a three-wave study completed over three years (2004-05, 2005-06, and 2006-07). Each year, one third of the kindergarten teachers were surveyed twice during the school year, once at the beginning and again at the end of the school year. The majority of teachers in this study indicated their ethnicity were white, making up 94% of the matched pairs. Teachers coming from multiple ethnic origins made up 4%, Hispanic .6%, Asian .6%, and Black-non-Hispanic .6%. Eighty-four percent of teachers had taught kindergarten the year before, and class sizes ranged from 2 to 37, with an average size of 23 ($SD = 4.73$).

A list of all school districts in Utah was obtained from the Utah State Department of Education. For each wave, school districts were chosen to represent urban and rural populations, districts with high and low SES, and large and small school districts. District superintendents were sent information regarding the study (appendix A). Once permission to continue was received, a list of kindergarten teachers working at each school in the district was obtained. Survey packets (appendix C) were then sent to every kindergarten teacher within those respective districts. Pre- and posttest surveys were sent to 709 kindergarten teachers in 36 of the 40 total school districts. From these, 180 sets of matched pretest/posttest surveys were returned (25% response rate). Packets sent to teachers included a letter of introduction (appendix B), directions for creating an ID
number, directions for completing the questionnaires, the two questionnaires combined in a booklet, and a self-addressed, stamped envelope for return of the completed questionnaires. The packets were distributed during the first few weeks of school each year and teachers were asked to complete the packet sometime during the sixth and seventh week of the school year. At four weeks following the distribution of the surveys, two sets of “reminder” post cards were mailed a week apart to each teacher. An identical procedure was followed at the end of the school year. Each wave of the study consisted of identical pre- and posttest distribution and collection procedures. The surveys were coded before being sent to the teachers indicating the year it was sent (04-05, 05-06 or 06-07), whether it was a pre- or posttest (01 for pretest, 02 for posttest), and which school district it was (numbered by alphabetical list, for example, Jordan school district was #14). Teachers then created a personal ID that was used to match up pre- and posttest surveys. In order to create their personal ID, teachers were asked to indicate their mother’s birth month (two digits) and year (last two digits), and their father’s birth month and year.

**Instruments**

Two measures were used to survey the kindergarten teachers and were combined into one survey packet. The first measure used was the Transition Practices Survey (National Center for Early Development and Learning [NCEDL], 1996). This survey is composed of six sections. For the purposes of this study, only the first three sections were used (pp. 2-7). Sections 1 and 2 of the survey focus on school information, teacher demographics, and classroom information. Demographic information was gathered about
the school and district, such as the current total student enrollment in the school and
whether the school was in an urban, suburban, small town, or rural setting. Demographic
data about the teacher’s education, number of years teaching at all grade levels, grades
the teacher had previously taught; and the number of years teaching kindergarten were
gathered as well.

Section 3 was designed to query teachers about perceptions regarding specific
problems children may have upon kindergarten entry. This section asked teachers about
the kind of problems they perceived concerning children’s kindergarten readiness. An
example of a question from the Transition Practices Survey (National Center for Early
Development and Learning, 1996) is: “Based on your experience, approximately what
percentage of children who enter kindergarten fall into the following categories?” Three
categories follow: (1) Very successful entry, virtually no problems; (2) Moderately
successful entry, some problems, mostly minor; or (3) Difficult or very difficult entry,
serious concerns or many problems. Teachers were asked to divide their class between
these three categories with all categories adding up to 100 percent. There have not been
any reported Cronbach’s alphas for this measure.

The second measure (pp. 8 -14) utilized was the Teacher Beliefs and Practices
Survey (Burts, Buchanan, & Benedict, 2001). This measured teachers’ beliefs about DAP
and their reported implementation of DAP within the classroom setting. It consisted of
two sections, and contained statements which were rated on 5-point Likert-type scale.

The first section measured DAP beliefs with questions such as: “It is_____ for
teachers to provide opportunities for children to select many of their own activities.” Or
“It is_____ for strategies like setting limits, problem solving, and redirection to be used to
help guide children’s behavior.” Teachers rate items on a Likert-type scale from 1 - not at all important to 5 - extremely important. Higher overall scores indicate more developmentally appropriate beliefs.

The second section measured perceptions of DAP practices in the classroom with questions such as: “How often do children in your class see their own race, culture, and language reflected in the classroom?” or “How often do children in your class play with games, puzzles, and construction materials (e.g., Tinker Toys, Bristle Blocks). The questions in this section were also rated on a Likert-type scale with 1 meaning “almost never” (less than monthly), to 5 meaning “very often” (daily). Higher scores on this section demonstrated more developmentally appropriate practices. Internal consistency was examined for both sections in this measure using Cronbach’s alpha. Reported alphas for the beliefs and practices portion of the survey were .88 and .82, respectively. Alphas for this study for the beliefs and practices portion of the survey were acceptable at .73 and .76, respectively.
CHAPTER IV

RESULTS

This chapter focuses on the results for each of the research questions. Descriptive analyses are presented to reveal teachers’ perception of their kindergarten students’ transition to school and the changes that occur from the beginning of the school year to the end.

Research Question 1

Do kindergarten teachers’ perceptions of the percentage of children who had a difficult, moderately successful, or a very successful transition to kindergarten change from the beginning of the school year (pretest) to the end of the school year (posttest)?

Question 25 of the Transition Practices Survey (National Center for Early Development and Learning, 1996) asked teachers to record the percentage of the children in their class that they believe had a very successful, moderately successful, or difficult transition to kindergarten with the total percentage adding up to 100% (being sure to include all children). Three paired samples $t$ tests were conducted, one for each category (very successful, moderately successful, and difficult), to discover if there was a statistically significant change from the pretest to the posttest (see Table 1). Results showed that teachers rated a significantly lower percentage of children as having had a difficult entry into kindergarten at the end of the year ($M = 17.4$) as compared to the beginning of the year ($M = 21.9$), $t(160) = 4.043$, $p = .000$. 
Table 1

Changes in Teachers’ Perceptions of Children’s Transition to Kindergarten from Pretest to Posttest

<table>
<thead>
<tr>
<th>Transition category</th>
<th>Pre-test M</th>
<th>Pre-test SD</th>
<th>Pre-test N</th>
<th>Post-test M</th>
<th>Post-test SD</th>
<th>Post-test N</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very successful</td>
<td>42.46</td>
<td>28.89</td>
<td>171</td>
<td>46.40</td>
<td>29.87</td>
<td>171</td>
<td>-1.79</td>
<td>170</td>
<td>.074</td>
</tr>
<tr>
<td>Moderate</td>
<td>36.79</td>
<td>21.22</td>
<td>169</td>
<td>37.10</td>
<td>23.73</td>
<td>169</td>
<td>-.16</td>
<td>168</td>
<td>.871</td>
</tr>
<tr>
<td>Difficult</td>
<td>21.97</td>
<td>18.76</td>
<td>161</td>
<td>17.47</td>
<td>16.40</td>
<td>161</td>
<td>4.04</td>
<td>160</td>
<td>.000</td>
</tr>
</tbody>
</table>

Responses for percentage of children who experienced a difficult entry ranged from 0% to 100% on both the pretest and posttest.

Additional analyses were then undertaken to examine variables which might be associated with this change. The t tests were conducted for pre- and posttest responses to examine whether or not there was a statistically significant difference between the teachers who had specific licensures or endorsements in early childhood education (ECE), reading, English as a second language (ESL), or special education and those teachers who did not. Moreover, responses of teachers who had a bachelor’s degree were compared to those teachers who had a master’s degree. Table 2 illustrates those comparisons where statistically significant differences emerged.

Teachers with ECE licensure reported a statistically significantly higher mean percentage (M = 43%) of children who experienced a very successful kindergarten transition at the pretest than did those teachers without ECE licensure (M = 22.6%), \( t(172) = -1.99, p = .013 \). In addition, on the posttest, teachers without ECE licensure rated
Table 2

Statistically Significant Differences Between Teachers’ Perceptions of the Type of Kindergarten Transition Children Experienced Based upon Specific Licensures or Endorsements on the Pretest and Posttest

<table>
<thead>
<tr>
<th>What percent of children in your class fall into the following categories…</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very successful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early childhood education</td>
<td>166</td>
<td>43.47</td>
<td>29.22</td>
<td>-1.99</td>
<td>172</td>
<td>.013</td>
</tr>
<tr>
<td>No early childhood education</td>
<td>8</td>
<td>22.63</td>
<td>17.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English as a second language</td>
<td>30</td>
<td>36.03</td>
<td>28.81</td>
<td>2.12</td>
<td>172</td>
<td>.035</td>
</tr>
<tr>
<td>No English as a second language</td>
<td>144</td>
<td>48.58</td>
<td>29.51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately successful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early childhood education</td>
<td>163</td>
<td>57.00</td>
<td>23.30</td>
<td>2.47</td>
<td>169</td>
<td>.014</td>
</tr>
<tr>
<td>No early childhood education</td>
<td>8</td>
<td>36.16</td>
<td>22.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficult</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English as a second language</td>
<td>31</td>
<td>31.26</td>
<td>4.91</td>
<td>-2.07</td>
<td>165</td>
<td>.046</td>
</tr>
<tr>
<td>No English as a second language</td>
<td>136</td>
<td>20.63</td>
<td>1.48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English as a second language</td>
<td>31</td>
<td>26.48</td>
<td>24.62</td>
<td>-2.53</td>
<td>171</td>
<td>.016</td>
</tr>
<tr>
<td>No English as a second language</td>
<td>142</td>
<td>14.95</td>
<td>12.85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
statistically significantly more children as having a moderately successful transition ($M = 57\%$) as compared to teachers who had ECE licensure ($M = 36\%$), $t(169) = 2.47, p = .014$. It is important to use caution when interpreting these results, however, because the number of teachers without ECE licensure is very low.

Teachers with ESL endorsement rated a statistically significantly higher percentage of children as having had a difficult entry to kindergarten (pretest $M = 31.2\%$, posttest $M = 26.4\%$) as compared to teachers without ESL endorsement (pretest $M = 20.6\%$, posttest $M = 12.8\%$) on both the pretest $t(165) = -2.07, p = .046$ and posttest $t(171) = -2.53, p = .016$. Additionally teachers without ESL endorsement rated a statistically significantly higher percentage of children as having had a very successful transition to kindergarten on the posttest ($M = 48.5\%$) as compared to those teachers with ESL endorsement ($M = 36.0\%$), $t(172) = 2.12, p = .035$.

Four repeated measures ANOVAs were conducted using specific licensures or endorsements (early childhood education [ECE], reading, English as a second language [ESL], and special education) and time (pretest versus posttest) as the independent variables and percentage of children assigned to each of the three transition categories (very successful, moderately successful, and difficult) as the dependent variable, for a total of twelve ANOVAs (see Tables 12-17 in Appendix D). Teachers with ECE licensure rated statistically significantly more children as very successful ($M = 45.35, N = 163, SD = 29.52$) as compared to teachers without the licensure ($M = 25.63, N = 8, SD = 19.16$) $F(1,169) = 4.60, p = .033$. Teachers without ECE licensure assigned statistically significantly more children to the moderately successful group ($M = 52.44, N = 8, SD = 35.697$) when compared to teachers with ECE licensure ($M = 36.175, N = 161, SD = 35.697$).
22.08), $F(1,167) = 5.94, p = .016$. There was not a statistically significant difference in the number of children rated as having a difficult transition by either the teachers with an ECE licensure. Nevertheless, there was a statistically significant drop overall in the number of children rated as having a difficult transition from pretest ($M = 21.97, N = 161, SD = 18.764$) to posttest ($M = 17.47, N = 161, SD = 16.405$) for teachers with and without ECE licensure $F(1,159) = 3.93, p = 0.49$.

There was no statistically significant difference in the percentage of children perceived as having a very successful or moderately successful transition between teachers with an English as a second language (ESL) endorsement and teachers without this endorsement. However, teachers who possessed an ESL endorsement ranked statistically significantly more children in the difficult transition category ($M = 28.25, N = 30, SD = 25.803$) when compared to those teachers without an ESL endorsement ($M = 17.77, N = 131, SD = 14.505$), $F(1,159) = 10.9, p = .001$. There was also a significant drop overall, irrespective of the ESL endorsement, in the number of children placed in the difficult transition category at the posttest $F(1,159) = 7.65, p = .006$.

Finally, there was no statistically significant difference in the number of children rated as having a very successful, moderately successful, or difficult transition to kindergarten between teachers with special education licensure and those without this endorsement, although there was a significant change in the number of children evaluated as having a difficult transition over time. Teachers, regardless of having the special education licensure, placed fewer children in the difficult transition category at the posttest ($M = 21.97$) than at the pretest ($M = 17.47$), $F(1,159) = 9.52, p = .002$. The same was true for those teachers who possessed a reading endorsement and those who did not.
There was no significant difference for any of the three categories for either the pretest or posttest, but there was a significant drop, regardless of having the endorsement, or licensure, in the number of children placed in the difficult transition category at the posttest (pretest $M = 21.97$, posttest $M = 17.47$), $F(1,159) = 12.90$, $p = .000$.

Separate repeated measures ANOVAs were conducted with education level and time, and teaching experience and time as the independent variables and percentage of children assigned to each of the three transition categories (very successful, moderately successful, and difficult) as the dependent variables. However, no statistically significant differences emerged.

Pearson’s correlations for teachers’ responses in each category (very successful, moderately successful, and difficult) were also conducted for the continuous variables including: number of children enrolled in each class, number of children with special needs in each class, and number of children in each class who qualified for free lunch (which indicates a child comes from a family with financial challenges). Four statistically significant correlations emerged (see Table 3). Consistent for both the pretest and posttest, results show that, as the number of children who qualified for free lunch went down, the number of children rated as having had a very successful transition went up (pretest $r = -.38$, $p = .000$, posttest $r = -.34$, $p = .002$). Conversely, as the number of children who qualified for free lunch increased, the number of children evaluated as having had a difficult transition also increased on both the pretest ($r = .59$, $p = .000$) and posttest ($r = .34$, $p = .001$).
Research Question 2

Do kindergarten teachers’ perceptions of the percentage of children who were not ready for kindergarten change from the beginning of the school year (pretest) to the end of the school year (posttest)?

Question 27 of the Transition Practices Survey (National Center for Early Development and Learning, 1996) queries teachers about their perceptions of the percentage of children in their class who were not ready for kindergarten. A paired t test was conducted to examine any significant change in the percentage of children whom teachers reported as not ready to enter kindergarten at both the pretest and the posttest. Teachers reported a statistically significantly larger percentage of children in their class were not ready for kindergarten at the pretest ($M = 27.07\%, N = 149, SD = 23.45$) as compared to the posttest ($M = 22.48\%, N = 149, SD = 20.71$), $t(148) = 2.45, p = .015$. Responses ranged from 0% were not ready to 100% of the children were not ready for kindergarten entry on both the pretest and posttest.

To examine possible variables which might be associated with this change, additional analyses were conducted. The t tests were conducted to determine any significant differences between teachers who hold ECE licensure, reading endorsement, ESL endorsement, special education licensure, or a master’s degree, and those teachers who did not. There were no statistically significant differences between the percentage of children that teachers rated as not ready for kindergarten based upon whether or not the teachers have ECE licensure, reading endorsement, special education licensure, or a master’s degree at either the pretest or posttest. However, at the pretest, teachers who had
Table 3

Pearson’s Correlations for Classroom Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Number of children enrolled in the class (r)</th>
<th>Number of children with special needs enrolled in the class (r)</th>
<th>Number of children in the class who received free lunch (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pretest</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very successful</td>
<td>-.01</td>
<td>-.07</td>
<td>-.38**</td>
</tr>
<tr>
<td>Moderately</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>successful</td>
<td>-.01</td>
<td>-.07</td>
<td>-.14</td>
</tr>
<tr>
<td>Difficult</td>
<td>-.04</td>
<td>-.01</td>
<td>.59**</td>
</tr>
<tr>
<td>Percent of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>children not</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ready</td>
<td>-.08</td>
<td>-.05</td>
<td>.51**</td>
</tr>
<tr>
<td>Beliefs</td>
<td>.06</td>
<td>.07</td>
<td>.11</td>
</tr>
<tr>
<td>Practices</td>
<td>.19*</td>
<td>.02</td>
<td>-.14</td>
</tr>
<tr>
<td><strong>Posttest</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very successful</td>
<td>.04</td>
<td>-.04</td>
<td>-.34**</td>
</tr>
<tr>
<td>Moderately</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>successful</td>
<td>-.07</td>
<td>.07</td>
<td>.18</td>
</tr>
<tr>
<td>Difficult</td>
<td>-.09</td>
<td>-.06</td>
<td>.34**</td>
</tr>
<tr>
<td>Percent of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>children not</td>
<td>-.30**</td>
<td>.16*</td>
<td>.31**</td>
</tr>
<tr>
<td>ready</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beliefs</td>
<td>.12</td>
<td>-.00</td>
<td>.01</td>
</tr>
<tr>
<td>Practices</td>
<td>.13</td>
<td>.11</td>
<td>-.14</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.
an ESL endorsement rated a statistically significantly higher percentage of children as not being ready for kindergarten \((M = 37.67\%, SD = 29.38)\) compared to those teachers without an ESL endorsement \((M = 23.95\%, SD = 20.99)\), \(t(156) = -2.307, p = .028\).

Five repeated measures ANOVAs were conducted using education level, and specific licensure or endorsements (early childhood education (ECE), reading, English as a second language (ESL), and special education) as well as time (pretest versus posttest) as the independent variables and percentage of children perceived by teachers as not ready for kindergarten entry as the dependent variable. A separate repeated measures ANOVA was conducted using teaching experience and time as the independent variables and percentage of children perceived by teachers as not ready for kindergarten entry as the dependent variable (see Tables 18-20 in Appendix D). Teachers, regardless of licensures, endorsements, education level, or teaching experience rated more children as being ready for kindergarten entry at the posttest as compared to the pretest.

Pearson’s correlations were conducted to examine relationships between the variables of number of children, number of children with special needs, and number of children who qualified for free lunch, and the percentage of children teachers reported as not ready for kindergarten entry on both the pretest and the posttest (see Table 3). At the pretest, as the number of children who qualified for free lunch increased, the percentage of children teachers reported as not ready for kindergarten entry increased \((r = .51, p = .000)\). At the posttest, statistically significant correlations emerged between the number of children, number of children with special needs, and number of children who qualified for free lunch enrolled in the class and percentage of children teachers reported as not ready for kindergarten entry. As the class size increased, the percentage of children...
teachers reported were not ready for kindergarten decreased ($r = -.30$, $p = .000$).

However, as the number of children with special needs in the classroom increased, teachers rated a higher percentage of children as not being ready for kindergarten entry ($r = .16$, $p = .041$). Lastly, as the number of children who qualified for free lunch increased, the percentage of children teachers reported as not ready for kindergarten increased as well ($r = .31$, $p = .004$).

**Research Question 3**

Do kindergarten teachers’ developmentally appropriate beliefs change from the beginning of the school year (pretest) to the end of the school year (posttest)?

The first section of the Teacher Beliefs and Practices Survey (Burts, Buchanan, and Benedict, 2001) was used to ascertain teachers’ beliefs about developmentally appropriate practices. This section asks teachers to rate items on a Likert-type scale from 1 - not at all important to 5 - extremely important, with higher scores indicating more developmentally appropriate beliefs. Table 21 in the appendix lists the 15 items that were reverse coded to demonstrate developmentally appropriate beliefs. Teachers’ responses on this section at the beginning of the school year (pretest) were compared to their responses at the end of the school year (posttest) using a matched pairs $t$ test to examine any significant ($p < .05$) changes. Results from the $t$ test indicated that teachers’ developmentally appropriate beliefs were statistically significantly higher at the beginning of the school year ($M = 3.92$) than at the end of the school year ($M = 3.87$), $t(178) = 3.23$, $p = .001$. 
To further explore this finding, matched pairs $t$ tests were conducted to determine which beliefs items statistically significantly changed from pretest to posttest (see Table 4). Additionally, Tables 5 and 6 show teachers’ five most developmentally appropriate beliefs items and five least developmentally appropriate beliefs items at both pretest and posttest.

Teachers rated *reading stories daily to children* as the most developmentally appropriate item, and *giving readiness or achievement tests as an evaluation of children’s progress* as the least developmentally appropriate item at both the pretest and the posttest. The order of the five most developmentally appropriate beliefs did not change from pretest to posttest. Even though a matched pairs $t$ test shows there was a statistically significant decrease in teachers’ beliefs about *providing daily opportunities for children to develop social skills* (pretest $M = 4.72$, $SD = .50$, posttest $M = 4.59$ $SD = .58$), $t(178) = 2.80$, $p = .006$, it remained the item rated as the third most developmentally appropriate belief. The five least appropriate beliefs included identical items in the pretest and the posttest, however, the order changed from pretest to posttest. Teachers rated nine of the beliefs items significantly higher on the pretest as compared with the posttest. The beliefs item that showed the most statistically significant drop between pretest and posttest was *parents/guardians being involved in ways that are comfortable for them* (pretest $M = 4.39$, $SD = .66$, posttest $M = 4.21$, $SD = .66$), $t(178) = 3.35$, $p = .004$.

Further $t$ tests were conducted to examine differences between the means of the beliefs of teachers with specific licensures or endorsements (early childhood education [ECE], reading, English as a second language [ESL], and special education) and teachers without. Education level of the teachers was also examined by comparing those teachers
with a bachelor’s degree to those with a master’s degree. Table 7 shows the beliefs items where statistically significant differences emerged for both pretest and posttest.

Table 4

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is __ for activities to be representative to the cultural diversity of students.</td>
<td>3.75</td>
<td>3.63</td>
<td>1.95</td>
<td>177</td>
<td>.050</td>
</tr>
<tr>
<td>It is __ for children to dictate stories to the teacher.</td>
<td>3.91</td>
<td>3.72</td>
<td>2.94</td>
<td>177</td>
<td>.004</td>
</tr>
<tr>
<td>It is __ that teachers engage in on-going professional development in early childhood education.</td>
<td>4.47</td>
<td>4.37</td>
<td>2.05</td>
<td>178</td>
<td>.041</td>
</tr>
<tr>
<td>It is __ for children to see and use functional print and environmental print.</td>
<td>4.44</td>
<td>4.32</td>
<td>2.13</td>
<td>178</td>
<td>.034</td>
</tr>
<tr>
<td>It is __ to provide many daily opportunities for developing social skills.</td>
<td>4.72</td>
<td>4.59</td>
<td>2.80</td>
<td>178</td>
<td>.006</td>
</tr>
<tr>
<td>It is __ that books, pictures, and materials in the classroom include people of different races, ages, and abilities and both genders in various roles.</td>
<td>4.40</td>
<td>4.26</td>
<td>2.66</td>
<td>178</td>
<td>.008</td>
</tr>
<tr>
<td>It is __ for parents/guardians to be involved in ways that are comfortable for them.</td>
<td>4.39</td>
<td>4.21</td>
<td>3.35</td>
<td>178</td>
<td>.001</td>
</tr>
<tr>
<td>It is __ for teachers to integrate each child’s home culture and language into the curriculum throughout the year.</td>
<td>3.59</td>
<td>3.48</td>
<td>1.97</td>
<td>177</td>
<td>.050</td>
</tr>
<tr>
<td>It is __ to plan activities that are primarily just for fun without connection to program goals.*</td>
<td>3.92</td>
<td>3.76</td>
<td>2.25</td>
<td>177</td>
<td>.025</td>
</tr>
</tbody>
</table>

*Note. * item is reverse coded.
Table 5

Pretest Beliefs Items Rated as Most and Least Developmentally Appropriate by Teachers

<table>
<thead>
<tr>
<th>Itema</th>
<th>N</th>
<th>Range</th>
<th>Mb</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest beliefs—most developmentally appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is ___ to read stories daily to children, individually and/or on a group basis.</td>
<td>179</td>
<td>3-5</td>
<td>4.92</td>
<td>.28</td>
</tr>
<tr>
<td>It is ___ for teacher-child interactions to help develop children’s self-esteem and positive feelings toward learning.</td>
<td>179</td>
<td>3-5</td>
<td>4.78</td>
<td>.48</td>
</tr>
<tr>
<td>It is ___ to provide many daily opportunities for developing social skills (i.e., cooperating, helping, talking) with peers in the classroom.</td>
<td>179</td>
<td>3-5</td>
<td>4.72</td>
<td>.50</td>
</tr>
<tr>
<td>It is ___ for teachers to develop an individualized behavior plan for addressing severe behavior problems.</td>
<td>179</td>
<td>2-5</td>
<td>4.58</td>
<td>.59</td>
</tr>
<tr>
<td>It is ___ for strategies like setting limits, problem solving, and redirection to be used to help guide children’s behavior.</td>
<td>179</td>
<td>3-5</td>
<td>4.56</td>
<td>.57</td>
</tr>
<tr>
<td>Pretest beliefs—least developmentally appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As an evaluation of children’s progress, readiness or achievement tests are ___.c</td>
<td>178</td>
<td>1-4</td>
<td>2.33</td>
<td>.95</td>
</tr>
<tr>
<td>It is ___ that outdoor time have planned activities.</td>
<td>179</td>
<td>1-5</td>
<td>2.40</td>
<td>1.03</td>
</tr>
<tr>
<td>Instruction in letter and word recognition is ___ in preschool.c</td>
<td>177</td>
<td>1-5</td>
<td>2.60</td>
<td>.97</td>
</tr>
<tr>
<td>It is ___ to provide the same curriculum and environment for each group of children that comes through the program.</td>
<td>175</td>
<td>1-5</td>
<td>2.61</td>
<td>1.00</td>
</tr>
<tr>
<td>It is ___ for the teacher to talk to the whole group and for the children to do the same things at the same time.</td>
<td>178</td>
<td>1-5</td>
<td>2.62</td>
<td>.77</td>
</tr>
</tbody>
</table>

aItems rated from 1 (not at all important) to 5 (extremely important).

bHigher scores indicate more developmentally appropriate beliefs.

cItem is reverse coded.
Table 6

Posttest Beliefs Items Rated as Most and Least Developmentally Appropriate by Teachers

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Range</th>
<th>$M^b$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest beliefs—most developmentally appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is ___ to read stories daily to children, individually and/or on a group basis.</td>
<td>180</td>
<td>3-5</td>
<td>4.87</td>
<td>.36</td>
</tr>
<tr>
<td>It is ___ for teacher-child interactions to help develop children’s self-esteem and positive feelings toward learning.</td>
<td>180</td>
<td>3-5</td>
<td>4.74</td>
<td>.48</td>
</tr>
<tr>
<td>It is ___ to provide many daily opportunities for developing social skills (i.e, cooperating, helping, talking) with peers in the classroom.</td>
<td>180</td>
<td>3-5</td>
<td>4.59</td>
<td>.58</td>
</tr>
<tr>
<td>It is ___ for teachers to develop an individualized behavior plan for addressing severe behavior problems.</td>
<td>180</td>
<td>2-5</td>
<td>4.55</td>
<td>.63</td>
</tr>
<tr>
<td>It is ___ for strategies like setting limits, problem solving, and redirection to be used to help guide children’s behavior.</td>
<td>180</td>
<td>3-5</td>
<td>4.54</td>
<td>.60</td>
</tr>
<tr>
<td>Posttest beliefs—least developmentally appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As an evaluation of children’s progress, readiness or achievement tests are ____.&lt;sup&gt;c&lt;/sup&gt;</td>
<td>179</td>
<td>1-4</td>
<td>2.35</td>
<td>.93</td>
</tr>
<tr>
<td>It is ___ that outdoor time have planned activities.</td>
<td>179</td>
<td>1-5</td>
<td>2.36</td>
<td>.89</td>
</tr>
<tr>
<td>It is ___ for the teacher to talk to the whole group and for the children to do the same things at the same time.</td>
<td>179</td>
<td>1-5</td>
<td>2.50</td>
<td>.70</td>
</tr>
<tr>
<td>It is ___ to provide the same curriculum and environment for each group of children that comes through the program.</td>
<td>179</td>
<td>1-5</td>
<td>2.53</td>
<td>.92</td>
</tr>
<tr>
<td>Instruction in letter and word recognition is ___ in preschool.&lt;sup&gt;c&lt;/sup&gt;</td>
<td>180</td>
<td>1-5</td>
<td>2.64</td>
<td>.98</td>
</tr>
</tbody>
</table>

<sup>a</sup>Items rated from 1 (not at all important) to 5 (extremely important).

<sup>b</sup>Higher scores indicate more developmentally appropriate beliefs.

<sup>c</sup>Item is reverse coded.
Table 7

Statistically Significant Differences on Developmentally Appropriate Beliefs Between Teachers With and Without Specific Licensures or Endorsements

<table>
<thead>
<tr>
<th>Teacher licensure/endorsement</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early childhood education</td>
<td>170</td>
<td>3.93</td>
<td>.23</td>
<td>-2.87</td>
<td>177</td>
<td>.004</td>
</tr>
<tr>
<td>No early childhood education</td>
<td>9</td>
<td>3.70</td>
<td>.21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English as a second language</td>
<td>31</td>
<td>3.98</td>
<td>.16</td>
<td>-2.12</td>
<td>177</td>
<td>.037</td>
</tr>
<tr>
<td>No English as a second language</td>
<td>148</td>
<td>3.91</td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early childhood education</td>
<td>171</td>
<td>3.89</td>
<td>.25</td>
<td>-2.76</td>
<td>178</td>
<td>.006</td>
</tr>
<tr>
<td>No early childhood education</td>
<td>9</td>
<td>3.65</td>
<td>.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English as a second language</td>
<td>32</td>
<td>3.96</td>
<td>.16</td>
<td>-2.62</td>
<td>178</td>
<td>.011</td>
</tr>
<tr>
<td>No English as a second language</td>
<td>148</td>
<td>3.86</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Teachers with ECE licensure were significantly more developmentally appropriate in their beliefs (pretest $M = 3.93$, posttest $M = 3.89$) than those teachers without ECE licensure (pretest $M = 3.7$, posttest $M = 3.65$) on both the pretest $t(177) = -2.87$, $p = .004$ and posttest $t(178) = -2.76$, $p = .006$. However, it is important to note that the number of teachers without an ECE licensure was low, so results need to be
interpreted with caution. Teachers with an ESL endorsement also were statistically significantly more developmentally appropriate in their beliefs (pretest $M = 3.98$, posttest $M = 3.96$) than teachers without that endorsement (pretest $M = 3.91$, posttest $M = 3.86$) at both pretest $t(177) = -2.12, p = .037$ and posttest $t(178) = -2.62, p = .011$. There were no other statistically significant differences that emerged.

One-way ANOVAs were conducted to examine any differences between the developmentally appropriate beliefs of teachers with different teaching experiences including only kindergarten, kindergarten and preschool, kindergarten and grade school, and preschool, kindergarten and grade school for both pretests and posttests. Statistically significant differences emerged between the means at the posttest for these groups: kindergarten experience ($M = 3.93, N = 56, SD = .247$); kindergarten and preschool experience ($M = 3.89, N = 33, SD = .224$); kindergarten and grade school experience ($M = 3.79, N = 49, SD = .261$); and preschool, kindergarten and grade school experience ($M = 3.90, N = 38, SD = .270$), $F(3,172) = 2.91, p = .036$. Teachers with kindergarten and grade school experience had significantly lower developmentally appropriate beliefs than those teachers with only kindergarten experience and teachers who have preschool, kindergarten and grade school teaching experience.

Four repeated measures ANOVAs were conducted using specific licensures or endorsements (early childhood education [ECE], reading, English as a second language [ESL], and special education) and time (pretest versus posttest) as the independent variables and teachers’ developmentally appropriate belief scores as the dependent variable. Separate repeated measures ANOVAs were conducted with education level, teaching experience, and time (pretest versus posttest) as the independent variables and
teachers’ developmentally appropriate belief scores as the dependent variable. Results showed that teachers with ECE licensure had statistically significantly more developmentally appropriate beliefs ($M = 3.91, N = 170, SD = .245$) than those teachers without this licensure ($M = 3.67, N = 9, SD = .228$), $F(1,177) = 9.22, p = .003$. This remained consistent from the pretest to the posttest. It is important to note, however, that only a small number of teachers lacked ECE licensure. Teachers, regardless of reading, ESL endorsement, or special education licensure or teaching experience, showed a statistically significant drop in developmentally appropriate beliefs from the pretest to the posttest (see Tables 22-26 in Appendix D). No other statistically significant differences emerged.

Pearson’s correlations were conducted to examine relationships between teachers’ developmentally appropriate beliefs and the variables of number of children, number of children with special needs, and number of children who qualified for free lunch at the pretest and the posttest. No significant correlations emerged between developmentally appropriate beliefs and any of these variables at either the pretest or posttest.

**Research Question 4**

Do kindergarten teacher’s developmentally appropriate practices change from the beginning of the school year (pretest) to the end of the school year (posttest)?

The second section of the Teacher Beliefs and Practices Survey (Burts et al., 2001) included 30 questions that were used to determine teachers’ experiences with developmentally appropriate practices. The questions in this section were also rated on a 5 - point, Likert-type scale ranging from 1 - almost never (less than monthly) to 5 - very
often (daily), with 1 indicating the item was not developmentally appropriate and 5 indicating the item was very developmentally appropriate. Therefore, a higher mean signifies that those items or activities were being implemented more often in the classroom, which reflects more appropriate practices. A higher mean on the 12 items in this section that were reverse coded for analysis (see Table 21 in Appendix D) indicates that the teachers are using those activities less often, which is more developmentally appropriate. Teachers’ responses on this section at the beginning of the year (pretest) were compared to their responses at the end of the year (posttest) using a paired samples t test to determine if there were any statistically significant (p < .05) changes. The paired samples t test indicated that teachers’ developmentally appropriate practices were statistically significantly higher at the posttest (M = 2.9, SD = .51) than at the pretest (M = 2.8, SD = .49), t(178) = 2.62, p = .009. Teachers reported implementing more developmentally appropriate activities at the end of the school year as compared to the beginning of the school year.

Subsequent analyses were undertaken to further explore this change. Tables 8 and 9 show the five most and five least developmentally appropriate practices items at the beginning (pretest) and end of the year (posttest). The top five items remained similar from the pretest to the posttest with the order of the items changing slightly. The bottom five items also experienced small changes in the order, but the item with the smallest mean (pretest M = 1.44, posttest M = 1.55), participate in whole-class, teacher directed instruction, remained consistently the least implemented activity from pretest to the posttest. Matched pairs t tests were conducted to compare pre- and posttest means for each practices item. As indicated in Table 10, a number of practices items changed
statistically significantly from the beginning to the end of the school year. Descriptive statistics indicate that the highest mean, or the most implemented activity, at the pretest \((M = 4.68, SD = .60)\) and posttest \((M = 4.54, SD = .72)\) was *singing, listening, and/or moving to music*. Even though a matched pairs \(t\) test indicated there was a significant drop from pretest to posttest \(t(177) = 2.60, p = .01\), it remained consistently the most developmentally appropriate practice reported by teachers.

Additional \(t\) tests were conducted to determine differences between the means of the reported practices of teachers with and without specific licensure or endorsements (early childhood education [ECE], reading, English as a second language [ESL], and special education). In addition responses of those teachers with a bachelor’s degree were compared to those of teachers with a master’s degree. Table 11 shows where four statistically significant differences emerged for the pretest and posttest. Teachers with a master’s degree reported statistically significantly higher developmentally appropriate practices \((M = 3.08)\) as compared to those teachers who possess only a bachelor’s degree at the posttest \((M = 2.89)\), \(t(177) = -2.06, p = .040\). Also at the posttest, teachers who had an ECE licensure had statistically significantly higher developmentally appropriate practices \((M = 2.95)\) than teachers without an ECE licensure \((M = 2.58)\), \(t(178) = -2.09, p = .038\). Again, however, it is important to note the vast majority of teachers in this study had ECE licensure. Nonetheless, this finding still offers applicable insight that will be discussed in the next chapter. At the pretest, teachers with either a reading \((M = 2.59)\) or ESL endorsement \((M = 2.69)\) reported significantly lower developmentally appropriate practices when compared to the teachers without these corresponding endorsements (non-reading \(M = 2.88\), non-ESL \(M = 2.89\)).
Table 8

Pretest Practices Items Rated as Most and Least Developmentally Appropriate by Teachers

<table>
<thead>
<tr>
<th>Item&lt;sup&gt;a&lt;/sup&gt;</th>
<th>N</th>
<th>Range</th>
<th>M&lt;sup&gt;b&lt;/sup&gt;</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest practices—most developmentally appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do children in your class sing, listen, and/or move to music?</td>
<td>179</td>
<td>3-5</td>
<td>4.68</td>
<td>.60</td>
</tr>
<tr>
<td>How often do children in your class do activities that integrate multiple subjects (reading, math, science, etc.)?&lt;sup&gt;d&lt;/sup&gt;</td>
<td>179</td>
<td>1-5</td>
<td>4.38</td>
<td>.75</td>
</tr>
<tr>
<td>How often do children in your class experiment with writing by drawing, copying, and using their own invented spelling?</td>
<td>179</td>
<td>1-5</td>
<td>4.31</td>
<td>.76</td>
</tr>
<tr>
<td>How often do children in your class use manipulatives (e.g. pegboards, Legos, and Unifix Cubes)?&lt;sup&gt;d&lt;/sup&gt;</td>
<td>179</td>
<td>2-5</td>
<td>4.17</td>
<td>.76</td>
</tr>
<tr>
<td>How often do children in your class have their work displayed in the classroom?</td>
<td>179</td>
<td>2-5</td>
<td>4.08</td>
<td>.96</td>
</tr>
<tr>
<td>Pretest practices—least developmentally appropriate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do children in your class participate in whole-class, teacher-directed instruction?&lt;sup&gt;c&lt;/sup&gt;</td>
<td>179</td>
<td>1-5</td>
<td>1.44</td>
<td>.74</td>
</tr>
<tr>
<td>How often do children in your class participate in rote counting?&lt;sup&gt;c&lt;/sup&gt;</td>
<td>179</td>
<td>1-5</td>
<td>1.65</td>
<td>.92</td>
</tr>
<tr>
<td>How often do children in your class practice handwriting on lines?&lt;sup&gt;c&lt;/sup&gt;</td>
<td>178</td>
<td>1-5</td>
<td>2.37</td>
<td>1.03</td>
</tr>
<tr>
<td>How often do children in your class use commercially-prepared phonics activities?&lt;sup&gt;cd&lt;/sup&gt;</td>
<td>178</td>
<td>1-5</td>
<td>2.51</td>
<td>1.06</td>
</tr>
<tr>
<td>How often do children in your class use flashcards with ABCs, sight words, and/or math facts?&lt;sup&gt;cd&lt;/sup&gt;</td>
<td>179</td>
<td>1-5</td>
<td>2.52</td>
<td>1.20</td>
</tr>
</tbody>
</table>

<sup>a</sup>Items rated from 1(almost never/less than monthly) to 5 (very often/daily).
<sup>b</sup>Higher scores indicate more developmentally appropriate practices.
<sup>c</sup>Item is reverse coded.
<sup>d</sup>Item did not appear on posttest top/bottom five.
Table 9

*Posttest Practices Items Rated as Most and Least Developmentally Appropriate by Teachers*

<table>
<thead>
<tr>
<th>Itema</th>
<th>N</th>
<th>Range</th>
<th>Mb</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Posttest practices—most developmentally appropriate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do children in your class sing, listen, and/or move to music?</td>
<td>179</td>
<td>2-5</td>
<td>4.54d</td>
<td>.72</td>
</tr>
<tr>
<td>How often do children in your class experiment with writing by drawing, copying, and using their own invented spelling?</td>
<td>178</td>
<td>1-5</td>
<td>4.52</td>
<td>.64</td>
</tr>
<tr>
<td>How often do children in your class do activities that integrate multiple subjects (reading, math, science, etc.)?</td>
<td>180</td>
<td>2-5</td>
<td>4.32</td>
<td>.68</td>
</tr>
<tr>
<td>How often do children in your class have their work displayed in the classroom?</td>
<td>179</td>
<td>1-5</td>
<td>4.13</td>
<td>1.04</td>
</tr>
<tr>
<td>How often do children in your class get placed in time-out (i.e. isolation, sitting on a chair, in a corner, or being sent outside of the room)?c</td>
<td>178</td>
<td>1-5</td>
<td>4.03</td>
<td>.93</td>
</tr>
<tr>
<td><strong>Posttest practices—least developmentally appropriate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do children in your class participate in whole-class, teacher-directed instruction?c</td>
<td>179</td>
<td>1-4</td>
<td>1.55d</td>
<td>.78</td>
</tr>
<tr>
<td>How often do children in your class participate in rote counting?c</td>
<td>179</td>
<td>1-5</td>
<td>1.96d</td>
<td>1.01</td>
</tr>
<tr>
<td>How often do children in your class experience parents reading stories or sharing a skill or hobby with the class?</td>
<td>179</td>
<td>1-5</td>
<td>2.36</td>
<td>1.10</td>
</tr>
<tr>
<td>How often do children in your class practice handwriting on lines?c</td>
<td>179</td>
<td>1-5</td>
<td>2.47</td>
<td>1.09</td>
</tr>
<tr>
<td>How often do children in your class work in assigned ability-level groups?c</td>
<td>178</td>
<td>1-5</td>
<td>2.55</td>
<td>1.22</td>
</tr>
</tbody>
</table>

aItems rated from 1(almost never/less than monthly) to 5 (very often/daily).

bHigher scores indicate more developmentally appropriate practices.

ccItem is reverse coded.

dItem experienced a significant change from pretest to posttest.
Table 10

Practices Items Which Statistically Significantly Changed Between the Beginning and the End of the School Year

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>...experiment with writing by drawing, copying, and using their own invented spelling</td>
<td>4.30</td>
<td>4.52</td>
<td>-4.39</td>
<td>176</td>
<td>.000</td>
</tr>
<tr>
<td>...sing, listen, and/or move to music</td>
<td>4.67</td>
<td>4.53</td>
<td>2.60</td>
<td>177</td>
<td>.010</td>
</tr>
<tr>
<td>...use manipulatives (e.g. pegboards, Legos, etc.)</td>
<td>4.17</td>
<td>4.02</td>
<td>2.70</td>
<td>177</td>
<td>.007</td>
</tr>
<tr>
<td>...participate in rote counting *</td>
<td>1.65</td>
<td>1.97</td>
<td>-4.15</td>
<td>177</td>
<td>.000</td>
</tr>
<tr>
<td>...color, cut, and paste pre-drawn forms *</td>
<td>3.09</td>
<td>3.30</td>
<td>-2.74</td>
<td>176</td>
<td>.007</td>
</tr>
<tr>
<td>...participate in whole-class, teacher directed instruction*</td>
<td>1.43</td>
<td>1.55</td>
<td>-2.04</td>
<td>177</td>
<td>.043</td>
</tr>
<tr>
<td>...experience parents reading stories or sharing a skill or hobby with the class</td>
<td>2.61</td>
<td>2.36</td>
<td>2.99</td>
<td>177</td>
<td>.003</td>
</tr>
</tbody>
</table>

Note: * item is reverse coded.

kindergarten and grade school experience, and preschool, kindergarten and grade school experience at both pretest and posttest. Statistically significant differences emerged on the posttest among the means for the experience groups: kindergarten experience ($M = 2.84, N = 56, SD = .457$), kindergarten and preschool experience ($M = 3.16, N = 33, SD = .554$), kindergarten and grade school experience ($M = 2.92, N = 49, SD = .510$), and preschool, kindergarten and grade school experience ($M = 2.86, N = 38, SD = .557$).

Teachers with preschool and kindergarten teaching experience report statistically
Table 11

*Statistically Significant Differences on Developmentally Appropriate Practices Between Teachers With and Without Specific Licensure, Endorsement, or Education*

<table>
<thead>
<tr>
<th>Teacher licensure/endorsement/education</th>
<th>Practices</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td><strong>t</strong></td>
<td><strong>df</strong></td>
<td><strong>p</strong></td>
</tr>
<tr>
<td><strong>Pretest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>20</td>
<td>2.59</td>
<td>.50</td>
<td>2.58</td>
<td>177</td>
</tr>
<tr>
<td>No reading</td>
<td>159</td>
<td>2.88</td>
<td>.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English as a second language</td>
<td>31</td>
<td>2.69</td>
<td>.49</td>
<td>2.00</td>
<td>177</td>
</tr>
<tr>
<td>No English as a second language</td>
<td>148</td>
<td>2.89</td>
<td>.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Posttest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td>42</td>
<td>3.08</td>
<td>.51</td>
<td>-2.06</td>
<td>177</td>
</tr>
<tr>
<td>No master’s degree</td>
<td>137</td>
<td>2.89</td>
<td>.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early childhood education</td>
<td>171</td>
<td>2.95</td>
<td>.51</td>
<td>-2.09</td>
<td>178</td>
</tr>
<tr>
<td>No early childhood education</td>
<td>9</td>
<td>2.58</td>
<td>.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significantly higher developmentally appropriate practices than all of the other experience groups $F(3,172) = 3.049, p = .03$.

Four repeated measures ANOVAs were conducted using specific licensures or endorsements (early childhood education [ECE], reading, English as a second language [ESL], and special education) and time (pretest versus posttest) as the independent variables and teachers’ developmentally appropriate practices scores as the dependent variable. Teachers with reading endorsement had statistically significantly lower
developmentally appropriate practices (pretest \( M = 2.59 \), posttest \( M = 2.81 \)) than those teachers without this endorsement (pretest \( M = 2.88 \), posttest \( M = 2.95 \)) on both the pretest and posttest \( F(1,177) = 4.286, p = .040 \). However, regardless of having reading endorsement or not, teachers had higher developmentally appropriate practices at the end of the year (posttest \( M = 2.94 \)) as compared to the beginning of the year (pretest \( M = 2.85 \)), \( F(1,177) = 7.872, p = .006 \). Results for ESL endorsement and teaching experience show there were no significant differences between practices scores of those teachers holding the ESL endorsement and those without. However, teachers regardless of licensure, endorsement or teaching experience had statistically significantly higher developmentally appropriate practices at the posttest (ESL, pretest \( M = 2.85 \), posttest \( M = 2.94 \)), \( F(1,177) = 6.32, p = .013 \). Separate repeated measures ANOVAs were conducted with the variables education level, and teaching experience and time (pretest versus posttest) as the independent variables and teachers’ developmentally appropriate practice scores as the dependent variable (see Tables 27-30 in Appendix D). Results indicated that teachers with a master’s degree had statistically significantly higher developmentally appropriate practices (\( M = 3.06, \ N = 42, SD = .509 \)) than those teachers with only a bachelor’s degree (\( M = 2.85, \ N = 136, SD = .492 \)), \( F(1,176) = 7.22, p = .008 \). In addition there was no significant difference between practices scores of teachers with only kindergarten experience, preschool and kindergarten experience, kindergarten and grade school experience, and teachers with preschool, kindergarten, and grade school experience on either the pre- or posttest (pretest \( M = 2.85 \), posttest \( M = 2.93 \)), \( F(3,171) = 6.41, p = .012 \).
Pearson’s correlations were conducted at pretest and posttest to examine relationships between teachers’ developmentally appropriate practices and the variables of number of children enrolled in the class, number of children with special needs enrolled in the class, and number of children who qualified for free lunch enrolled in the class (see Table 3). Pretest results showed that as the number of children enrolled in the class increased, teachers’ developmentally appropriate practices increase ($r = .19, p = .010$). No other significant correlations were evident.
CHAPTER V
DISCUSSION

The purpose of this study was to investigate kindergarten teachers’ perceptions of children’s transition to kindergarten, as well as teachers’ developmentally appropriate beliefs and practices. This study specifically looked at both the pretest and posttest data to determine if there were any changes in teachers’ perceptions from the beginning of the school year to the end of the school year. Classroom and teacher demographics were also analyzed to give further insight into teachers’ perception of children’s entry and transition to kindergarten.

Data were collected from 180 Utah kindergarten teachers through their responses on the two part Kindergarten Transition Practices Survey. For the purposes of this study only the matched pre-posttest surveys were used. Teachers’ responses to the survey were analyzed to answer this study’s four research questions. Results of the study’s findings are discussed and organized by research question.

Research Question 1

The first research question asked, “Do kindergarten teachers’ perceptions of the percentage of children who had a difficult, moderately successful, or a very successful transition to kindergarten change from the beginning of the school year (pretest) to the end of the school year (posttest)?”

Teachers rated a significantly lower percentage of children as having had a difficult entry to kindergarten at the end of the school year as compared to the beginning
of the school year. At the pretest, teachers rated over one-fifth of children as having a
difficult entry, with serious concerns or many problems. This is a higher percentage than
Rimm-Kaufman and associates found in their nationally representative sample in 2000
(16%), which also utilized the Kindergarten Transition Practices Survey. In the current
study it is alarming that responses ranged from 0% to 100% at the pretest and posttest.
This indicates that there were teachers, even at the end of the school year, who believed
that 100% of the children in their class had a difficult entry with serious concerns or
were reported as having a successful entry. Nonetheless, in the current study just over
40% of children were considered by their teachers to have had a successful entry at the
pretest. On the other hand, numbers from the current study show that teachers rated about
a third of the children as having experienced a moderately successful kindergarten entry,
with some, mostly minor, problems. These numbers are consistent with what Rimm-
Kaufman and colleagues found (32%). Additionally, teachers in the current study rated a
little over 17% of children as having had a difficult entry at the posttest, which is much
closer to the numbers found in the Rimm-Kaufman and colleagues’ study. The significant
change from pretest to posttest in the current study could possibly be attributed to the
lower stress level of teachers toward the end of the year. Teachers may not feel as
overwhelmed with a new class of children who each have a variety of abilities and needs
that will have to be understood and met. After being able to get to know the children in
their class, teachers may recognize that fewer children struggled than they at first
perceived would.
Considering the increased focus on academic success and performance expectations in kindergarten (Fromberg, 2006; Rimm-Kaufman et al., 2000), and the reality that children bring with them very diverse backgrounds, experiences, and skills, it is not surprising that just under 60% of children were judged as having a major or minor problem adjusting to the current context of kindergarten. This movement towards a focus on academic success and expectations of high performance on standardized tests, exacerbated by No Child Left Behind, has placed increased pressure on teachers to make sure their students are ready for what is to come “next” (Fromberg, 2006; Goldstein, 2007; Hyun, 2003; Winter & Kelley, 2008). Commenting on this issue, Rimm-Kaufman and colleagues (2000) stated “As school standards become increasingly rigorous and higher levels of academic performance are expected in kindergarten, we can expect that teachers’ judgments will show greater discrepancies between teachers’ expectations and children’s competencies” (p. 150).

Teachers with early childhood licensure (ECE) rated statistically significantly more children in the very successful category at the pretest as compared to teachers without. Additionally, teachers without ECE licensure rated statistically significantly more children in the moderately successful category at the pretest. It may be that teachers with ECE licensure have a better grasp of appropriate expectations for children of this age and are better able to meet the needs of a wide variety of the children in their class. Even though there were few teachers without ECE licensure, these are intriguing findings that support the argument that it is important for kindergarten teachers to indeed have ECE licensure.
Teachers with English as a second language (ESL) endorsement judged a statistically significant higher percentage of children as having a difficult transition at both the pretest and posttest. Conversely, teachers without ESL endorsement rated a statistically significantly higher percentage of children in the successful transition category at the end of the school year. This finding may be attributed to a number of factors, including that teachers with ESL endorsement may have different expectations, influenced by their ESL training, for the children in their class. Another possibility could be that school officials perceive teachers with ESL endorsement to be more qualified to teach children who are English language learners, and thus may have placed more of these children in their classes, increasing the number of children who are at risk of having a difficult transition (Rimm-Kaufman et al., 2000; Winter & Kelley, 2008).

Another finding of interest is that as the number of children who qualified for free lunch increased, the percentage of children who were judged as having had a difficult transition also increased. In light of this finding, and not surprisingly, as the number of children who qualified for free lunch decreased, the percentage of children who were perceived to have had a successful transition increased. The relationship between these variables is not surprising, considering that qualifying for free lunch is an indicator that a child comes from a family with financial challenges, something that researchers have found to be a major risk factor for young children (Brooks-Gunn, 2003; Burts et al., 1992; Huffman & Speer, 2000; Rimm-Kaufman et al., 2000). Children from low-income families may indeed have a more difficult transition to kindergarten for a number of reasons. Perhaps they have not had the same access to quality preschools as their more economically advantaged peers. Additionally Brooks-Gunn (2003) stated that vulnerable
children, including those from low-income families, are less likely to arrive at school with the requisite skills to be successful in kindergarten. This is significant in view of the literature showing that success in early school experiences is likely to affect a child’s success in later schooling (Copple & Bredekamp, 2009; McClelland et al., 2006; Rimm-Kaufman et al., 2000).

In summary, teachers perceived more children as having had a difficult transition to kindergarten at the beginning of the year than at the end of the year. Teachers with early childhood education licensure were more likely to rate a higher percentage of children as having had a successful entry when compared to those teachers without, whereas teachers with English as a second language (ESL) endorsement rated more children as having had a difficult transition at both the beginning and end of the school year. Moreover, as the number of children who qualified for free lunch increased, the percentage of children teachers rated as having had a difficult entry also increased.

**Research Question 2**

The study’s next research question was “Do kindergarten teachers’ perceptions of the percentage of children who were not ready for kindergarten change from the beginning of the school year (pretest) to the end of the school year (posttest)?”

Teachers reported that a significantly statistically larger percentage of children were not ready for kindergarten entry at the beginning of the school year. Startlingly, over a quarter of children were judged by their teachers as not being ready for kindergarten entry at the pretest. The percentage did drop at the posttest, however, it still remained a large percentage with 22.4% being rated as not ready for kindergarten.
Although teachers, on average, rated quite a few children as not ready for kindergarten entry, it was encouraging that the number did decrease at the end of the year. This finding is consistent with the results found in Question 1 of this study. Essentially the teachers were being asked to give the same type of information regarding children’s readiness, but in different ways. In both instances, the percentages of children who struggled with the transition, or were not ready for kindergarten at the beginning of the year were shocking, but there was a statistically significant decrease in those percentages at the end of the year. This reflects that teachers, for a number of reasons, perceived the children in their class somewhat differently at the end of the school year. This may be attributed to hindsight, reflecting that more children were indeed ready for kindergarten. A teacher’s familiarity with the children in his or her class that comes with time spent together, might also give a clearer perception of whether or not a child was ready for kindergarten. Perhaps teachers were, once again, more stressed or overwhelmed with a new class, with a wide variety of needs and backgrounds at the beginning of the year, as compared to the end of the year.

Even more surprising, however, is that some teachers rated their entire class as not ready for kindergarten, while others reported that all of the children in their class were ready for kindergarten entry. This demonstrates the enormous amount of variance in expectations that teachers hold for the children entering their classes. One could argue, though, that teachers who rated 100% of their class as not ready do not differ entirely in how realistically they view children’s needs in kindergarten from those teachers who rated all of their students as being ready. There are perhaps large differences in the considerations of what teachers look for in terms of readiness. This finding leaves the
question of what factors are associated with this variance and gives support for the idea of focusing on “ready schools” versus “ready children.” Children arrive at kindergarten with a myriad of different experiences, skills, and backgrounds, and in order to allow all children to feel success in kindergarten some of the burden of “readiness” needs to be placed on the schools (Copple & Bredekamp, 2009; NAEYC, 1990; Nelson, 2005). Teachers, school administrators and legislators need to ensure that schools are able to meet the needs of children at all levels of development.

At the pretest, teachers with English as a second language (ESL) endorsements rated a statistically significant higher percentage of children as not being ready for kindergarten as compared to teachers without this endorsements. This could be for a number of reasons. Teachers with ESL endorsement may have different, possibly more rigorous, expectations for kindergarten readiness. Another reason is that perhaps that more children who are English language learners are placed in classes of teachers with this particular endorsement, thus increasing the possibility that these teachers with ESL endorsement did, in fact, have more children with this unique risk factor, which in turn, may have lead to more children who seemed not ready for the rigors of kindergarten.

Consistent with other correlational findings in this study, as the number of children qualifying for free lunch increased, the percentage of children teachers reported as not ready for kindergarten also increased at both the pretest and posttest. In addition at the pretest, as the number of children with special needs went up, the percentage of children judged as not ready for kindergarten went up as well. These are not surprising findings based on the fact that the literature identifies these two groups of children as more likely to not be ready for kindergarten (Brooks-Gunn, 2003; Burts et al., 1992;

However, it is possible that teachers who had larger numbers of children with these particular risk factors felt more overwhelmed by the challenges they might be presented with, and perceived those children as not ready for kindergarten. Another cause of stress for teachers in this situation could have been the obligation for their children to perform well on standardized tests, which is placed on them by external sources (Goldstein, 2007; Hyun, 2003), and not feeling able to also address all of the unique needs a class of children possessed. Children with these risk factors, for a myriad of reasons, often enter school lacking required skills to be successful in kindergarten (Brooks-Gunn, 2003; Rimm-Kaufman et al., 2000). Winter and Kelley (2008) documented that “forty years of research continues to underscore the association of poverty with lack of school readiness skills and abilities” (p. 264). Helping children with risk factors be prepared for school is important, as research has shown that the level of competence a child displays in academic, social, and emotional skills in kindergarten is a key predictor in later school success (Copple & Bredekamp, 2009; McClelland et al., 2006; NAEYC, 1990; Rimm-Kaufman et al., 2000).

Possibly one of the most intriguing findings of this study is that as the class size increased the percentage of children reported as not ready for kindergarten decreased. A possible reason for this could be that when a teacher had a large class of children to be responsible for they had less time to focus on individual challenges a child might have displayed, and therefore any problems or lack of skills were not as easily highlighted. This finding could also be attributed to teachers possibly feeling it was too difficult to teach the large group of children all at once in a teacher-directed didactic situation.
Therefore, they may have planned more center-type activities where children learn in smaller groups. If teachers are indeed making this change, they would also have provided children with more choices in what they wanted to explore, which is a more developmentally appropriate way for children to learn. In fact, researchers (Copple & Bredekamp, 2009) have shown that this is how children learn best. Teachers are more likely to be able to observe more readily what children are capable of doing or what skills they actually possess in this more developmentally appropriate context. Fromberg (2006) documented that “both socio-dramatic play, including unit floor blocks, and art media are ways for children to represent their understanding and for teachers to assess what children can do” (p. 82). Therefore, because of the larger class size, children may have been able to participate in more appropriate activities, thereby more easily providing evidence for the teacher to see that they were indeed ready for kindergarten entry. The danger of the changes that are occurring in kindergarten classrooms across the United States, including the intense focus on achievement tests (Fromberg, 2006; Goldstein, 2007; Hyun, 2003) partly lies in the diminished time children are able to spend in developmentally appropriate activities. In turn, they are spending more time preparing for a high performance on standardized tests, and sadly children are not able to fully demonstrate their abilities for their teachers.

In summary, teachers reported a statistically significantly larger percentage of children were not ready for kindergarten entry at the beginning of the year as compared to the end of the year. Teachers with ESL endorsement rated more children as not ready for kindergarten entry at the beginning of the year than teachers without. At the beginning and end of the school year, as the number of children who qualified for free
lunch went up, the percentage of children teachers perceived as not ready for kindergarten also went up. At the end of the year, as the number of children with special needs increased, the percentage of children rated as not ready for kindergarten entry also increased. Also at the posttest, as the class size increased the percentage of children rated as not ready for kindergarten entry decreased.

**Research Question 3**

The third research question read, “Do kindergarten teachers’ developmentally appropriate beliefs change from the beginning of the school year (pretest) to the end of the school year (posttest)?”

Teachers’ belief scores were statistically significantly higher at the beginning of the school year as compared to the end of the school year. Teachers in this study had a mean beliefs score of 3.9 at the beginning of the year and 3.8 at the end of the year on a scale of 5, with 5 being very appropriate indicating that teachers overall, despite the change over the year, had high developmentally appropriate beliefs at both the beginning and at the end of the school year. Overall belief scores ranged from 1 to 5 on both the pretest and posttest, indicating there was a large range of what teachers feel is “not important at all” and what is “extremely important.” Teachers’ responses for the most developmentally appropriate belief items indicated that teachers believed that the majority of items were “fairly” to “extremely important.” However, the mean scores of the top five most appropriate belief items were all above 4.5 showing that, for the most part, teachers believed those items to be “very important” or “extremely important” to early childhood programs. The items that teachers believed to be the most
developmentally appropriate did not change from the beginning of the school year (pretest) to the end of the school year (posttest). These items included the importance of having stories read to children everyday, having teacher-child interactions be positive to foster self-esteem and a love of learning, having daily opportunities for children to develop social skills, and items concerning positive methods for guiding and addressing children’s behavioral needs. These items covered a wide array of developmental areas, which points to the idea that teachers believe in the importance of teaching children from a whole-child perspective, which is one of the underpinning principles of developmentally appropriate practice (Copple & Bredekamp, 2009). The items that teachers rated as most developmentally appropriate show that they believe that these activities are important to a young child’s development, despite external pressures to stray from implementing curriculum in developmentally appropriate ways (Fromberg, 2006).

Nelson and Smith (2004) demonstrated, consistent with others (Parker & Neuharth-Pritchett, 2006), that teachers can benefit from training on how to adopt developmentally appropriate beliefs and implement practices in line with those beliefs in the midst of resistance and adversity. In support of this knowledge, Deal and White (2006) recognized the importance of support and education programs for new teachers, who may be easily influenced by external factors, to put their developmentally appropriate beliefs into practice. This points to the importance of making sure there are qualified teachers, with knowledge of how children learn best in classrooms (Cochran-Smith, 2002; Hyun, 2003), while also providing support to those teachers to be advocates for their beliefs about developmentally appropriate practice.
The items teachers reported as the least developmentally appropriate on the pretest appeared on the posttest as well. However, the order of the items changed from pretest to posttest. Teachers rated *giving readiness or achievement tests as an evaluation of children’s progress* as the least developmentally appropriate item for both the pretest and the posttest. Responses on this item ranged from 1-4 showing that not one teacher saw this item as extremely important. However, teachers’ responses yielded a mean of 2.3 on the pretest and posttest after being reverse coded. Teachers believe readiness or achievement tests to be between “fairly important” and “very important” as a measure of children’s progress. It is interesting that administering readiness or achievement tests was the least developmentally appropriate belief item in light of the fact that teachers in all states are required to administer these types of tests to their kindergarten students as part of the government mandated NCLB act (Jeynes, 2006). Some teachers may report that these evaluations are important because their schools’ “success” and funding depends on test scores. Other teachers might have accepted these tests as a normal part of their curriculum, as they are becoming so commonplace in United States schools. This shows how external factors might be shaping teachers’ beliefs about what is necessary, if not developmentally appropriate.

Other items that appeared as the least developmentally appropriate on both the pretest and posttest include *having planned activities for outdoor time, the importance of letter and word recognition in preschool, the importance of the teacher talking to the whole group and for children to do the same things at the same time, and the importance of providing the same curriculum and environment for each group of children*. Each of these had a mean score below 2.63 which is well below being developmentally
appropriate; however, the range for each of these items was 1-5, indicating the wide variation of beliefs on these topics.

Additionally, nine individual belief items dropped statistically significantly from the pretest to the posttest, which is consistent with the overall drop in teacher’s developmentally appropriate beliefs from pretest to posttest discussed earlier. Specific items included the importance of parents/guardians to be involved in ways that are comfortable for them, the importance of children dictating stories to the teacher, providing many daily opportunities for children to develop social skills, the importance of children seeing and using functional and environmental print, the importance of teachers to engage in on-going professional development in early childhood development, and ensuring that different races, ages, and abilities are displayed in books, pictures and materials in the classroom. The change over time for some of these items might be explained by the children demonstrating proficiency in these specific areas, and therefore, the teacher changed the area of their focus, or perhaps the burn-out that may occur for some teachers toward the end of the year. For example, planning and implementing opportunities for children to develop social skills or planning for children to dictate stories to the teacher can take a lot more time and energy. Teachers may also be feeling pressure from external sources which influence their instructional choices (Fromberg, 2006; Goldstein, 2007; Parker & Neuharth-Pritchett, 2006). They may be under such time constraints to make sure that students have been taught everything they needed to know to take end of level tests and be “ready” for first grade that they may not want to take the extra time to focus on other developmental areas outside of the academic realm. In addition, teachers might have felt that it was more important for
parents/guardians to be involved in ways that were comfortable for them at the beginning of the year as opposed to the end of the year. At the beginning everyone is still trying to get to know each other and if parents/guardians are more comfortable in the classroom, it is less stressful for the teacher, and the parents might be willing to do more to help out.

This study also found that teachers with an early childhood education licensure had statistically significantly more appropriate beliefs at the pretest and posttest than teachers without this licensure. This is consistent with other research on the topic of teacher education programs (Deal & White, 2006; Nelson & Smith, 2004; Parker & Neuharth-Pritchett, 2006). Teachers who experience training in ECE had more success in translating their developmentally appropriate beliefs into practices that match those beliefs. Furthermore, Copple and Bredekemp (2009) stated that when a teacher understands the developmental stages of a child and takes that information into account, that teacher is better able to meet the child’s needs. Teachers who possessed English as a second language endorsement were also statistically significantly more appropriate in their beliefs at both the pretest and posttest.

In addition to the types of training teachers have, this study found that the types of teaching experience a teacher has are associated with their developmentally appropriate beliefs. Teachers with kindergarten and grade school experience had statistically significantly lower developmentally appropriate beliefs at the posttest than teachers who have only taught kindergarten and those who have taught preschool, kindergarten, and grade school. This finding may be influenced by a number of factors: teachers who have taught older grades may understand the external pressure on them to ensure that children
to perform well on tests, and the expectations they may have had for the teachers below them to “prepare” children for the next grade. Therefore, they may want to ensure their students know everything they need to know for the first grade in order to have their students’ “success” reflect positively on their teaching. This may cause teachers with this type of teaching experience to shift their priorities for children in ways that do not always align with developmentally appropriate beliefs. They also may not be as aware of developmental needs of children nor may they have as much practice at creating and experimenting with developmentally appropriate strategies which meet these same objectives. It could also be that teaching preschool in addition to the other grades and only teaching kindergarten makes it easier to focus on what is developmentally appropriate for children at early ages.

In summary, teachers’ developmentally appropriate beliefs were higher at the beginning of the school year than at the end. The belief items that teachers believed to be the most and least developmentally appropriate at the beginning and end of the year were reading stories daily to children and administering readiness or achievement tests as an evaluation of children’s progress, respectively. Teachers with early childhood education licensure (ECE) and teachers with English as a second language (ESL) endorsement had higher developmentally appropriate belief scores at both the beginning and end of the school year when compared to teachers without the respective licensure or endorsement. Teachers with kindergarten and grade school experience had lower developmentally appropriate beliefs than the other experience groups.
Research Question 4

The final research question of this study, “Do kindergarten teacher’s developmentally appropriate practices change from the beginning of the school year (pretest) to the end of the school year (posttest)?”

Teachers reported implementing statistically significantly more developmentally appropriate practices at the end of the school year as compared to the beginning of the school year. It seems that this increase in teachers’ developmentally appropriateness may be attributed to teachers who are implementing inappropriate activities less, rather than increasing the amount of developmentally appropriate activities they choose to implement. The overall increase, however, may be due to many factors. Teachers may not be feeling as overwhelmed at the end of the year as compared to the beginning of the year, therefore, they may be better equipped to focus on implementing developmentally appropriate activities.

Nevertheless, even with this positive increase in developmentally appropriate practices at the end of the school year, consistent with other research (e.g., Parker & Neuharth-Pritchett, 2006), teachers’ reported practices were found to be lower than their reported beliefs scores. The inconsistency between teachers’ beliefs and their practices is a central theme of continuing study by researchers trying to identify issues that prevent teachers from transforming developmentally appropriate beliefs into practices within their classrooms. Parker and Neuharth-Pritchett (2006) asserted that outside factors, such as pressure from upper grades and curriculum constraints, are adversely affecting teachers’ choices in the experiences they offer their students. Goldstein (2007) has
declared that with the changing role of kindergarten, from a bridge between children’s early educational experiences and the rigors of real school to a preparatory time for success on high-stakes testing, many teachers are finding it difficult to strike a balance between fulfilling the mandated demands places on them and their commitment to teach in developmentally appropriate ways. However, Goldstein further stated that “many early childhood teachers are searching for strategies that will help them respond to the new expectations in responsive, effective ways” (p. 380). Goldstein among others (e.g., Graue, 2006; Parker & Neuharth-Pritchett, 2006) suggested that kindergarten teachers can and must find ways to adapt to the changing kindergarten climate of high-stakes testing and increased focus on academics while not sacrificing the teaching strategies they know to be best for children. Graue (2006) stated it simply by saying, “You can have standards for learning without standardizing your teaching” (p. 8).

Teachers’ most developmentally appropriate practices items changed from pretest to posttest, although the most developmentally appropriate practice item, *sing, listen and/or move to music* remained consistent from the pretest to the posttest. Teachers responded that the children in their classrooms participated in music and movement activities at least two to four times per week, if not daily. All of the other top-ranked items for both the pretest and posttest had a mean practice scores above 4 on a scale of 1 to 5, with 5 being the most developmentally appropriate. This demonstrates that teachers are implementing appropriate teaching strategies within their classrooms while also complying with academic standards. Teachers also reported implementing items such as *integrating multiple subjects,* and *experimenting with writing by drawing, copying,* and
invented spelling two to four times a week, if not daily. This suggests that teachers are using developmentally appropriate strategies to teach in academic areas.

The least developmentally appropriate practices items changed from pretest to posttest, with the two least developmentally appropriate items remaining consistent. Participating in whole-class, teacher-directed instruction was the least developmentally appropriate item with participating in rote counting as the second least developmentally appropriate practice item. Teachers reported implementing these activities regularly or very often, even after reverse coding. All of the least developmentally appropriate practices items were reverse coded, with the exception of one: how often do parents read stories or share a skill or hobby with the class. Other practices items reported as least developmentally appropriate include handwriting on lines, working in assigned ability levels, using flashcards with ABCs, sight words, and/or math facts on them, and using commercially prepared phonics activities. It is possible that teachers are using these techniques to complete set academic curriculum objectives, or that they are trying to satisfy school officials and parents, by showing children’s ability to perform on academic tasks.

Seven practice items changed statistically significantly from pretest to posttest. Items including experimenting by drawing, copying, and using invented spelling, participating in rote counting, color, cut, and paste pre-drawn forms, and whole-class teacher-directed instruction all became more developmentally appropriate. It is interesting to note that, although teachers reported implementing whole-class instruction and rote counting statistically significantly less often on the posttest, the practices means for this item still remain developmentally inappropriate. The items that became less
developmentally appropriate include *music and movement activities, using manipulatives, and having parents read stories or share a skill or hobby with the class.* Interestingly, even though the practice items for *music and movement activities* and *using manipulatives* dropped statistically significantly from the pretest to the posttest the means remain on the high end of being developmentally appropriate.

Examining the findings for differences in practice means between teachers with a master’s degree and those without shows teachers with a master’s degree had statistically significantly higher developmentally appropriate practices than those teachers with only a bachelor’s degree. This finding supports the results of Nelson and Smith (2004) and others (e.g., Parker & Neuharth-Pritchett, 2006) showing that teachers implemented significantly more developmentally appropriate practices upon completion of a master’s degree. They purport that the courses required to complete the master’s program increased student’s awareness and understanding of developmentally appropriate practice. Perhaps teachers with a master’s degree are stronger in implementing what they know to be developmentally appropriate. As the focus of kindergarten becomes more academic in nature, teachers may feel pressure to stop employing techniques that include hands-on exploration and play and start implementing less appropriate strategies such as whole-class, didactic instruction and teaching to tests. In addition, Parker and Neuharth-Pritchett (2006) assert that many teachers who believe in developmentally appropriate practices, but do not actually teach within those beliefs, attribute the inconsistency to the lack of confidence in knowing how to implement DAP and view it as more difficult. However, the current study’s finding supports the tendency that, with specialized
training, teachers may be more confident and prepared to implement developmentally appropriate practices.

Teachers with preschool and kindergarten teaching experience reported statistically significantly higher developmentally appropriate practices on the posttest when compared to teachers with only kindergarten, kindergarten and grade school, or teachers with all three types of teaching experience. This is consistent with the finding that teachers with early childhood education licensure reported statistically significantly higher developmentally appropriate practices at the end of the year as compared to teachers without this licensure. It may be that teachers who have had experience and training in the most appropriate ways to teach children in this age group have a better understanding of how young children learn best. Or, perhaps, they are better able to articulate to parents and administrators rationale for their teaching practices. They may also have more knowledge of the unique characteristics of preschool and kindergarten-aged children and are, therefore, better able to have realistic expectations and more consistently implement developmentally appropriate practices to help children meet those expectations. There was a relatively small number of teachers in this study who did not posses ECE licensure; however, this gives support for the argument that this licensure should be a requirement for all kindergarten teachers (Cochran-Smith, 2002).

An intriguing finding in this study was that teachers with an English as a second language (ESL) endorsement had statistically significantly lower developmentally appropriate practices at the posttest than teachers without ESL endorsement. However, teachers with ESL endorsement also had higher beliefs than teachers without. It leaves one to wonder what may be influencing the gap between beliefs and practices for this
group of teachers. Of further interest is that teachers with ESL endorsement, when compared to teachers without, rated statistically significantly more children as having a very difficult kindergarten entry at both the pretest and posttest. In addition this group of teachers also rated a statistically significantly higher percentage of children as not being ready for kindergarten. Clearly these findings are interrelated. For instance, Hart and colleagues (2003) found that developmentally inappropriate practices were related to increased child aggression, hostility, and hyperactive distractible behaviors. Teachers in this study reported implementing significantly less developmentally appropriate practices at the posttest, which may have influenced the behavior of their students, thereby influencing their perception that significantly more children had a difficult transition to kindergarten. In addition, teachers with ESL endorsement in this study may have different expectations than teachers without, thus perceiving significantly more children as not being ready for kindergarten and also more children as having a difficult transition. A third explanation is that school officials possibly perceived teachers with ESL endorsement, as being more prepared to teach children who are English language learners and, therefore, those teachers were given more children with this unique risk factor for kindergarten readiness (Rimm-Kaufman et al., 2000). This may, in turn, have raised the number of challenges with which these teachers were faced: a larger workload with more children who were not ready for kindergarten, and/or had a difficult entry. If this was the case then, less time and attention could be devoted to planning and implementing developmentally appropriate practices.

Teachers with reading endorsements were found to have statistically significantly lower developmentally appropriate practices at both the pretest and posttest than those
teachers without. This is a surprising finding, because the trend has been that the more specialized training or education teachers have, the more equipped they are to teach in developmentally appropriate ways. This finding may be attributed to the type of focus in a reading endorsement. Because of the academic nature of a reading endorsement, teachers may not be as focused on using a whole-child approach. This points to the notion that the type of specialized training a teacher receives does influence the type of instruction they offer their 5- and 6-year-old students.

Lastly, this study found that as the number of children enrolled in the class increased, the teachers’ developmentally appropriate practices increased. This is an unexpected finding. However, it could be that as the class size increases, teachers may find it more difficult to teach to the whole-group at one time. As a result, teachers may plan activities that include smaller groups where children are doing different things at the same time. If teachers are indeed changing their approach to teaching in these ways it would increase the developmentally appropriateness of their practices.

To summarize, kindergarten teachers’ developmentally appropriate practices (DAP) were higher at the end of the school year than at the beginning. Teachers with a master’s degree had higher DAP scores regardless of the time of year. At the beginning of the year teachers with English as a second language (ESL) endorsement had lower DAP scores than teachers without. Teachers with early childhood education licensure had higher DAP scores at the end of the year when compared to teachers without. Also, at the end of the school year, teachers with preschool and kindergarten teaching experience reported higher DAP scores than teachers with in the other experience groups. Teachers with reading endorsement reported lower DAP scores at both the beginning and end of
the school year than teachers without. Finally as the class size increased, teachers’ DAP scores also increased.

In conclusion, Parker and Neuharth-Pritchett (2006) contended that teachers who employ a more teacher-directed approach do not feel as much pressure from upper grade teachers. However, these teachers also do not feel that they have much control over their curriculum, whereas, teachers who use a child-centered style of teaching feel that they have more control over their curriculum, but they often feel more pressure from teachers of upper grades. This brings up the question of whether or not teachers feel free to implement developmentally appropriate practices, while also fulfilling the obligations that have been placed on them by factors such as the NCLB Act. Goldstein (2007) summed it up well with the statement “In order to meet the varied needs of their students, the myriad demands placed upon them, and the expectations mandated by the district and state, kindergarten teachers need access to a full range of practices and the freedom to select the tool that best fits the demands of the given situation” (p. 396).

**Limitations**

There are some limitations of this study that must be considered. First, some of the group sizes were small for the comparisons between teachers with specific licensures and endorsements and those without. For example, there were only nine kindergarten teachers who did not possess the early childhood (ECE) endorsement. Many significant differences emerged between those teachers with ECE licensures and those without, and because of the small number of teachers without ECE licensure, the application of those findings are limited.
Next, teachers’ developmentally appropriate practices were obtained by way of self-report. Nelson and Smith (2004) validated the assertion that when teachers are assessing their developmentally appropriate practices in a self-report format, they lean toward higher levels of implementing developmentally appropriate practices. Without verifying teachers’ actual practices by classroom observation, there is no way to know how accurate or valid their reports are.

Another limitation to this study was that not all superintendents were willing to allow their district to participate in the study, including the largest district in the state, representing 210 kindergarten teachers. Participation of these districts likely would have increased the sample size, and the representation of urban schools, thereby, widening the ability to generalize findings to Utah as a whole.

A final limitation to this study was that, because of the number of tests run with these data, the risk of Type I errors was high. It is possible that some of the statistically significant findings occurred only by chance. Nevertheless, all statistically significant findings were investigated to identify significant themes in teachers’ perceptions of children’s transition to kindergarten.

**Implications**

There are several implications of this study. First is that kindergarten transition affects a lot of people and is an important time in a child’s life. Clearly teachers have different perceptions of their kindergarten students at the beginning of the year compared to the end. For numerous reasons teachers, overall, viewed the children in their class as less ready for kindergarten entry and as having had a difficult transition at the beginning.
of the year as compared to the end. Parents, preschool teachers, and school
administrators need to be aware of the stresses that teachers are experiences at the
beginning of the year so they can work to help alleviate some of the undue pressure on
teachers.

Another implication involves the disconnection between children’s perceived
capabilities and teachers’ expectations. Considering the formative early years in a child’s
life and the lasting effects of kindergarten transition, it is important that children’s
introduction to formal schooling is not tainted with an overly stressed kindergarten
teacher who, because of curriculum constraints and other factors, is not able to recognize
what students are actually capable of doing. In light of the findings that teachers in this
study reported one fifth of children as having had a difficult transition and a quarter of the
children as not ready for kindergarten entry, parents and preschool teachers, specifically,
need to have a continuing dialogue with kindergarten teachers about ways they can help
prepare children for the kindergarten transition. Teachers also need to receive training to
gain skills to improve children’s transitions.

Additionally, findings suggest that teachers with higher education, more
experience in teaching young children, or specialized training in how children learn best
had higher developmentally appropriate practices. With the shifting focus of
kindergarten, to being more academic in nature, it is important that teachers feel free to
implement curriculum that is consistent with their developmentally appropriate beliefs.
Therefore, school officials and policy makers need to be aware of how young children
learn best in order to shape education programs for teachers that will benefit children the
most. Efforts made in this direction may also help to close the gap that is evident between
teachers’ developmentally appropriate beliefs and their practices. Goldstein (2007) substantiated the contention that the “philosophy of valuing, treasuring, and protecting young children’s right to their childhood [is what] makes today’s kindergartens, like those of the past, a paradise of childhood” (p. 380). With all of the evidence of the immediate and delayed benefits of developmentally appropriate curriculum, parents, preschool teachers, school administrators, and legislatures need to provide support for kindergarten teachers to fight for a child’s right to learn in a developmentally appropriate environment.

Teachers need support and education to gain skills in ways to inform parents and school administrators of the importance of DAP. If parents are aware of the implications developmentally appropriate practices have for their children they can be partners with kindergarten teachers in ensuring that mandated academics are still taught to children in developmentally appropriate ways. Jeynes (2006) denoted that the founder of kindergarten, Fredrick Froebel, contended that focusing on only the academic aspects of development, with little or no focus on the moral and social development of children does not necessarily ensure the success in future schooling and the real world. In fact research has shown that Frobel was right; McClelland and others (2006) have asserted that children’s early learning-related skills are a measure of later academic success. They also maintain that early learning-related skills are consistent with the principles of developmentally appropriate practices (DAP) and that settings where DAP is implemented help foster early learning-related skills, such as self-regulation, following directions, and getting along with peers.
Additionally, Froebel asserted that “if academic subjects were introduced to children in too rigid a way, like instructing them in the formal rules of grammar, children could lose the inherent joy in learning” (Jeynes, 2006, p. 1941), which may have a lasting impact on how a child approaches learning in the future. With the climate of kindergarten shifting to a more academic focus, parents, teachers and school administrators need to be vigilant in the decisions they make on behalf of a child’s education, ensuring that a balance exists between cognitive, social, and emotional development. “The children’s garden has to be a place for every child to grow and learn, in every dimension of development. That means a place in kindergarten for every child” (Graue, 2006, p. 10).

The next implication is that the concept of ready environments needs to be more of a focus for parents and teachers so the burden of “proof of readiness” is lifted from the shoulders of the children. Children need to be viewed as individuals with unique needs and with varying levels of development, thus reinforcing the notion that “readiness” is not a one-dimensional model that can be measured by a test. Fromberg (2006) asserted when standardized tests become the basis for measuring how well a child is doing, some adults teach to the test alone, and that “when tests can only measure isolated skills, drilling for the test sometimes replaces vivid and deep intellectual/experiential education” (p. 82).

Kindergarten is facing fierce pressure to align itself more closely with upper grades and mandated standards, “in order to weather this difficult process and emerge with its most significant distinguishing qualities intact kindergarten will need to sharpen its capacity to adapt” (Goldstein, 2007, p. 397). Teachers need support in implementing developmentally appropriate curriculum that meets the diverse needs and capabilities of
the children they teach. A final implication was summed up well by Fromberg (2006):

When considering the context of kindergarten, the issue of children’s education might be reframed from one of preparing children for the rigors of elementary school to one of making each year a significant and wonderful educational experience that retains young children’s openness to learning and helps them to have significant experiences for their own sake. (p. 83)

**Suggestions for Future Research**

This study examined data from matched pretest/posttest surveys of 180 Utah kindergarten teachers. A suggestion for future study would be to increase or expand the scope of this study with a larger sample size from a larger area, in order to generalize findings to a broader population.

Because one of the limitations of this study was there was no way to verify the actual developmentally appropriate practices (DAP) of teachers because of the self-report format of the survey, it is important that future studies include observation of teachers’ actual practices by a trained observer. This will provide evidence of what practices teachers are actually implementing in their classrooms.

Observation, in addition to surveys or interviews, at the beginning and end of the school year, would give insight into sources of external pressures to stray from implementing developmentally appropriate practices in order to fulfill mandated achievement standards. Moreover, this would allow for gathering information about the context within which teachers make instructional choices, and determine if they feel free to implement a curriculum program that is in line with their beliefs about how young
children learn best. Moreover, having teachers identify sources of stress at the beginning and the end of the school year might give additional insight into the gap that has frequently been documented between beliefs and practices.

It would also be interesting to assess how teachers are adapting to the increased focus on academics and achievement testing in developmentally appropriate ways. Information on teachers’ perceived ability to talk with parents and school administrators about the importance of DAP would also be useful in creating support programs for teachers to continue teaching in developmentally appropriate ways. A final suggestion is to examine the longitudinal effects of a smooth transition to kindergarten, and conversely, the longitudinal outcomes of children who were rated as not ready for kindergarten would be equally as interesting and enlightening.

**Conclusion**

This study was an exploration of teachers’ experiences with developmentally appropriate beliefs and practices, as well as their perception of children’s transition to kindergarten. It was designed to discover if there was a change from the beginning of the school year to the end in the percentage of children who were perceived to have had a very successful, moderately successful, or difficult transition, or in the percentage of children who were perceived as not ready for kindergarten. Additionally this study sought to determine if there was a change from the beginning of the school year to the end in teachers’ developmentally appropriate beliefs and practices.

Teachers perceived significantly more children as having had a difficult transition to kindergarten at the beginning of the year when compared to the end of the year.
Overall, teachers perceived close to one-fifth of children as having had a difficult transition with many problems or serious concerns. Teachers reported a statistically significantly larger percentage of children were not ready for kindergarten entry at the beginning of the year when compared to the end of the year. Moreover, teachers’ developmentally appropriate beliefs were statistically significantly higher at the beginning of the school year than at the end of the school year. Conversely, teachers reported statistically significantly higher developmentally appropriate practices at the end of the school year compared to the beginning of the year.

Teachers with early childhood education licensure were statistically significantly more likely to rate more children as having had a successful entry, and had statistically significantly higher developmentally appropriate belief and practices scores, when compared to those teachers without, whereas teachers with English as a second language (ESL) endorsement rated statistically significantly more children as having had a difficult transition, and more children as not being ready for kindergarten. These teachers also had significantly higher belief scores, but significantly lower practice scores.

Moreover, as the number of children who qualified for free lunch increased the percentage of children teachers rated as having had a difficult entry and the percentage of children who were perceived as not ready for kindergarten also increased. Additionally, as the class size increased, teachers’ developmentally appropriate practices also increased, but the percentage of children rated as not ready for kindergarten entry decreased.

Teachers with a master’s degree had higher developmentally appropriate practice (DAP) scores. Whereas teachers with reading endorsement had significantly lower DAP
scores. Teachers with kindergarten and grade school experience had significantly lower developmentally appropriate beliefs than teachers with other types of experiences. Also, teachers with preschool and kindergarten teaching experience reported significantly higher DAP scores than teachers with only kindergarten and kindergarten and grade school experience.

It is evident from this study that teachers have differing perceptions about how their students are handling the kindergarten transition from the beginning of the year to the end. The end of the school year seems to be a little brighter for teachers in terms of how “ready” their children seemed for kindergarten. It is a complex time for children as they enter kindergarten, and for teachers trying to weather the storm of pressure to prepare children for a high performance on an achievement test, while still trying to focus on teaching children what they need to know in developmentally appropriate ways.

It is clear that teachers are making curriculum choices within a multifaceted context, including their own expectations, governmental programs and school officials’ expectations, children’s prior school and family experiences, and parental expectations. In order for children to have a smoother, more successful entry to kindergarten it is important for those involved, most importantly teachers, to work toward understanding and alignment of each of these factors. Additionally all involved need to acknowledge that there is not a single definition of “readiness” and that each child may manifest their level of readiness in different ways (NAEYC, 1990; Nelson, 2005; Rimm-Kaufman et al., 2000). Teachers should feel the freedom to implement a curriculum that is in harmony with how they know children learn best. What is apparent is that the type of early
experiences a child has is significant and that the success or failure they feel does
indeed have a bearing on their lives far beyond the year they spend in kindergarten.
REFERENCES


for the Education of Young Children.


Graue, M. E. (2006). This thing called kindergarten. In D. F. Gullo (Ed.), *K today: Teaching and learning in the kindergarten year* (pp. 3-10). Washington, DC:
National Association for the Education of Young Children.


APPENDICES
Appendix A. Letter to Superintendent
Title of Study: Children's Transition to Kindergarten: A Survey of Utah Kindergarten Teachers' Perspectives

August 15, 2004

Dear Superintendent XXX:

We are researchers at Utah State University who are interested in understanding how kindergarten teachers feel about the transition that children make to kindergarten. We are conducting a statewide survey of kindergarten teachers' perspectives and are asking your permission for kindergarten teachers in XXX School District to participate.

Kindergarten teachers' participation would entail filling out and returning a packet of two questionnaires within the first 6 weeks of the school year, and then filling out and returning the same packet of two questionnaires during the last 6 weeks of the school year. It will take teachers approximately 20 minutes to complete each packet each time.

Teachers' responses to the questionnaires will remain anonymous, identified only by a code number that each teacher individually creates. Reporting of the data will be in aggregated form, not by individual responses. A summary of the study results will be sent to all teachers who participate in this study and to each District office. There are no risks posed by participating in this study, and participants may withdraw from the study at any time without penalty.

If you agree to allow XXX School District's kindergarten teachers to participate, we will need a list of the names of kindergarten teachers at each school, as well as their contact information (addresses, e-mails). This is necessary in order for us to distribute questionnaire packets and to send reminders to kindergarten teachers.

Because we are sensitive to your kindergarten teachers' busy schedules and very valuable time, only minimal contact will be made with each teacher:

* Each teacher will receive the questionnaire packet at the beginning of the year and the end of the year through the mail.

* Each teacher will receive two e-mail and two postcard reminders to return the packet at the beginning of the year and two e-mail and two postcard reminders to return the packet at the end of the year.

* Each teacher will receive a summary of the study results through the mail.
No other contact will be made with kindergarten teachers, and all teacher contact information will be destroyed at the conclusion of the study.

The information we gain from kindergarten teachers is essential in helping us understand their perceptions of kindergarten children's transition challenges. This information is also essential in helping us identify the ways in which parents, preschools, and child care providers can more effectively prepare children for kindergarten entry.

Should you have any questions or concerns, please do not hesitate to contact any one of us. Thank you in advance for your time and feedback.

Sincerely,

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Appendix B. Letter to Kindergarten Teacher
DEPARTMENT OF FAMILY AND HUMAN DEVELOPMENT
College of Education

Title of Study: Children's Transition to Kindergarten: A Survey of Utah Kindergarten Teachers' Perspectives

April 3, 2007

Dear Kindergarten Teacher:

We are researchers at Utah State University who are interested in understanding how kindergarten teachers feel about the transition that children make to kindergarten. As you know, we are conducting a statewide survey of kindergarten teachers' perspectives and invite you to participate once again in this important study. Your name was obtained from a list of kindergarten teachers given to us by your school district office. You were sent a packet of two questionnaires to fill out last fall. We are asking you to complete the same questionnaires again.

Your participation would entail filling out and returning a packet of two questionnaires within the last 6 weeks of the school year. It will take you approximately 30 minutes to complete the packet.

Your responses to the questionnaires will remain anonymous, identified only by a code number that you create. Reporting of the data will be in aggregated form, not by individual responses. A summary of the study results will be sent to all teachers who participate in this study. There are no risks posed by participating in this study, and participants may withdraw from the study at any time without penalty.

The information we gain from kindergarten teachers such as yourself is essential in helping us understand their perceptions of kindergarten children's transition challenges. This information is also important in helping us identify the ways in which parents, preschools, and child care providers can more effectively prepare children for kindergarten entry.

Should you have any questions or concerns, please do not hesitate to contact us. Thank you in advance for your time and feedback!

Sincerely,

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Appendix C. Transition Practices Survey/Teacher Beliefs and Practices

Survey Packet
Utah Kindergarten Transition Practices Study

Dear Kindergarten Teacher:

We are interested in understanding how kindergarten teachers feel about the transition that children make to kindergarten. This information is essential in helping us identify ways in which parents, preschools, and child care providers can more effectively prepare children for kindergarten entry.

To ensure that your responses on this questionnaire are completely anonymous, you will create your own code number. It is necessary for you to have the same code number on the questionnaire you complete at the beginning of the year and the questionnaire you complete at the end of the year. We know it may be hard to remember the individual code you create. Therefore, we are giving you the same instructions for creating a code number on both questionnaires. Simply fill in the spaces with the corresponding numbers.

01 – January 07 – July
02 – February 08 – August
03 – March 09 – September
04 – April 10 – October
05 – May 11 – November
06 – June 12 – December

Your personal code number:

[Spaces for code number]

Mother’s birth month

Mother’s birth year
(last 2 digits)

Father’s birth month

Father’s birth year
(last 2 digits)

Please take about 30 minutes to complete this survey and return it. Feel free to write comments on the survey to let us know, for example, if you have any reactions to the survey’s content or format, or think some questions are not clear or relevant. Thank you in advance for your help in this study.
Transition Practices Survey

School Information

1. What is the current total student enrollment in your school? ________

2. Which one of the following best describes the location of your school?

3. Which one of the following best describes your school?
   _____ 1. A public school that draws students from the surrounding neighborhood
   _____ 2. A public school with students from neighborhoods that do and do not surround the school
   _____ 3. A public magnet school that draws students from many neighborhoods
   _____ 4. A public school that draws students from a large rural area
   _____ 5. A private or parochial school
   _____ 6. Other (please describe): ________________________________

4. Check below if your school currently contains any of the following programs. Check all that apply:
   _____ 1. Pre-kindergarten program with open enrollment
   _____ 2. Pre-kindergarten program for "at risk" students (not Head Start)
   _____ 3. Head Start
   _____ 4. Pre-kindergarten program for special education students
   _____ 5. Kindergarten class—full day
   _____ 6. Kindergarten class—half day
   _____ 7. Transitional K-1 program (regular education)
   _____ 8. Combined kindergarten and first grade class (not traditional)
   _____ 9. First grade class
   _____ 10. Combined first and second grade class
   _____ 11. Other programs for kindergarteners and first graders (describe): ________________________________

5. Does your district's policy allow children to remain in the same school despite moves across school boundaries during the academic year?
   _____ No   _____ Yes   _____ Does not apply (private or parochial school)

Teacher/classroom information

6. Did you teach kindergarteners last year?
   _____ No   _____ Yes   If yes, answer questions 7-10. If no, go directly to question 11.

   If you taught multiple classes last year (morning & afternoon sessions), answer questions for one of those classes.

7. Last year, approximately how many children were transferred into or enrolled in your class AFTER the first two weeks of school? ________

Continue to next page →
8. Approximately how many children left your class last year AFTER the first two weeks of school? __________

9. Last year, what was the total number of children in your class at the end of the year? __________

10. How many children in your class last year were retained? __________

11. Check the one category that best describes your race/ethnicity:

   1. American Indian or Native Alaskan
   2. Asian/Pacific Islander
   3. Black, not Hispanic
   4. Hispanic
   5. White, not Hispanic
   6. Other
   7. Multiple Origins

12. List the year of degree(s) you have received:
   Bachelor's 19__ / 200__  Masters 19__ / 200__  Doctorate: 19__ / 200__

13. Check the area(s) of specialization or certification you may hold. This pertains to state-level certification(s). Check all that apply:

   1. Elementary Education (K-6)
   2. Education (K-12)
   3. Early Childhood/Primary Grades
   4. Special Education
   5. Preschool
   6. Other (describe): ____________________________

14. Have you had any specialized training to enhance children's transition into kindergarten?
   No   Yes  If yes, please describe: ____________________________

15. Have you had any specialized training to enhance children's transition from kindergarten to first grade?
   No   Yes  If yes, please describe: ____________________________

16. List your years of teaching experience at each of the following levels:
   1. Below kindergarten level (e.g., preschool): __________
   2. Kindergarten (includes K-1, K-2): __________
   3. Above kindergarten (first grade & above, not K-1 or K-2): __________

   If you teach multiple classes, such as morning and afternoon sessions with different children, answer questions for just one of those classes, for example, your morning class.

17. At this time, how many students are enrolled in your class? __________

18. This year, how many children were transferred into or enrolled in your class AFTER the first two weeks of school? __________

19. This year, how many children left your class after the first two weeks of school? __________

Continue to next page ➔
26. How many children with special needs (children receiving special education services) are enrolled in your class this year? __________

21. Note the number of children in your current class for each group below. Enter 0 for none.
   ______  1. American Indian or Native Alaskan  ______  5. White, not Hispanic
   ______  2. Asian/Pacific Islander  ______  6. Other
   ______  3. Black, not Hispanic  ______  7. Multiple Origins
   ______  4. Hispanic

22. How many students in your class are eligible to receive free or reduced-price lunches? __________

23. Are any of the following types of people in your classroom at least 3 times per week? Check all that apply. For example, if an individual parent volunteers on Monday, Tuesday, and Thursday each week, or different parents come in for a total of 3 times per week, then check Parent Volunteer.
   ______  1. Teaching assistant/paraprofessional  ______  4. Parent volunteer
             ______  2. Co-teacher  ______  5. Community volunteer
             ______  3. Student teacher  ______  6. College student

24. Which children leave your classroom to receive instruction (not gym) from other teachers at least 3 times per week? Check all that apply and briefly describe the type of instruction received.
   ______  1. Special education students
             ______  2. Non-special education students
             ______  3. Whole class
             ______  4. No students

Continue to next page →
Entering kindergarten

25. Based on your experience, approximately what percentage of children who enter kindergarten fall into the following categories? Make sure these numbers total 100%.

- % 1. Very successful entry, virtually no problems
- % 2. Moderately successful entry, some problems, mostly minor
- % 3. Difficult or very difficult entry, serious concerns or many problems

26. Based on your experience, for how many children in a typical class are the following characteristics a problem when they enter kindergarten? Check appropriate box.

<table>
<thead>
<tr>
<th>Problem Description</th>
<th>None (0)</th>
<th>A few (1)</th>
<th>About one-fourth of the class (2)</th>
<th>About half of the class (3)</th>
<th>More than half of the class (4)</th>
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</thead>
<tbody>
<tr>
<td>Lack of academic skills</td>
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<tr>
<td>Difficulty following directions</td>
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<tr>
<td>Difficulty working as part of group</td>
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<tr>
<td>Problems with social skills, getting along with other children</td>
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<tr>
<td>Difficulty working independently</td>
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<tr>
<td>Difficulty communicating/language problems</td>
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<tr>
<td>Lack of any formal preschool experience</td>
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<tr>
<td>Highly academic preschool experience</td>
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<tr>
<td>Non-academic preschool experience</td>
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<tr>
<td>Disorganized home environments</td>
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<tr>
<td>Immaturity</td>
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<tr>
<td>Other (describe)</td>
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</table>

27. In your judgment, what percentage of children in your current class were not ready for kindergarten when they entered? Enter zero if all were ready. ____ %

28. Approximately how many children in your current class spent last year in the following? Enter zero for none.

1. Preschool center-based program (private)
2. Pre-K program at a school
3. Head Start program
4. Don't know
5. Other (describe):

29. If you do not know last year’s settings for children in your class, would it have been useful to know this information to prepare for their transition into kindergarten?

____ No    ____ Yes

Continue to next page →
30. Check any of the following barriers which prevent you personally from implementing the "good idea...but" practices you just identified. Check all that apply, then circle the item numbers of those you consider the most serious barriers, up to a maximum of five.
1. Class lists are generated too late
2. Requires work in summer that is not supported by salary
3. Contacts with parents are discouraged prior to the start of school
4. Concern about creating negative expectations
5. Funds are not available
6. Materials are not available
7. Parents are not interested
8. Preschool teachers are not interested
9. It takes too much time to conduct these practices
10. I could not reach most parents of children who need these practices
11. It is dangerous to visit student's homes
12. Parents do not bring their child in for registration or open house
13. Parents cannot read letters, etc. sent home
14. A transition practices plan is not available in school/district
15. The school or district does not support
16. I choose not to do it
17. Others? Please list.

31. Which of the following practices are used by any of the Pre-K programs (for example, preschool or Head Start programs) that feed into your school? Check all that apply.
1. Participating in joint workshops with school staff on issues of interest
2. Sharing information about an individual's child's progress
3. Providing assistance for children having difficulty
4. Talking with children and parents to prepare them for kindergarten
5. Children from these programs visiting our school
6. Others? (describe)

32. Approximately how many days before school started this year did you receive your class list?

33. Which of the following screening procedures are performed for at least some of the children in your class? For each item, label with a "T" if you as teacher perform the procedure, "S" if someone else performs, "B" if both you and someone else performs, or an "N" if no one performs the procedure.
1. Interview parents
2. Screen child using a formal instrument
3. Screen child informally
4. CHECK HERE if any of these took place in the child's home

Continue to next page →
34. Who currently has responsibility for practices related to entry into kindergarten in your school? Check all that apply.
   1. District
   2. Principal
   3. K-teacher
   4. Preschool teacher
   5. Parent
   6. Community
   7. School counselor
   8. Family specialist
   9. Behavioral specialist
   10. Primary resource teacher
   11. Don’t know
   12. Other (describe): ______________________

35. In your school, are any practices for enhancing children’s entry into kindergarten systematically targeted toward any of the following groups of children? Check all groups to which practices are targeted.
   1. Low income
   2. Racial/ethnic minority
   3. Limited English speaking
   4. No pre-K experience
   5. Children with disabilities/special needs
   6. Children who transfer into the school
   7. All children
Teacher Beliefs and Practices Survey

1. Rank the following (1-6) by the amount of influence you believe that each has on the way you plan, or will plan and implement instruction, after considering children's needs. Please use each number only once. (1 = Most influence; 6 = Least influence)

- parents
- school system policy
- principal/director
- teacher (yourself)
- state regulations
- other teachers

Recognizing that some things in education programs are required by external sources, what are YOUR OWN PERSONAL BELIEFS about early childhood programs? Please circle the number that most nearly represents YOUR BELIEFS about each item's importance for early childhood programs.
(1= Not at all important; 5 = Extremely important)

<table>
<thead>
<tr>
<th>Importance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tr>
<td>Not at all</td>
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<tr>
<td>Very</td>
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<tr>
<td>Important</td>
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<td>Fairly</td>
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<tr>
<td>Important</td>
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<tr>
<td>Extremely</td>
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</table>

2. As an evaluation of children's progress, readiness or achievement tests are ________

3. To plan and evaluate the curriculum, teacher observation is ________

4. It is ________ for activities to be responsive to individual children's interests.

5. It is ________ for activities to be responsive to individual differences in children's levels of development.

6. It is ________ for activities to be responsive to the cultural diversity of students.

7. It is ________ that each curriculum area be taught as separate subjects at separate times.

8. It is ________ for teacher-child interactions to help develop children's self-esteem and positive feelings toward learning.

Continue to next page →
9. It is ______ for teachers to provide opportunities for children to select many of their own activities.

10. It is ________ to use one approach for reading and writing instruction.

11. Instruction in letter and word recognition is _______ in preschool.

12. It is ______ for the teacher to provide a variety of learning areas with concrete materials (writing center, science center, math center, etc.).

13. It is ______ for children to create their own learning activities (e.g., cut their own shapes, decide on the steps to perform an experiment, plan their creative drama, art, and computer activities).

14. It is _______ for children to work individually at desks or tables most of the time.

15. Workbooks and/or ditto sheets are _______ in my classroom.

16. A structured reading or pre-reading program is _______ for all children.

17. It is ______ for the teacher to talk to the whole group and for the children to do the same things at the same time.

18. It is _______ for the teacher to move among groups and individuals, offering suggestions, asking questions, and facilitating children’s involvement with materials, activities, and peers.

19. It is ______ for teachers to use treats, stickers, and/or stars to get children to do activities that they don’t really want to do.

20. It is _______ for teachers to regularly use punishments and/or reprimands when children aren’t participating.

Continue to next page →
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<tbody>
<tr>
<td>21.</td>
<td>It is _____ for teachers to develop an individualized behavior plan for addressing severe behavior problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22.</td>
<td>It is _____ for teachers to allocate extended periods of time for children to engage in play and projects.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23.</td>
<td>It is _____ for children to write by inventing their own spelling.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24.</td>
<td>It is _____ for children to color with pre-drawn forms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25.</td>
<td>It is _____ to read stories daily to children, individually and/or on a group basis.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26.</td>
<td>It is _____ for children to dictate stories to the teacher.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27.</td>
<td>It is _____ that teachers engage in on-going professional development in early childhood education (e.g., attend professional conferences, read professional literature).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28.</td>
<td>It is _____ for children to see and use functional print (telephone book, magazines) and environmental print (cereal boxes, potato chip bags).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29.</td>
<td>It is _____ to provide many daily opportunities for developing social skills (i.e., cooperating, helping, talking) with peers in the classroom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30.</td>
<td>It is _____ that books, pictures, and materials in the classroom include people of different races, ages, and abilities and both genders in various roles.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31.</td>
<td>It is _____ that outdoor time have planned activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32.</td>
<td>It is _____ for parents/guardians to be involved in ways that are comfortable for them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Continue to next page →
53. It is _____ for strategies like setting limits, problem solving, and redirection to be used to help guide children's behavior.

54. It is _____ for teachers to integrate each child's home culture and language into the curriculum throughout the year.

55. It is _____ for teachers to solicit and incorporate parent's knowledge about their children for assessment, evaluation, placement, and planning.

56. It is _____ to establish a collaborative partnership/relationship with parents of all children, including parents of children with special needs and from different cultural groups.

57. It is _____ for the classroom teacher to modify, adapt, and accommodate specific indoor and outdoor learning experiences for the child with special needs as appropriate.

58. It is _____ that services (like speech therapy) be provided to children with special needs in the regular education classroom by specialist within the context of typical daily activities.

59. It is _____ that teachers maintain a quiet environment.

60. It is _____ to provide the same curriculum and environment for each group of children that comes through the program.

61. It is _____ to focus on teaching children isolated skills by using repetition and recitation (e.g., reciting ABC's).

62. It is _____ to follow a prescribed curriculum plan without being distracted by children's interests or current circumstances.

63. It is _____ to plan activities that are primarily just for fun without connection to program goals.

Continue to next page ➔
### Instructional Practices Survey

Please circle the number that best represents the average frequency of each activity.

<table>
<thead>
<tr>
<th>HOW OFTEN DO CHILDREN IN YOUR CLASS:</th>
<th>Almost Never (impossibly)</th>
<th>Rarely (monthly)</th>
<th>Sometimes (weekly)</th>
<th>Regularly (1-3 times a week)</th>
<th>Very Often (daily)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. build with blocks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. select from a variety of learning areas and projects (i.e., dramatic play, construction, art, music, science experiences, etc.)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. have their work displayed in the classroom</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. experiment with writing by drawing, copying, and using their own invented spelling</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. play with games, puzzles, and construction materials (e.g., Tinker Toys, Bristle Blocks)</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. explore science materials (e.g., animals, plants, wheels, gears, etc.)</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. sing, listen, and/or move to music</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. do planned movement activities using large muscles (e.g., balancing, running, jumping)</td>
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<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>9. use manipulatives (e.g., pegboards, Legos, and Unifix Cubes)</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
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Continue to next page →
<table>
<thead>
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<th>HOW OFTEN DO CHILDREN IN YOUR CLASS:</th>
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<th>Rarely (monthly)</th>
<th>Sometimes (weekly)</th>
<th>Regularly (2-4 times a week)</th>
<th>Very Often (daily)</th>
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<td>5</td>
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<td>work in assigned ability-level groups</td>
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<td>3</td>
<td>4</td>
<td>5</td>
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<td>12.</td>
<td>circle, underline, and/or mark items on worksheets</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>use flashcards with ABCs, sight words, and/or math facts</td>
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<td>4</td>
<td>5</td>
</tr>
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<td>14.</td>
<td>participate in rote counting</td>
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<td>3</td>
<td>4</td>
<td>5</td>
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<td>15.</td>
<td>practice handwriting on lines</td>
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<td>5</td>
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<tr>
<td>16.</td>
<td>color, cut, and paste pre-drawn forms</td>
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<td>5</td>
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<tr>
<td>17.</td>
<td>participate in whole-class, teacher-directed instruction</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18.</td>
<td>sit and listen for long periods of time until they become restless and fidgety</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19.</td>
<td>have the opportunity to learn about people with special needs (e.g., a speaker or character in a book)</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20.</td>
<td>receive rewards as incentives to participate in classroom activities in which they are reluctant participants</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>21.</td>
<td>see their own race, culture, language reflected in the classroom</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22.</td>
<td>get placed in time-out (i.e., isolation, sitting on a chair, in a corner, or being sent outside of the room)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>23.</td>
<td>experience parents reading stories or sharing a skill or hobby with the class</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>24.</td>
<td>engage in child-chosen, teacher-supported play activities</td>
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<td>4</td>
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Continue to next page →
<table>
<thead>
<tr>
<th></th>
<th>How Often Do Children in Your Class:</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>draw, paint, work with clay, and use other art media</td>
</tr>
<tr>
<td>26</td>
<td>solve real math problems using real objects in the classroom environment that are incorporated into other subject areas</td>
</tr>
<tr>
<td>27</td>
<td>get separated from their friends to maintain classroom order</td>
</tr>
<tr>
<td>28</td>
<td>engage in experiences that demonstrate the explicit valuing of each other (e.g., sending a card to a sick classmate)</td>
</tr>
<tr>
<td>29</td>
<td>work with materials that have been adapted or modified to meet their needs</td>
</tr>
<tr>
<td>30</td>
<td>do activities that integrate multiple subjects (reading, math, science, social studies, etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Almost Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Regularly</th>
<th>Very Often</th>
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<tr>
<td>1</td>
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<td>4</td>
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Continue to next page →
THANK YOU FOR PARTICIPATING IN THIS SURVEY!

WE APPRECIATE YOUR HELP!

PLEASE RETURN THE COMPLETED FORM.
Appendix D. Tables
Table 12

*Analysis of Variance Results for Early Childhood Education Licensure and Very Successful Transition*

<table>
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Table 13

*Analysis of Variance Results for Early Childhood Education Licensure and Moderately Successful Transition*

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<tr>
<td><strong>Between subjects</strong></td>
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<td></td>
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<tr>
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Table 14

Analysis of Variance Results for Early Childhood Education Licensure and Difficult Transition

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Table 15

Analysis of Variance Results for English as a Second Language Endorsement and Difficult Transition

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Table 16

Analysis of Variance Results for Special Education Licensure and Difficult Transition

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Table 17

*Analysis of Variance Results for Reading Endorsement and Difficult Transition*

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Table 18

Analysis of Variance Results for Education Level and Percentage of Children Reported as Not Ready for Kindergarten

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Table 19

*Analysis of Variance Results for English as a Second Language Endorsement and Percentage of Children Reported as Not Ready for Kindergarten*

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Table 20

**Analysis of Variance Results for Teaching Experience and Percentage of Children Reported as Not Ready for Kindergarten**

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### Table 21

**Reverse Coded Items for Teacher Beliefs and Practices Survey**

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<th>Reverse coded beliefs items:</th>
<th>Reverse coded practices items:</th>
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| 2. As an evaluation of children’s progress, readiness or achievement tests are ___.
7. It is ___ that each curriculum area be taught as separate subjects at separate times.
10. It is ___ to use one approach for reading and writing instruction.
11. Instruction in letter and word recognition is ___ in preschool.
14. It is ___ for children to work individually at desks or tables most of the time.
15. Workbooks and/or ditto sheets are ___ in my classroom.
19. It is ___ for teachers to use treats, stickers, and/or stars to get children to do activities, that they don’t really want to do.
20. It is ___ for teachers to regularly use punishments and/or reprimands when children aren’t participating.
24. It is ___ for children to color with pre-drawn forms.
39. It is ___ that teachers maintain a quiet environment.
42. It is ___ to follow a prescribed curriculum plan without being distracted by children’s interests or current circumstances. | 10. …class use commercially-prepared phonics activities?
11. …work in assigned ability-level groups?
12. …circle, underline, and/or mark items on worksheets?
13. …use flashcards with ABCs, sight words, and/or math facts?
14. …participate in rote counting?
15. …practice handwriting on lines?
16. …color, cut, and paste pre-drawn forms?
17. …participate in whole-class teacher-directed instruction?
18. …sit and listen for long periods of time until they become restless and fidgety?
20. …receive rewards as incentives to participate in classroom activities in which they are reluctant participants?
22. …get placed in time-out (i.e., isolation, sitting on a chair, in a corner, or being sent outside of the room)?
27. …get separated from their friends to maintain classroom order? |
Table 22

*Analysis of Variance Results for Early Childhood Education Licensure and Teachers’ Developmentally Appropriate Beliefs Scores*

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Table 23

Analysis of Variance Results for Reading Endorsement and Teachers' Developmentally Appropriate Beliefs Scores

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Analysis of Variance Results for English as a Second Language Endorsement and Teachers’ Developmentally Appropriate Beliefs Scores

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Analysis of Variance Results for Special Education Licensure and Teachers’ Developmentally Appropriate Beliefs Scores

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*Analysis of Variance Results for Teaching Experience and Teachers’ Developmentally Appropriate Beliefs Scores*

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*Analysis of Variance Results for Reading Endorsement and Teachers’ Developmentally Appropriate Practices Scores*

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Analysis of Variance Results for English as a Second Language Endorsement and Teachers’ Developmentally Appropriate Practices Scores

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Table 29  

Analysis of Variance Results for Education Level and Teachers’ Developmentally Appropriate Practices Scores

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Table 30

*Analysis of Variance Results for Teaching Experience and Teachers’ Developmentally Appropriate Practices Scores*

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