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A STUDY OF UTAH TEACHERS' DEVELOPMENTALLY APPROPRIATE
BELIEFS AND PRACTICES AS RELATED TO PERCEPTIONS OF
KINDERGARTENERS' SUCCESSFUL SCHOOL ENTRY

by

Mary McEuen Darnell

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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UTAH STATE UNIVERSITY
Logan, Utah

2008

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ABSTRACT

A Study of Utah Teachers' Developmentally Appropriate Beliefs and Practices
as Related to Perceptions of Kindergarteners' Successful School Entry

by

Mary McEuen Darnell, Master of Science

Utah State University, 2008

Major Professor: Dr. Shelley L. Knudsen Lindauer
Department: Family, Consumer, and Human Development

This study was an exploration of 450 Utah kindergarten teachers' perceptions of problems children face at the time of kindergarten entry, as well as an examination of the teachers' developmentally appropriate beliefs and practices. Consistent with previous research, teachers' beliefs were found to be more developmentally appropriate than their reported practices. This study also investigated the relationship between both teacher and classroom/school demographics and teachers' developmentally appropriate beliefs and practices. Further, the relationship between teachers' perceptions of children's transition to kindergarten and beliefs, practices, teacher demographics, and classroom/school demographics was studied.

Study findings indicated that teachers perceive 20% of kindergarten children as experiencing a difficult school entry, with some teachers reporting 100% of their class as having a difficult entry into kindergarten. Teachers reported 25% of children as not being ready for kindergarten, with about 20% of teachers judging at least half of their

class as not being ready, and an additional 7% of teachers estimating that 75% or more of their class was not ready for kindergarten. “Lack of academic skills” was the transition problem rated as most prevalent for kindergarteners, while “immaturity” was the item perceived as the least problematic at kindergarten entry.

Findings also exhibited a trend that teachers with more appropriate beliefs perceived a higher percentage of children experiencing very successful entry than did teachers with less appropriate beliefs. Special education and early childhood licensed teachers, as well as those who had received their ESL endorsement, consistently judged “half or more” of their class as having a number of transition problems, including “problems with social skills,” as well as “difficulty communicating/language problems,” and not having a “non-academic preschool experience.”

Overall, as the percentage of special education children enrolled increased, and the number of children qualifying for free lunch increased, teachers perceived more children as not ready for school and/or having many problems upon entry. Another trend was that teachers in urban schools consistently reported fewer numbers of children as experiencing successful kindergarten entry, and larger percentages of children as not ready for school. Limitations, implications, and suggestions for future research are discussed.

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I am extremely proud of this project, but in no way take sole credit for its completion. There are so many people who helped in bringing this thesis to be what it is. For me, the process has been so much more than researching and writing – I have learned that I love learning, about managing time, more about technical and professional writing, about how much I need and have the support of others, and perhaps most importantly, I have learned that I can be brave and push myself more than I ever thought was possible *and then a little more!* Here, in a small but genuine and important way, I offer recognition of those who have helped me in a multitude of ways since the undertaking of “the thesis.”

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Mary McEuen Darnell, 2008

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CHAPTER I

INTRODUCTION

Kindergarten education has undergone enormous change since its inception in the United States in 1856. Far from the Froebelian approach that viewed this “children’s garden” as a place where young children learn from playful, hands-on, aesthetic child choice opportunities that afforded children a reverence for the world around them, 21st century kindergarten teachers and children alike are expected to meet the academic demands of a nationwide schooling transformation, with the No Child Left Behind Act (NCLB) of 2001 at its core (Fromberg, 2006; Jeynes, 2006; Parker & Neuharth-Pritchett, 2006).

Current trends find teachers feeling pressure to teach more information to students at earlier ages than previous years. As a result of this “accountability shovedown” (Goldstein, 2007, p. 380), teachers strain to fit what they would like to do and know is best practice with what is mandated by district, state, and national regulations. Moreover, many teachers feel inclined to fulfill the accountability standards via teacher-directed methods, rather than a child-centered approach (Parker & Neuharth-Pritchett, 2006; Schmidt, Burts, Durham, Charlesworth, & Hart, 2007). However, in the face of these pressures and changes, Bredekamp and Copple (1997) remind that education need not be either/or, but can in fact be seen from a both/and perspective. In other words, new academic standards can be met while also implementing activities derived from knowledge of how children best learn, commonly labeled developmentally appropriate practice (DAP).

A growing body of research suggests many tools teachers can use to teach regulated standards concepts in developmentally appropriate ways (Fromberg, 2006; Goldstein, 2007). Goldstein encourages teachers to maintain a positive outlook in the face of surmounting pressure. Her research points to kindergarten's history, and how it has withstood previous movements of change, specifically the growing pains associated with the convergence of kindergarten and the elementary grades, especially first grade. Just as kindergarten maintained its perspective of the early childhood years as a unique period of growth and learning then, it must now surmount pressure and continue to provide children with early childhood educators and opportunities that respect every young child's right to childhood.

Implementing developmentally appropriate practices in the current phase of academic accountability requires the professional abilities of skilled, dedicated, and creative teachers (Davis, 2003; Fromberg, 2003; Goldstein, 2007; Hyun, 2003; Pianta, 2007). Research in recent years has begun to examine the teacher characteristics and traits seen as requisite to meet the demands of the current educational experience. Sometimes, unfortunately, teachers with specialized training and the know-how of providing developmentally appropriate practices are not in line with what NCLB proponents recognize as "qualified teachers."

Additionally, the literature points to the issue of teachers' developmentally appropriate beliefs (DAB) versus their developmentally appropriate practices (DAP). Often what teachers claim as beliefs are not met in their actual practices (Parker & Neuharth-Pritchett, 2006). One of the goals, then, of the current study, was to shed further light on why this gap between beliefs and practices may exist. External pressures,

teacher characteristics, and class demographics are explored as possible contributors to the complex world in which educators make decisions.

Regarding the transition to kindergarten, part of the complexity teachers face is that each child arrives at the kindergarten door with a myriad of varying needs, interests, challenges, background factors, and prior schooling/care experiences (Fromberg, 2006). Considering the varying abilities and experiences of children upon school entry, the pressure to teach regulated lessons and concepts may affect teachers' ability to practically meet child needs, despite what they believe to be best practice. Because success throughout the schooling years is linked to early school experiences, school entry is crucial to setting a positive course in children's lives; thus, teachers' beliefs and practices during this time may highly influence children's experiences (Bredenkamp & Copple, 1997; Schmidt et al., 2007). It is largely up to the kindergarten teacher to ensure that the kindergarten experience is a positive one; they must do so within the parameters of curricula mandates. Thus, one easily notes the difficult tasks and decisions that confront kindergarten teachers of the 21st century.

Indeed, many factors contribute to the complexity of the transition to kindergarten. One source of struggle at this important time is that often a discrepancy exists between what parents and teachers deem as essential transition skills (Knudsen-Lindauer & Harris, 1989; Nelson, 2004). It is essential for all pertinent adults to work together toward an understanding of how to make this period of time a successful one for children.

Foundationally, kindergarten was seen as a playful time of transition between home and school, providing young children comfortable opportunity to gain basic skills

of socialization and learning through child-choice play activities. Recently, kindergarten has, in some regards, become little more than an extension of the primary grades; a place to “ready” children with the skills that subsequent years demand. Nelson (2004) suggests, in contrast, that we not only need to consider “ready children,” but also create “ready schools” (p. 190) — places where children of all levels of ability and skills are welcomed and offered activities formulated specifically to enhance their development, not solely to cram for standardized tests.

Research has demonstrated beliefs that teachers hold with regard to children’s transition to kindergarten, reporting that many teachers judge an alarming number of children as unready for the tasks that will be presented to them. Not only are academic measures included in these perceptions, but constructs of emotional regulation as well. Such skills are requisite for success in both kindergarten and later elementary schooling. This information again speaks to the responsibilities of kindergarten teachers to teach these skills, and provide opportunities to practice such abilities (Bodrova & Leong, 2008; Rimm-Kaufman, Pianta, & Cox, 2000).

This study seeks to add to what is known about teachers’ perceptions of the transition to kindergarten, and to further explore the inconsistencies between teacher beliefs versus practices. Where the two constructs are not aligned, teacher characteristics and class demographics will be examined as possible factors affecting this relationship. Eight research questions to be examined are:

1. What are kindergarten teachers’ perceptions of children’s transition to kindergarten?

2. What are the developmentally appropriate beliefs of kindergarten teachers at the beginning of the school year?
3. What are the developmentally appropriate practices of kindergarten teachers at the beginning of the school year?
4. Are teacher demographics (years of education, years of experience total, years teaching kindergarten, certifications) related to
 - (a) beliefs scores, or
 - (b) practices scores?
5. Are classroom/school demographics (school location, number of children in class, number of children qualifying for free lunch, number of special education children in class, child ethnicity) related to
 - (a) beliefs scores, or
 - (b) practices scores?
6. Are teachers' perceptions of children's transition to kindergarten related to
 - (a) developmentally appropriate beliefs, or
 - (b) developmentally appropriate practices?
7. What is the relationship between teachers' perceptions of children's transition to kindergarten and teacher demographics?
8. What is the relationship between teachers' perceptions of children's transition to kindergarten and classroom/school demographics?

CHAPTER II

LITERATURE REVIEW

This review of literature is an exploration of, first, the historical foundation of kindergarten and the Froebelian model of how young children learn. This perspective will provide a basis for the important implications of this study's questions concerning the transformation that kindergarten is currently experiencing as a result of contemporary policy issues and the impact on teacher practices. Next is an examination of the guidelines and outcomes of developmentally appropriate practice (DAP) that undergird quality early childhood education experiences. Specifically noted are how teacher perspectives of DAP have changed over time; moreover the issue of beliefs versus practices is addressed: why aren't teachers practicing what they preach? Important changes that have occurred in the "children's garden" will be noted to substantiate concern over the current state of kindergarten. The notion of academic accountability and high-stakes education will be addressed. Finally, the importance and necessity of practices that aid in children's transition to school will be examined. Factors that increase the complexity of this process will be explored.

Foundation of Kindergarten

Friedrich Froebel, the founder of kindergarten, "conceptualized kindergarten as a place where children developed the personality, discipline, and social skills necessary to succeed in school and society" (Jeynes, 2006, p. 1938). At the heart of Froebel's intentions was the broader role of play in shaping children who were morally educated,

had learned self-discipline, and who were socialized through both teacher instruction and peer interaction. “Froebel opined that play served to develop children in both the cognitive and sensory spheres, [and] he asserted that its contribution to a child’s moral and social development made it foundational to any education program” (p. 1942).

Literally translated, kindergarten means “children’s garden;” thus, Froebel was enveloped in the idea that, within this realm, children were free to explore, grow, and become one with nature and, ultimately, each other. Indeed, it was never in Froebel’s conception that the purpose of education prior to elementary school be academic in nature. Although, he did, in fact, believe that academics had their place when presented in developmentally appropriate ways (although the term DAP did not exist in Froebel’s time). He believed that 4- and 5-year-old children were still much too immature for the kinds of exercises required in the rigors of the primary grades; thus, the birth of kindergarten’s unique place in early childhood and other schooling. So, rather than serve children with academically oriented activities, Froebel offered “gifts and occupations,” which were activities that encouraged practice of skill through manipulation of various materials, thus holding to the idea that children learn through active, hands-on exploration of their environment (Jeynes, 2006).

Froebel held sacred the role of the teacher as leading the children to become virtuous and mature beings. Teachers were to encourage the quest for knowledge, and to create loving and trusting environments. Ideally, Froebel thought, teachers should develop curriculum based on enhancing mind, body, and spirit at the same time (Jeynes, 2006).

Kindergarten was regarded as a way to help children become ready for school, where readiness was defined by developing morally and maturing the personality traits that would later lend to optimal school citizenship. Creative activity—especially in the context of nature—was the focus, not workbooks and mindless drills. “[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).

In summation, the Froebel model of kindergarten held fast to the ideas that “young children: learn in different ways than adults; need sensory experiences; develop from opportunity to study the world around them; are capable of making choices, and; can benefit from playful activities” (Fromberg, 2006, p. 68).

Developmentally Appropriate Practice

Rationale for DAP

Foundational to an investigation of the factors shaping teachers’ instructional choices is an understanding of a widely recognized tradition of standards for high-quality practice in the field of early childhood education, known as developmentally appropriate practice. Professionals who espouse the positions of DAP mark their work with a tradition of recognizing the “whole child,” and putting into practice efforts to develop the physical, social, emotional, and cognitive needs of all children (Parker & Neuharth-Pritchett, 2006). Although officially not published as “DAP” until the 1980’s, developmentally appropriate practice follows in the traditions and foundational objectives of the Froebel model.

Developmentally appropriate practices are officially defined through statements from the National Association for the Education of Young Children (NAEYC), and include the following positions of rationale for declaring such elements of practice: “Children’s experiences during early childhood not only influence their later functioning in school but can have effects throughout life” and “the [early] 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. 2).

Further backing the imperative need to promote high-quality early childhood programs, the position statement continues with these alarming, well-documented findings: “Children who attend good-quality programs, even at very young ages, demonstrate positive outcomes, and children who attend poor-quality programs show negative effects” and “good quality that supports children’s health and social and cognitive development is being provided in only about 15% of programs” (Bredekamp & Copple, 1997, p. 3). Taken together, these findings indicate the formative nature of early experiences. The authors further contend that “A growing body of research indicates that more developmentally appropriate teaching in preschool and kindergarten predicts greater success in the early grades” (p. 3).

Multiple factors have re-shaped early childhood program experiences in recent years. Societal factors include the continual need for more care settings as dual-worker families become the norm, as well as the recognition that early learning experiences are beneficial to child development. For example, Census Bureau statistics indicate that for 69% of two-parent families, both parents work outside the home, as do most single

parents (as cited in Fromberg, 2006). Considering this heightened call for increased number of programs, NAEYC recognized the need to ensure that such programs provide quality experiences, and thus defined conditions and definitions of what constitutes developmentally appropriate practice.

Definition of DAP

Developmentally appropriate programs consider a “whole child” perspective, and simply stated, are “based on knowledge about how children develop and learn” (Bredekamp & Copple, 1997, p. 5). Recognizing, however, that development varies both within individuals and among groups, and that quality teachers must respond to such dynamics, the NAEYC definition of developmentally appropriate practice acknowledges many dimensions of knowledge. Quoting from the statement,

Developmentally appropriate practices result from the process of professionals making decisions about the well-being and education of children based on at least three important kinds of information or knowledge: 1. what is known about child development and learning; 2. what is known about the strengths, interests, and needs of each individual child in the group; and 3. knowledge of the social and cultural contexts in which children live. (pp. 4-5)

Following these guidelines, then, appropriate teaching practices must incorporate and value many dimensions of knowledge acquisition. One can appreciate the complexity teachers face when developing and implementing best practices for children, considering that each child in the room may occupy a unique spot along the developmental continuum. To aid in the planning process, the NAEYC position

statement delineates guiding principles which serve to inform early childhood educators how to best implement developmentally appropriate practices within their given setting.

Because a full discussion of the 12 guiding principles is beyond the scope of this review, they will briefly be listed here, followed by brief commentary. Inclusion of the list is seen as helpful in guiding readers to a clear perspective on what DAP entails. Also of note is that the principles were developed by an empirically-based approach.

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

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

3. Development proceeds at varying rates from child to child as well as unevenly within different areas of each child's functioning.

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

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

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

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

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

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

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

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

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

Guided by these principles, early childhood teachers are in line with what is known about how children learn, and are therefore in a position to provide quality experiences. Doing so is not an easy task, and takes dedication, skill, and professionalism to ensure that needs are being met across the curriculum, while also respecting the environments and socio-cultural contexts from which the learners come (Bredekamp & Copple, 1997).

Effects of DAP

Because it is known that early school experiences have an impact on future experiences (Bredekamp & Copple, 1997; Pianta, 2007), studies have examined the outcomes of children who have experienced teachers employing developmentally appropriate practices, sometimes in comparison to classes in which the teacher demonstrated developmentally inappropriate practices (DIP). Trajectories for children in DAP classrooms have yielded mixed results, and are, therefore, explored here.

One study conducted by Burts and colleagues (1992) compared the stress behaviors of children in both DIP and DAP classrooms. Activities and stress behaviors were observed for 204 kindergarten children; 101 in six inappropriate classrooms (53 males, 48 females; 53 black, 48 white; 54 low SES, 47 high SES) and 103 in six appropriate classrooms (46 males, 57 females; 27 black, 76 white; 48 low SES, 55 high SES) in a medium-sized southern city. Race, SES, and sex differences were taken into account with regard to effect of classroom type (DIP or DAP) because these variables are thought to affect how children react to stress, and because positive school experiences can mitigate stressful experiences. Motivation for the study was driven by the concern of the negative consequences of developmentally inappropriate curricula; the authors sought to provide empirical data to confirm these detrimental effects.

Teacher participants for the Burts et al. study (1992) were those whose initial Teacher Questionnaire responses were congruent with a follow-up classroom observation rating that verified questionnaire responses. Parental permission was obtained for the children in the 12 classrooms selected for participation in the investigation. Discussion of the study results indicated that more overall stress behaviors were displayed by

children in DIP classroom than by children in DAP classrooms. As hypothesized, race, SES, and sex effects were found between the two classroom types. In particular, boys in inappropriate classrooms exhibited more stress behaviors than boys in appropriate classrooms; this difference was not found for girls. Additionally, low SES black children showed more total stress behaviors than their low SES white peers. In terms of types of activities as related to classroom type, and mediated by race, white children in inappropriate classrooms were found to exhibit less stress during whole group, waiting, and group transitions than black children in inappropriate classrooms. Burts and associates suggested these findings as indicative of the types of classroom curricula, namely developmentally appropriate instruction, that serve to mediate stress behaviors in young children and support activities for particularly vulnerable groups.

Later work by Hart, Yang, Charlesworth, and Burts (2003) also compared the stress behaviors of children in DIP and DAP classrooms. Conclusions were drawn that children from DIP classrooms exhibited the detrimental effects of stress, such as growth of hostility, aggression, and distractible tendencies, more readily than children whose teachers used DAP strategies. Math abilities increased at a faster rate in the DAP classrooms, as compared to DIP classes. Suggestions were made by the authors that trajectories set in motion by these effects persisted into third grade (as cited in Schmidt et al., 2007). Additional note is then made by Schmidt et al. of the 1997 work of Dunn and Kontos, which “cite[s] the effectiveness of DAP in benefitting children’s motivation, attitudes about school, and level of stress” (p. 291).

Parker and Neuharth-Pritchett (2006) studied the outcomes of didactic, or teacher-directed, teaching methods as compared with developmentally appropriate strategies of

34 kindergarten teachers in terms of their students' achievement, motivation, and stress effects, and reported mixed results. Participants represented seven schools from a rural, southeastern U.S. school district. Years of teaching experience among the participants averaged 11.94 years. Interestingly, the study noted that didactic practices produce favorable effects in terms of academic achievement in letter recognition and reading efforts. However, the authors did warn that long-term negative effects do not outweigh reported short-term gains. In fact, the remaining evidence concerning outcomes of teaching delivery method provided in the article stands in strong support of developmentally appropriate approaches.

Furthermore, Parker and Neuharth-Pritchett (2006) provide evidence of the negative repercussions resulting from didactic practices on motivation levels and achievement expectations, personality and creative well-being, as well as stress behaviors, which were found to be particularly pronounced in males and African Americans. Unfavorable outcomes such as these do not match the goals for optimum development espoused by developmentally appropriate guidelines.

Another study examining the outcomes resulting from DIP and DAP classrooms looked specifically at social behaviors as an outcome of the two contending instructional methods. Schmidt and others (2007) noted the motivation for the study came after examining the effects of current scrutiny to achieve academically and perform well on standardized measures, and the resulting trend toward direct teaching, or "teaching to the test." And, although standardized tests largely begin in third grade, early childhood classrooms are nonetheless feeling the impact, as teachers are encouraged to prepare children to learn more at earlier ages than previous years. Aside from pure academics,

though, the authors highlighted the fact that children, albeit often implicitly, also learn social and moral skills in school — what many term the “hidden” or “implicit” curriculum. As the ability to navigate social situations competently is an essential skill in the school environment at any age, this effort is definitely worthy of exploration.

Through their study, Schmidt and associates (2007) observed three dyads of kindergarten children from two classrooms selected from two neighboring schools: one in which the teacher used positive guidance (DAP); the other teacher used negative guidance strategies (what would represent DIP). Enrollment in the positive guidance teacher’s classroom was 14 total children, while 23 children were enrolled in the class (the only kindergarten in the school) of the teacher using negative guidance. From each of these classrooms, three dyads of children were chosen, for a total sample of 12 children. Over the course of three months, the dyads were observed in a researcher-designed play center. Findings indicated an overall positive increase in social behaviors from those children in the positive guidance classroom, whereas a decrease in positive social behaviors was found in the negative guidance group. Examples of the children’s responses to socially oriented hypothetical situations uncovered fascinating implications about the types of skills learned in either the presence or absence of appropriate practice.

When asked, “What would you do if a friend got hurt on the playground?,” the children from the PG [positive guidance] classroom answered uniformly that they would try to help their friend by getting a Band-Aid, consoling her, or staying with her until she felt better. The children from the NG [negative guidance] classroom uniformly responded, “I’d go get the teacher” (Schmidt et al., 2007, p. 297). It seems as though these responses are indicative of the types of skills being modeled, taught, and practiced

within both types of classroom settings. Also of interest is that when the groups were queried about decision-making in the classroom, the PG dyads spoke of voting and making rules as a class; NG children, on the other hand, regarded the teacher as the sole rule maker, leaving them with lots of things they “couldn’t do” (Schmidt et al., p. 298).

This study not only illustrates that teacher practice strategies affect children’s social and moral development, but also that developmentally appropriate environments provide children the opportunity to create and be a part of a “community of learners” (Bredekamp & Copple, 1997, p. 10). La Paro, Rimm-Kaufman, and Pianta (2006) also support the existence of a “relation between children’s classroom experience and social and academic outcomes for children in the earliest years of school” (p. 191). Clearly, teachers need to be informed of their role and impact within the classroom setting in order to effectively convey the hidden curriculum.

The work of La Paro and colleagues (2006) addressed the role of teachers and the impact of such constructs as teacher sensitivity, and instructional and emotional support in relation to teaching format activities, and child engagement. Knowing that early schooling experiences resulting from teacher practices are related to children’s outcomes, both academic and social, La Paro and associates’ study goal was to examine children’s classroom experiences through observationally based measures. Data for the study was longitudinal in nature, and came from the NICHD Study of Early Child Care. One hundred ninety-two kindergarten and first grade children and their teachers comprised the study participants, representing urban, suburban, and rural areas in Arkansas, North Carolina, and Virginia. Mean class size was 20 children, with an average of one paid aide per classroom. Teachers’ years of experience averaged 14 and 13 years for the

kindergarten and first grade classrooms, respectively. The majority of teachers were female (98% kindergarten, 97% first grade) and white (95% for both groups). The breakdown of child demographics was as follows: 95 males and 97 females, 164 of the children were white, 24 African American, and 4 children's ethnic status was coded as "other." An important note in light of the current study is that specific school demographic (location) information was not gathered, and therefore, comparisons could not be made between such demographic features and classroom experiences.

Observations aimed to focus on experiences in the classroom setting with regard to learning formats, teaching activities, children's engagement in activities, as well as global classroom quality ratings comparing study classrooms. Descriptions from the coding system considered a quality, developmentally appropriate classroom as one in which: teachers have planned activities, but children decide their own level of participation in such activities; reading aloud, writing in journals, participating in games, and talking to peers and teachers about the current activity occur often; teachers interact with both individuals and small groups of children; a child-centered approach is taken wherein interests, needs, and capabilities of individuals are considered; pleasant conversation, spontaneous laughter and bursts of excitement are heard; children are encouraged to take on responsibility; and, children receive quality verbal feedback about their activities. Data based on ratings from observational coding were analyzed in an effort to establish characteristics of stability and change that children experience in the quality of early childhood classroom experiences (La Paro et al., 2006).

Results yielded differences in learning formats between kindergarten and first grade, with kindergarten children spending more time in center, free time, and transition

activities; interestingly, kindergarteners were also judged as having more exposure to academic and social skills than their first grade peers (21% versus 9% of time-sampled observation intervals). A significant decrease was observed between kindergarten and first grade in the amount of time children were exposed to the teaching of social skills.

Concerning teacher support, no significant differences were found between kindergarten and first grade teachers on measures of sensitivity (found to be moderately high) and intrusiveness (found to be low). However, first grade teachers were rated lower than kindergarten teachers on measures of evaluative feedback, conversation, and encouraging child responsibility within the classroom. La Paro and colleagues (2006) concluded that children experienced more change than stability in the movement from kindergarten to first grade. Included in these many changes was more structure and lower levels of developmentally appropriate beliefs and practices. The findings of this study, they felt, raised the question of whether a shift to more teacher-directed instruction is useful for young children, and if children are prepared to make such transitions. Finally, La Paro and associates commented on the variability and discontinuities in early learning environments, and pointed to the overall need, then, to ensure that instruction is suited to children's needs and offers the high-quality instructional support needed to improve learning outcomes.

Despite Parker and Nueharth-Pritchett's (2006) findings that reported didactic teaching methods as effective for certain aspects of achievement, the majority of the early childhood research overwhelmingly supports the use of developmentally appropriate practices in programs serving young children. For example, Huffman and Speer (2000) provided research-based support for the goal of closing the achievement gap through

avenues of appropriate practice (Pianta, 2007) by supplying evidence that DAP can indeed improve urban children's achievement.

Huffman and Speer's (2000) study examined the relationship between DAP on achievement outcomes for 113 low-income, urban, minority kindergarten and first grade children, and found through their work that children whose teachers provided developmentally appropriate experiences scored higher on an academic testing battery (the Woodcock-Johnson Psycho-Educational Battery) than did a comparison group with low use of DAP. The results further uncovered additional long-term effects of DAP which included higher rates of high school graduation, higher adult incomes, and fewer arrests and acts of misconduct. Citing the significance of Huffman and Speers' study, La Paro and colleagues (2006) stated: "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. 191).

In addition to the Woodcock-Johnson Tests of Achievement, Huffman and Speer (2000) used the Assessment Profile for Early Childhood Programs to assess developmentally appropriate practices in the 28 participating classrooms. As determined by scores on the Assessment Profile, classrooms were divided into two levels: lower DAP and moderate DAP. Results of a repeated measures MANOVA found statistically significant interactions for DAP level and semester, and indicate that DAP can improve children's achievement, specifically for at-risk populations of children. Huffman and Speer noted the unique nature and importance of the study's findings, as much effort in educational policy is applied in the persistent issue of urban, at-risk populations.

Participants in the study were comprised of 99% minority children, with 71% of families

reportedly earning less than \$12,000 per year, and 82% qualifying for free lunch.

Despite the extraordinary risk for academic failure indicated by these figures, the study results showed that on measures of letter/word identification and applied problems over time, children in higher DAP classrooms achieved significantly higher, thus supporting appropriate practice strategies. Huffman and Speer concluded their work with the statement that their research provides “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).

Findings of the DIP/DAP debate are to be taken with care, as they can differ based on type of outcome being measured. One goal of ongoing research is to provide clarity regarding DAP and academic outcomes. Methodological ambiguities are certainly in need of clarification; hence, the design of Huffman and Speer’s (2000) project, specifically targeting an at-risk population, that of low-income, minority kindergarten and first grade children from an urban district.

Much of the value derived from Huffman and Speer’s (2000) study comes from their effort to note the *types* of skill outcomes that result from DIP and DAP classrooms. Generally, DIP classrooms are typified by direct teacher instruction, based on behavioral theories of learning and accomplish tasks by way of rote memorization, drill-and-practice, workbook and worksheet approaches, and are further characterized by lack of student choice, hands-on experience, or collaboration with peers. Also, little room is allowed for integration of learning across content areas. DAP environments, on the other hand, are rooted in the Piagetian and Vygotskian foundations of cognitive learning theories, in which emphasis is placed on child choice and peer interactions, and assumes

that children learn by actively exploring and interacting with their environment (Parker & Neuhart-Pritchett, 2006).

Within the context of the Huffman and Speer (2000) research, then, comparison of DIP and DAP outcomes was important, as “adherents to didactic instruction often claim that an emphasis on academic achievement in early education comports with the values of low-income and minority families” (p. 180). Conversely, the authors asserted that their findings not only suggest that DIP classrooms are possible contributors to lower academic/at-risk populations, but further that DAP “explicitly addresses the diverse skills, personalities, and cultural backgrounds of children and that DAP would enhance the ability of schools to educate and manage the behaviors of children of varying contexts and capacities” (p. 180). In sum, the authors point to the principle that striving to create optimal learning environments with practices that attend to the way children learn and develop (DAP core beliefs) can increase child success.

In addition to helping at-risk children achieve academically, developmentally appropriate classrooms also serve to aid children with disabilities. As a result of policy changes, specifically the Americans with Disabilities Act and the Individuals with Disabilities Education Act, increasing numbers of young children with disabilities are attending inclusive programs (Bredenkamp & Copple, 2007; Bruns & Mogharreban, 2007).

Included in the NAEYC position statement regarding DAP in early childhood programs, it is noted that “young children with disabilities are best served in the same community settings where their typically developing peers are found” (Bredenkamp & Copple, 1997, p. 2). Implications for teachers as a result of these changes include

necessary increased effort to provide appropriate activities based on observation and what is known about the child, as well as providing any specialized services the disabilities may demand. While certainly an appropriate practice recommendation, keeping up with such requirements may add pressure to that which is already placed on teachers.

An example study tending to the issue of teacher perceptions about inclusion, and their implementation of such practices is the work of Bruns and Mogharreban (2007). Their report emphasized the need for teachers in inclusion settings to understand any needed structural and management strategies in helping the disabled child practice age-appropriate behaviors and social interactions. In encouraging these skills, the authors noted, optimal gains are enabled for both the disabled child as well as their typically developing peers.

Through assessment of teacher-reported beliefs and skills about inclusion practices, the researchers ascertained that, consistent with the literature, the practitioners responded overwhelmingly that all young children, with or without a disability can learn, are more alike than different, and all should be included. One hundred-twenty teachers from southern Illinois participated in the survey completed at their worksites, 83 from Head Start, and 37 from Pre-K programs. A large percentage (85% for Head Start participants, 70% for Pre-K professionals) agreed that young children with disabilities are deserving of the same program participation as their typically developing peers. In contrast, only 7% of Head Start and 3% of Pre-K practitioners held the perception that actually implementing the adapted practices necessary for inclusion was always possible.

While many of the participants felt they were able and comfortable in implementing specific inclusion practices, such as arranging the classroom environment and materials, to meet the needs of all abilities and assessing child needs through observation, fewer teachers admitted to comfort in implementing IEP (individual education plan) objectives. The lowest ratings of teacher practices were in the area of understanding specialized services (Bruns & Mogharreban, 2007). The latter of these points speaks to the need to fully prepare early childhood teachers for the practices they may be required to implement as a means of enhancing the development of all levels of learning. Additionally, the results attest that teacher beliefs and practices often paint two very different pictures; further explanation of this phenomenon is the subject to which the next section of this review is focused.

Both of the examples just cited — of DAP as an effective tool for guiding at-risk children, and the suitability of DAP for promoting inclusion services — counter the questions that are often had about the effectiveness of this approach in meeting the needs of children from all backgrounds (Huffman & Speer, 2000).

Beliefs Versus Practices

Following the guidelines of the NAEYC position statement and guidelines about developmentally appropriate practice which “assert that children learn actively through physical and social experiences to construct their own understandings of the world around them” (Parker & Neuharth-Pritchett, 2006, p. 66), it makes sense that teachers would believe in and provide these types of experiences for young learners. However,

both research and observation have revealed that what teachers claim as *beliefs* regarding DAP does not necessarily match up with their actual *practices*.

Bruns and Mogharreban's (2007) work of the gap between beliefs and practices on the topic of inclusion was just cited as one example of this issue. The work of Parker and Neuharth-Pritchett (2006) provides another, and cites the following:

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)

Considering this apparent inconsistency in practice, the researchers were interested in uncovering the factors that would shape such results, as is the case with the current study.

At the heart of Parker and Neuharth-Pritchett's (2006) hypothesis was the effect of the high-stakes testing period in which the American schooling system now finds itself. They asserted that, based on the push for accountability, teachers are spending less time at playing, running, and the arts, and spending more time in didactic instructional practices, as they "ready" children for the next grade. In fact, all 34 kindergarten teachers included in the study reported feeling that kindergarten is becoming more and more academic in nature. Essentially, this suggests that teachers feel it increasingly difficult to enact their developmentally appropriate beliefs.

Teachers in the Parker and Neuharth-Pritchett (2006) study represented seven schools in a rural, southeastern U.S. school district. At the time of the study, African Americans were reported to make up 13.5% of the population, with another 19% of

kindergarten through high school-aged children being of non-European descent. An estimated 13.3% of residents in the county where the schools were located lived below the poverty level. Teacher demographics were also collected for the purposes of evaluating whether teacher characteristics influenced teaching. Mean years of teaching was 11.94, of which 7.57 years was the reported number of years teaching kindergarten. bachelor's degrees were held by 18 of the teachers, with the remaining 16 teachers having obtained a master's degree. Consistent with the majority of early childhood educator research, the majority of the participants were white, and all were female.

Through survey, interview, and observation, three groups of teachers were identified: teacher-directed (didactic), child-centered (developmentally appropriate), and mixed approach (using both approaches). These identifying categories were used to compare the teachers among four factors that shape instructional choices: the shift to a more academic kindergarten; pressure from peers; perceptions of teacher-directed instruction; and perceptions of child-centered instruction.

A brief summation of the findings indicated that overall, all teachers reported feeling that kindergarten has become more academic in nature. Perhaps the most interesting finding of the study (Parker & Neuharth-Pritchett, 2006) was that teachers classified as demonstrating child-centered practices remarked that they felt control over their curriculum, but also reported feeling more pressure from first grade teachers. On the other hand, teachers who endorsed a more teacher-directed style of practice did not report feeling the external pressure from first grade teachers, and interestingly did not feel they had control over curriculum decisions. As the authors pointed out, a conclusion that can be drawn from these patterns is that "an increased use of child-centered,

developmentally appropriate practices correlates with perceived freedom to make instructional decisions” (p. 75). A different, though disconcerting, pattern that was also illuminated by this research is that as classrooms become more child-centered, teachers report feeling more pressure from higher grades. This speaks to the strain that teachers are currently feeling to produce marked achievements, and is certainly a topic worthy of further inquiry.

A second example in the beliefs versus practices analysis pertains to helping preservice and novice teachers make the conscious connection between their beliefs and practices. Considering that the “literature widely acknowledges the potential for teachers’ beliefs to affect classroom interactions and instruction” (Deal & White, 2006, p. 313), and that research has found positive relationships between beliefs and practices, “noting that the more strongly teachers believed in developmentally appropriate practices, the more likely they were to implement the practices in the classroom” (Parker & Neuharth-Pritchett, 2006, p. 68), and finally that “teachers differ in the types of experiences that they offer children in kindergarten and 1st grade” (La Paro et al., 2006, p. 201), it is imperative that teachers, especially those new to the field, be informed and prepared to implement their knowledge of best practice in the complex process of teaching.

Deal and White (2006) examined the process of two new teachers evolving from preservice student teachers to the “real world” of teaching where teachers must attempt to align beliefs with practices. The authors noted prior research evidence that often novice teachers struggle to discover that their own educational experiences did not fully prepare them for the realities of classroom procedures, and that moreover, new teachers are too

easily dictated by school regulations. Importance was placed on observing the progression of novice teachers' beliefs, as many new teachers' instructional choices are influenced by external factors, including time constraints, pressure to perform well on high-stakes achievement assessments, and systemic issues. Therefore, two participants were chosen for case study in the first years following their teacher education program.

Limits to the Deal and White (2006) study include the small number of participants, the volunteer nature of study participation, and the similar advantageous backgrounds the female educators came from. Notwithstanding, the study analysis provides insight into factors impacting developmentally appropriate beliefs and how such beliefs translate into practices, as well as the need to properly train and prepare teacher candidates for the reality of the complexities involved in establishing child-centered, developmentally appropriate classrooms. School context was noted as a pervasive influence over time in the development of novice teachers as to selecting instructional practices.

The 2004 report of Nelson and Smith's work demonstrated that early childhood teacher candidates can significantly benefit from training in how to adopt developmentally appropriate practices that meet their beliefs. Upon completion of a series of courses aimed at increasing awareness of many methods of practice, the group of 30 master's program student participants scored significantly higher on use of DAP than before completing the course regimen.

Motivation for Nelson and Smith's (2004) study was centered on the growing recent focus on academic outcomes of early childhood education. Recognizing that current goals for achievement can be met through developmentally appropriate

instructional strategies, and knowing that teachers' methods and beliefs are largely shaped by teacher education programs (e.g., Chen & McNamee, 2006; Fromberg, 2003), the researchers sought to demonstrate the efficacy of a program designed to heighten teachers' use of developmentally appropriate practices.

Students in the early childhood master's program were first exposed to literature about a variety of teaching systems, including the efficacy of DAP. Focus in a number of the students' core courses was on evaluating the theoretical foundations of their current teaching style. Participants were then exposed to a set of examples, materials, and activities to give them experience with implementing developmentally appropriate practices. Finally, the group of master's students completed course and field work in dissemination information about, and drawing support for, DAP. As hypothesized, all students experienced a shift in instructional practices (as measured by posttest survey instrument), toward developmentally appropriate strategies, but all to varying degrees. Not surprisingly, Nelson and Smith (2004) noted that, consistent with other literature (e.g., Parker & Neuharth-Pritchett, 2006), the teachers indicated strong beliefs in support of developmentally appropriate practice, especially when completing self-reports. Observation of actual practices may yield inconsistencies; however, the general conclusion of the Nelson and Smith study is that such inconsistencies may well be the result of systemic issues that prevent teachers from fully implementing appropriate practices.

The literature review of these studies has pointed to the many factors that teachers face in effort to put into practice the developmentally appropriate beliefs that so many allege to subscribe. What the research has done is clarify a portion of the environmental

complexities under which teachers must make decisions of practice. Parker and Neuharth-Pritchett (2006) issued the call for “more in-depth research into additional external factors affecting teacher practices [which] would enhance the literature and best inform educators working toward implementing developmentally appropriate classrooms” (pp. 76-77). Nelson and Smith (2004) summed up the matter of beliefs versus practices well:

There may be substantial environmental, cultural, and administrative constraints that prevent early childhood educators from practicing what they believe. [They] 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. (p. 78)

In sum, a large body of research supports the efficacy of developmentally appropriate practice as a means to enhance learning and provide young children with quality early experiences. The challenge to educators and policy makers alike is to ensure that the principles stated in the guidelines of DAP are delivered consistently, and with the knowledge of how children learn and develop as a firm basis for decision-making.

Kindergarten in the United States

Educated in the Froebel model of kindergarten, a woman by the name of Margarethe Schurz opened the first U.S. kindergarten in 1856. Following the path of Schurz, Elizabeth Peabody launched the first English-speaking kindergarten in Boston in

1860. The concept of kindergarten grew with time, especially within the St. Louis Public Schools, where kindergarten was publicized in 1870, though for a period, the majority of the programs were private endeavors. Historical movements carved changes in the path that kindergarten would continue to take, including the progressivist, child-centered movement, which had child-centered education at its core. This model continued through the 1950s. Even enduring post war and troubled economic times, financial and government support of kindergarten continued. Importantly, during a time of growth in research, the distinct and important nature of children's early years was widely acknowledged (Fromberg, 2006).

Upon the historic successful launching of Sputnik in 1957, kindergarten was set in a new position of American education. Differing from Froebel's concept that children experience the inherent joy of learning, young children were now seen as a prospective source of competitive and economic growth. Not surprisingly, subsequent trends further saw policy makers dialing up the knob for what they perceived would bring achievement growth to the nation; what also occurred was an increase in pressure on children to learn more at earlier ages, and teachers to teach concepts earlier than had been previously done (Fromberg, 2006). As further social changes occurred, specifically more women in the workplace—as a result of both increased numbers of dual-worker households and an increase in single mothers—changes also occurred within the structure and purpose of kindergarten (Graue, 2006).

No Child Left Behind Act of 2001

Standardized tests became popular in the United States around the early 1960s. Upon a period of falling scores on nearly every achievement test for 17 consecutive years (1963-1980), a call to reform education (though admittedly, social trends were partly to blame for the decline) was undergone. Ways to increase test scores were sought. Also at this time, Froebel's kindergarten model was explicitly rejected and educators began to insist on a "back to basics" approach to education. This movement gained in popularity, especially when the achievement gap between minority and White students was said to be diminishing. With an eye ever to the performance of top economic countries, the United States noticed they were lagging behind the Japanese. Noting the high volumes of homework and testing in the Japanese curricular system, the U.S. government further increased its emphasis on achievement tests and basic skills through drill instruction (Jeynes, 2006).

A final step in setting the stage for the No Child Left Behind Act (NCLB) was concern with the academic achievement gap dividing suburban and inner-city schools. A call by President Clinton for nationwide standardized tests was seen as a means of schools demonstrating accountability and improvement in skills. Upon assuming the role of President, George W. Bush reinforced Clinton's ideas by passing the initiative entitled "The No Child Left Behind Act of 2001" (Jeynes, 2006).

Premises of the legislation hold that all schools will be accountable for math, reading, and science learning (No Child Left Behind, 2002), as measured for mastery by

annual standardized achievement tests (Goldstein, 2007). Receiving continued federal funding is provisional to meeting these mandates. Not meeting outlined stipulations results in a corrective action review and the need to map out a plan for improvement. If and when schools consistently fail to provide “quality” services, parents have the option to send their child to a “successful” school. Ultimately, consistently failing schools face the loss of federal funding.

It seems ironic that one of the very things that could help make poor-performing schools better, funding is the very thing the government threatens to take away from the already struggling schools. With this perspective, the very goal of NCLB—closing the achievement gap—will never be realized, and the most vulnerable children will only be left further behind (Hyun, 2003). Fromberg (2003) reported, quite emphatically, on the many contradictions inherent in the policies and procedures of the prescribed NCLB agenda:

The ethical issue of ‘doing no harm’ appears to vanish when teachers engage in reading scripted programs that abuse the trust and vulnerability of 63-month-old kindergarten children who are generally eager to please adults. In this regard, school administrators need support in understanding how young children learn and how to provide support for meaningful curriculum. (p. 104)

Although under the legislation guidelines testing procedures do not begin formally until third grade, it is certain that teachers all the way down to the kindergarten level feel pressure to assure that children arrive in third grade with the necessary foundational skills to achieve well on the tests, with many schools testing earlier than third grade.

Fromberg (2003) further contended: “The shortsighted focus on cramming for tests and isolated skills and knowledge which is the outcome of a quantitative-only factory model, clashes with the nature of our information society that demands different kinds of capabilities from its citizens” (p. 104). It is clear that the profile of kindergarten is changing as a result of legislation that directly impacts the practices of teachers. Kindergarten has historically withstood pressure and maintained its unique position in the school system, and will need to do so now. Goldstein commented that in the face of rising pressure, “today’s kindergarten is in great need of images of potential and possibility” (2007, p. 396). Teachers’ abilities to “satisfy the new demands without sacrificing fundamental values at the heart of kindergarten” (p. 379) are discussed in a later section.

Current Kindergarten: Out of the Garden to Mandated Achievement

Resulting from increasingly higher numbers of children receiving early care and schooling experiences, not to mention federal mandates of accountability (NCLB), a shift has occurred in the goals and purposes of kindergarten. This shift is characterized by viewing kindergarten as preparatory to future academics, rather than acclimating children to the social nature of school. As more mothers have entered the workforce, and with the increased knowledge of importance of the early years, more children are entering kindergarten with some kind of prior care or schooling experience. Consider that 96% of 5- and 6-year-old children attended school in 2002, compared with 91% in 1972 and 84% in 1965; 70-80% of these children have had 1 year of preschool and 45-55% have had 2 years of preschool experience compared with 20.5% of 3- and 4-year-olds who attended

some preschool in 1970 (U.S. Department of Commerce, Bureau of the Census, 2002, as cited in Fromberg, 2006). Additionally, reports provided by NAEYC indicate that 58.5% of mothers with children under age 6 were in the labor force in 2005; further, four in five children under age 5 whose mothers were in the workforce received care from someone other than a family member (NAEYC, 2005). Therefore, kindergarten no longer serves the sole purpose of socializing young children and preparing them to leave home for the rigors of elementary school.

Kindergarten's mission has changed from helping children get used to school to preparing them to achieve in first grade. This is not a subtle change. Rather than having intrinsic worth, kindergarten is being redefined in terms of its ability to set up children's academic success at the *next* level. (Graue, 2006, p. 6)

Couched with increased accountability standards and concept topics being mandated at the local, state, and national level, there is indeed cause for concern with possible outcomes, given what professionals in the field of early childhood education know about essential characteristics to providing meaningful learning experiences in the early stages of development. However, as one author frankly offers, "There is no reason to believe this process [highly regulated education] will not continue" (Pianta, 2007, p. 5). Graue (2006) admonished Pianta's line of thought by informing that it was unlikely that children would forever attend the kindergarten of the past. Changes in schooling are inevitable; therefore, the task set before early childhood educators and policy makers is to ensure that shifts which affect regulations and practices do so in a manner respectful of children's right to childhood.

Referring back to Jeynes' (2006) article, which earlier highlighted the foundation of the Froebel model, one might note here that the author provided evidence that "Froebel is right about the nature of the kindergarten" (p. 1944). There is documented research to suggest that the original model of kindergarten stands to benefit young children better than an approach of high-stakes testing. Jeynes' marks the account of Spodek who says that to believe that a mere focus on academics, with no emphasis on moral and social advancement is to believe a myth. Further added is the statement, "People must know much more than how to read" (p. 1945). Regardless of reasons for change, then, it appears that principles contained within the original kindergarten model are consistent with those of developmentally appropriate practice, which has been demonstrated to best serve positive outcomes of children.

*Accountability and DAP:
Both/And, Not Either/Or*

Response to the complexities of providing quality early childhood education while also meeting standards of accountability has varied. The NCLB legislation has left many teachers frustrated, feeling pressure to keep up with expectations while also meeting the various individual needs of the children they work with. Goldstein suggested, "Standards delineate clearly the specific knowledge and skills that students must master; as a result, kindergarten teachers' ability to base their decisions about what to teach on their students' prior knowledge, interests, and needs has been drastically limited" (2007, p. 378).

Many teachers, on the other hand, have accepted the challenge to meet the mandates without shying away from what they know to be best practice. Fortunately,

researchers have documented such instances, which may serve to highlight patterns of success for others to follow. “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” (Goldstein, 2007, p. 380).

Work by Parker and Neuharth-Pritchett (2006) suggests that teachers select their practices from a continuum of instructional approaches. Further, Graue (2006) asserted that “you can have standards for learning without ‘standardizing’ your teaching” (p. 8). A more in-depth perspective is shared by Fromberg (2006, p. 70):

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, sociodramatic play, and active experiences in an intense language environment where children have reasons to use literacy and mathematical skills.

Indeed, teachers can interpret the constrictions of federal mandates however freely or literally they choose. What this research demonstrates is that teachers can in fact meet accountability requirements and still engage in developmentally appropriate practice. “This situation poses many challenges, but it also creates opportunities for innovation, growth, and change” (Goldstein, 2007, p. 379).

Qualified Teachers

Comparing DAP and NCLB constructs of what comprises a “qualified” teacher yields conflicting results. Congruent to the principles within DAP, a “qualified” teacher is one regarded as a professional in the areas of using assessment and observation to guide knowledge of individual children, and thereby provide intentional and meaningful hands-on, playful learning experiences. DAP teachers respect the varying backgrounds of children, and the social contexts in which they dwell. Responding to the concept that young children learn by engaging in activity, Chen and McNamee (2006) remarked, “To insure daily curriculum activities connect to learning standards, teachers need to understand the key concepts and skills of each content area” (p. 110). Teachers then guide children’s mastery of these concepts.

Early childhood research justifies the belief that not everyone is qualified to teach in early childhood settings. In the face of fast track paths to qualifying teachers to guide the early learning experience that research has demonstrated is so important, early childhood professionals must advocate specialized training based on knowledge of child development, social contexts, developmental disability, and appropriate curriculum planning. Davis’s (2003) report lends this support:

Stated simply, everyone can’t teach. Knowledge of content, child development, classroom management, diversity, assessment, and a number of other skills are necessary for effective teaching. These skills alone, however, are still not sufficient for high-quality teaching. Being able to bring the above knowledge to bear at a teachable moment with the right student is also necessary—but not sufficient. However, being able to do all of the above within the context of

community values, professionalism, and a high-stakes testing environment begins to define the necessary ingredients for teaching success in today's world. (p. 100)

A "qualified" teacher from the NCLB perspective is qualitatively different than the one described above. Recent reporting from the U.S. Secretary of Education suggests that teacher education programs are not producing the kind of teachers necessary for meeting NCLB standards. By NCLB definition, a "qualified" teacher essentially needs to merely be able to accurately deliver proscribed lessons and administer tests. Certainly this characterization does not support the whole child/child-centered approach called for in DAP. Hyun (2003) further proposed that a teacher seen simply as an administrative figure who dispenses tests based on knowledge the child has been unable to apply in meaningful ways will undermine the implicit curriculum. Teachers are minimally called on to "proctor" scripted information. Fromberg's (2003) work also speaks to the contradiction within the NCLB Act concerning the value of professionally prepared teachers.

Of particular concern to some early childhood professionals is the method by which NCLB legislation is "qualifying" teachers. Individuals with no classroom experience, training in curriculum planning, or knowledge of child development, among other things, can pass a single state teacher test and therefore be "qualified" under the act (Hyun, 2003).

Finally, as the increased academic focus finds its way into early childhood classrooms, unqualified adults (deemed "qualified" by the process stated above) will lend their practices far more easily to teacher-directed, rote memorization, worksheet (DIP)

strategies than would a teacher specially skilled in guiding appropriate practice, even in the face of political scrutiny (Fromberg, 2003; Hyun, 2003).

Teacher Characteristics

Chen and McNamee (2006) stated, "In contrast to the increasingly diverse student population, most U.S. teachers are young European Americans from middle-class backgrounds who speak only English." Moreover, "When teachers are unfamiliar with children from diverse backgrounds, they are more likely to attribute poor performance on school tasks to cultural, familial, or linguistic differences, which too often are interpreted as deficits" (p. 110). For this reason, it is imperative to examine the demographic characteristics of teachers.

Okpala (2007), Parker and Neuharth-Pritchett (2006), and Wilcox-Herzog (2004) all noted teacher background factors including teaching experience, specialized trainings, and advanced degrees are related to teacher behaviors. Surprisingly, the Wilcox-Herzog study found experience to negatively predict sensitive behaviors, and she suggested that teachers being overworked and underpaid is a potential explanation; dually, she noted early childhood certification to be a positive predictor with regard to verbalization behaviors in children. The author asserted that research has "demonstrated that level of education appears to be positively related to both caregiving behaviors and overall classroom quality" (p. 12).

To study how background factors are related to teachers' behaviors, Wilcox-Herzog (2004) studied 47 early childhood educators, 29 of whom had majored in early childhood, with 26 holding early childhood certificates. Range in years teaching 3-5 year

old children was 0-30, $M = 7.6$ years. Assessment of teacher actions via videotape was designed to identify the role that years of teaching experience, general schooling, and specialized training specific to early childhood education play in classroom practices. As hypothesized, based on a growing body of research suggesting that specialized training impacts early childhood practices, study results confirmed that having earned early childhood teaching certification was positively related to higher levels of verbalization behaviors and level of involvement with children. The correlation between early childhood education certificate and high level of verbalizations was statistically significant at the $p < .01$ level, $r = .43$. In contrast, correlation between years of teaching experience and sensitivity behaviors was strongly negative, $r = -.42$, also statistically significant at the $p < .01$ level. Wilcox-Herzog (2004) suggested that it is not surprising for teachers to experience burnout after continuous exposure to children with many needs, and additionally asserted that simply spending time with young children does not equate with expertise.

Just as the current study did, the Wilcox-Herzog (2004) study obtained information about teachers' highest obtained degree, and reflected evidence that specialized training is an important component of care and quality classrooms. "It is clear that specialized training typically has a positive relationship to the provision of developmentally appropriate practice" (p. 12). Her study was unable to validate the reported literature that a relationship between appropriate care and general level of schooling attainment.

Okpala's (2007) study attended specifically to teacher certification as a function of perceptions regarding kindergarten retention. Perceptions of 37 kindergarten teachers

about retention were in fact found to vary with teacher certification. Teachers were either certified or non-certified (56.8% and 43.2%, respectively). The instrument designed for the study was composed of two parts, the first of which gathered demographic data, and the second gathered data on teachers' perceptions of retention practices. Approximately 65% of teachers had five or more years of experience. Those teachers with more years of teaching experience were less partial to advocate retention practices ($M = 3.44$, $SD = 0.64$). Participants with less than five years teaching experience were more likely to perceive retention of kindergarten children as beneficial ($M = 4.34$, $SD = 0.47$). In terms of certification, certified teachers held lower beliefs on the benefits of retention ($M = 3.17$, $SD = 0.71$) as compared with those who were not certified ($M = 4.46$, $SD = 0.30$). Lastly, Okpala noted the apparent contradiction that existed as the teachers in this study who were least likely to hold kindergarten retention as a positive action also reported to uphold the district's policy regarding retention. This statement points to one of many areas in which system policies are not aligned with teacher beliefs.

Fromberg's work (2006) closely examined the relationship between specific teacher and classroom characteristics and the subsequent ability to provide appropriate practice. With regard to class size, Fromberg's review found that smaller class sizes were beneficial to children's school experiences; children from low-income families especially benefit from the extra attention a small class size affords. Distinction was drawn between absolute number of children in a classroom and teacher-student ratio, once aides and other specialists were accounted for. Fromberg next offered a multitude of statistical figures regarding class size, including: the average number of children in full-day

kindergarten in the U.S. is 20.3, 19.1 in half-day classes; classroom aide percentages are reported as 61% and 44% for full- and half-day, respectively. An additional note of import made in this assessment was of the crucial need to maintain a sufficient supply of teachers who are qualified to teach kindergarten. However, Fromberg cited the enormous financial start-up costs of reducing class sizes and increasing teacher numbers, though long-term outlooks seem to imply benefits (more achievement, less retention, and so forth). Such findings certainly call for more attention to certified teachers; it is important that policy makers understand the benefit specially trained teachers have to children's school experiences.

Other studies have focused on the relationship between teacher characteristics and the judgment of child behavior. Research has pointed to the notion that teachers' personal characteristics and perceptions can affect the manner in which they, in turn, rate children's behavior. Common findings note that, in terms of school readiness, teachers tend to rate minority children lower than other children. Also, expectations for school success may be judged in terms of reflecting dominant vs. minority culture norms (McClelland, Acock, & Morrison, 2006). It is to the issue of teachers' judgment of school readiness and perceptions of problems in the transition to kindergarten that discussion now turns.

The Transition to Kindergarten

Making the transition to kindergarten from home, or other preschool or care settings, is generally navigated successfully by young children. However, for those children who have not yet acquired necessary social and regulation skills, or for those

who may make the transition from impoverished backgrounds, problems of transition may exacerbate already present development issues. Furthermore, the academic, social, and emotional readiness skills have been shown to contribute to not only early school success, but also to later school success (Hair, Halle, Terry-Humen, Lavelle, & Calkins, 2006; McClelland et al., 2006; Rimm-Kaufman et al., 2000).

One study that focused on the trajectory of academic achievement at the end of elementary school, based on early learning-related skills (self-regulation and social competence) was that done by McClelland and colleagues (2006). Acknowledging that all children come to school with varying levels of these competencies, children who entered kindergarten without mastering even basic skills were judged as at risk of low academic achievement as well as peer rejection. The researchers linked these learning-related skills of academic success with the following statement: “Once children make the transition to school, learning-related skills continue to be linked to a child’s academic success. These early skills provide the foundation for later academic performance in the context of positive classroom behavior” (p. 473).

Reading and math trajectories between kindergarten and sixth grade as related to kindergarten learning-related skills were examined for 538 children. Specifically, McClelland and colleagues (2006) sought to add to the existing research about how these learning-related skills might be indicative of long-term outcomes. Children in the sample were 51% Caucasian, 49% African-American, and 51% male, 49% female. Ultimately, 260 participants were followed over the full course from kindergarten to sixth grade, due to attrition.

Data from multiple measure subscales were analyzed to reveal that, as expected, there was a significant difference between children's kindergarten learning-related skills and reading and math skills from kindergarten to sixth grade. Moreover, learning-related skills significantly influenced both math and reading initial levels, as well as growth, between kindergarten and second grade. Between third and sixth grade, level, but not growth, of math and reading skills were significantly predicted from kindergarten learning-related skills.

Overall, findings from this research suggested kindergarten learning-related skills as effective tools in predicting academic success trajectories for the elementary years. Additionally, and perhaps more importantly, is the finding that teacher ratings of children's social skills at the beginning of kindergarten significantly predicted children's academic achievement scores years later. This is important information in the face of increased focus on academic-related skills for school readiness, as opposed to the more social and behavioral (learning-related) skills studied as predictors of success in the McClelland and others (2006) study. Furthermore, this study holds implications for early intervention efforts in helping children develop social readiness skills prior to school entry, as those children who lagged behind their more capable peers in kindergarten continued to face this gap throughout the elementary grades.

Offering a final comment, McClelland and associates (2006) share the further implication that also affecting children's success trajectories is the match experienced between teacher expectations and child characteristics. A poor fit between the two is likely to impede transition. Teachers must acknowledge the multiple sources — including child characteristics, family and parenting characteristics, as well as

sociocultural influences—that affect children’s learning, not just their ability to take a test. Teacher demographic information was not collected for the teachers in the McClelland and associates study, and thus relationships between teacher characteristics and perceptions of school readiness could not be assessed. The present study will offer such comparisons.

Much research has explored the issue of perceived problems (“deficiencies” as Graue, 2006, referred to them) in the transition to kindergarten. Key to this exploration of the transition to kindergarten is the large-scale, nationally representative work of Rimm-Kaufman and colleagues (2000), which provides excellent insight into teachers’ perceptions of children’s problems at the time of school entry.

Using the Transition Practices Survey, as did the current study, Rimm-Kaufman and others (2000) examined 3,595 teachers’ perceptions of the types of problems children have upon school entry. Of particular interest is the finding that about half of children were judged by their teachers as not experiencing a successful entry into kindergarten. 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” (p. 155). The most prevalent problem judged by teachers in this study was “difficulty following directions.” This finding has remained consistent over time, as the 2001 study by Rimm-Kaufman and colleagues also revealed “difficulty following directions” as the top ranked concern about children’s kindergarten entry (Bodrova & Leong, 2008).

Teacher characteristics were of particular interest in the Rimm-Kaufman and colleagues (2000) investigation, as it is known that teacher expectations influence perceptions of problems. Further, heightened number of perceived problems may in turn impact teachers' judgment of difficulty in teaching. Imperative in a study of this nature is to assess teacher perception of problems in relation to the teachers' demographic characteristics, as it has been found that individual attributes impact identification with students, and in turn shape teacher expectations, thus exacerbating the reciprocal effect of perceptions, judgments, expectations, and ultimately, academic outcomes.

Originally, 10,071 questionnaires were sent out for the study, with 3,595 being returned, for a return rate of 36%. Although with a lower response rate than expected, the sample was still considered nationally representative due to the sampling strategy. The national sample, then, consisted of kindergarten teachers who were 79.8% non-Hispanic White; 7.0% non-Hispanic African American, and 5.0% Hispanic, with another 9% checking other origins. Responding to level of education and experience items, the teachers reported that 46.5% obtained at least a master's degree. Teachers had an average of 11.5 years experience teaching kindergarten, with 1.1 year of experience below kindergarten level and 3.5 years above. Classrooms contained on average 22.2 students, of which 60.4% were non-Hispanic White, 18.4% were non-Hispanic African American, and 14.6% Hispanic children. A reported 50.3% of children in the surveyed classrooms qualified for reduced-price or free lunch.

Analysis of survey questions was similar to what occurred in the present study, as the first research question reviewed by Rimm-Kaufman and others (2000) asked what the types and prevalence of perceived school entry problems were. Second, the relationship

between teachers' reports of types of problems and school demographics was addressed. Third, the relationship between teachers' reports of types of problems and teacher demographics was explored.

In answer to the first question, just over half (52%) of kindergarteners were judged as experiencing a successful transition to school, whereas teachers judged 32% of children to have experienced a moderately successful entry, and 16% were perceived as having a difficult entry to kindergarten. Specific entry problems were assessed for about half of the classes, with "difficulty following directions" being the most reported issue. Not surprisingly, teachers reported more problems for higher levels of poverty and minority status children. Regression equations were computed to test if both non-minority and minority teachers judge more problems in classes of higher minority composition. No significant difference between teacher status (minority or non-minority) was found in perception of problems perceived for high minority populated classes; that is, all teachers judged more problems in the higher minority classrooms.

Of the many perspectives taken in discussing findings from this large-scale study it is imperative to reflect on the effects of teachers' judgment on children's skills. It was already shared that Rimm-Kaufman and colleagues (2000) noted the influence of teacher expectations on child outcomes. And, as reflected earlier in the work of McClelland and others (2006), teacher expectations have implications for child achievement trajectories. Among many other conclusions, the work of Rimm-Kaufman and colleagues marks the transition that children face upon entry to kindergarten.

Another "fit" that serves to either aid or impede the kindergarten transition process is that between parent and teacher beliefs about readiness practices as well as

what should be taught in kindergarten. A good fit is defined by Nelson (2004) as “horizontal continuity” across contexts, the contexts being home and school. Nelson cited previous research in which it was found that “Parents tend to believe that pre-reading, writing, and counting skills are very important and teachers rate interpersonal skills such as communication and approaches to learning as most important” (p. 187). Honest and informed communication regarding these issues can help parents and teachers together develop common expectations for the kindergarten experience.

Although reaching a consensus on one definition of readiness standards has proven to be a complex task, there are known practices that can encourage a child’s readiness for school. Home visits and dissemination of reading materials are two of the most common transition practices. Results from Nelson’s (2004) study reported that teachers with more years of experience (veteran teachers) were more likely to invite parents to visit the classroom before school started than novice teachers. The same trend was exhibited with regard to inviting parents to come visit the classroom when comparing teacher training: those with early childhood certification tended to extend the invitation to parents more than teachers without early childhood certification.

Perhaps most worthy of mention from the Nelson (2004) research is the idea of “ready schools” (p. 190). Ready schools take advantage of the transition practices described above in an effort to establish a home-school community, and are therefore ready to accept children of all developmental levels when the time for transition arrives.

Graue (2006) mentioned a lag concerning the idea of a “good fit” to kindergarten for both children and teachers. Graue extended the belief that children today are arriving at kindergarten less prepared than the kindergarten children from 15 years ago. “But with

the escalation of the curriculum in the primary grades, what used to be first grade work is now work for the kindergarten. Are these increased expectations somehow related to the perceptions of students as deficient?" (p. 9).

The findings reported from these studies are consistent with what was first identified in this section about children who lack the requisite skills to function in a school setting. Rimm-Kauffman and colleagues (2000) provide this summation:

Because of the heightened academic goals associated with kindergarten and because children have had such diverse experiences preceding school entrance, some children are more successful than others in meeting these new demands.

Thus, the transition into kindergarten poses a challenge to children and produces a wide range of responses to school transition among children. (p. 148)

Especially in the current atmosphere of educational transformation, it is imperative that teachers work with parents and children to instigate successful school entry. Teachers also have cause to strive to match child characteristics with their own expectations, in order to provide a good fit between home and school in the transition to kindergarten.

Conclusion

This review of literature has provided a historical perspective of the purposes of kindergarten and the contemporary establishment and guidelines of DAP which has the Froebelian model of how children learn at its core. Recent research has revealed the transition to early school experiences, specifically kindergarten, as an important, though complex, time for children. Contributors to the complex nature of this important period for young children include the No Child Left Behind Act of 2001, inconsistencies

between teachers' developmentally appropriate beliefs and what they actually practice, and the relation between the two, as current trends reveal teachers feeling pressure to teach academic skills at earlier ages than previously taught in order to meet standards of accountability and prepare children for upcoming high-stakes testing. Research findings suggest that teachers often move away from what they know to be best practice toward more inappropriate, didactic methods in order to meet the demands placed on them.

There is evidence to suggest that DAP classrooms produce positive long-term outcomes for children in terms of both academic and social skills. Despite findings to the contrary for some groups of at risk populations, the research generally supports the use of DAP in promoting successful early school experiences that affect trajectories for later schooling, and ultimately, life. Considering the realities then, that early school experiences impact later development, and that curriculum delivery varies greatly due to individual teaching strategies, it becomes imperative to examine beliefs and practices as resulting from teacher perceptions and demographic characteristics.

Although teacher demographics have previously been found to relate to teacher expectations for the children in their classrooms, no study to date has explored the relationship between teacher demographics and perceptions of children's transition to kindergarten within a single state. This study seeks to reveal insights into this potentially interesting relationship, as well as add to the growing body of research concerning the gap between beliefs and practices. Additionally, this study is unique in comparing teachers' perceptions of school entry and developmentally appropriate beliefs and practices. Further, this project looked at school and classroom demographics as factors influencing teacher beliefs, practices, and perceptions of children's success in entering

school. School demographics are generally described in study sample sections, but to date have not been directly compared with teacher judgment of children's success in the transition to kindergarten. A final unique aspect of this study is the context of a state-wide perspective of teachers' perception of the transition to kindergarten. It may well be that unique systemic issues underlie teachers' choices in the educational practices they choose to employ.

In sum, this study provides a unique examination of teacher and school demographics related to teacher perceptions of the transition to kindergarten. Additionally, the relationship between developmentally appropriate beliefs and practices and perceptions of children's readiness for kindergarten was studied. Exploration of these issues was guided by the following research questions. First, what are kindergarten teachers' perceptions of children's transition to kindergarten? Second, what are the developmentally appropriate beliefs of kindergarten teachers at the beginning of the school year? Third, what are the developmentally appropriate practices of kindergarten teachers at the beginning of the school year? Fourth, are teacher demographics related to (a) beliefs scores, or (b) practices scores? Fifth, are classroom/school demographics related to (a) beliefs scores, or (b) practices scores? Sixth, are teachers' perceptions of children's transition to kindergarten related to (a) developmentally appropriate beliefs, or (b) developmentally appropriate practices? Seventh, what is the relationship between teachers' perceptions of children's transition to kindergarten and teacher demographics? Finally, what is the relationship between teachers' perceptions of children's transition to kindergarten and classroom/school demographics?

CHAPTER III

METHODS

Participants

Study participants included respondents from all waves of a three-phase study, the Utah Kindergarten Transition Practices Study, conducted over the course of the school years from fall 2004 to spring 2007. Each year, kindergarten teachers in approximately one third of Utah school districts were queried. Only the pretests, those surveys completed in the fall of each year of the study, were analyzed for this study. No posttest surveys were considered. Overall, 450 kindergarten teachers' responses were used in this study.

Teacher Characteristics

Teacher participants represent 36 out of the 40 total school districts in Utah. Unfortunately, not all superintendents complied with the request for research within their district. However, 90% of districts and 42% of kindergarten teachers participated in the study. Of interest with regard to this study, only 16.3% of teachers reported on having any sort of specialized training specific to aiding in children's transition to kindergarten.

Of the 450 kindergarten teachers in this study, the majority (92.1%) were Caucasian, with 3.6% reported as Multiple Origins, 2.7% Hispanic, 1.1% Asian, and .5% were Black, not Hispanic. Of the 439 teachers who indicated educational level, 339 (77.2%) had obtained a bachelor's degree, 99 had received a master's degree (22.6%), and one teacher reported having earned a doctorate. Teachers were further asked to

supply information about additional or specialized certifications they had attained. Three hundred ninety-four teachers, or, 87.6% reported earning an Early Childhood license, 72.0% had completed Elementary Education certification, and 7.6% a Special Education license. Additionally, 13.8% had met the qualifications for their ESL endorsement, 9.6% held a preschool certificate, 7.6% had earned their reading endorsement, and 5.1% of kindergarten teachers had earned an education degree. With regard to teaching experience, the range of total years of experience was from 0 (teachers who reported this were in their first year of teaching) to 49 years ($M = 14.31$, $SD = 9.18$). The range of years having taught kindergarten specifically was 0 to 44 ($M = 9.76$, $SD = 7.60$). Number of years teaching below kindergarten level ranged from 0 to 26 ($M = 3.39$, $SD = 4.53$).

Classroom Characteristics

As with the teacher demographics reported above, classrooms representing 36 out of 40 Utah school districts, included urban, suburban, small town, and rural areas. On average, 22.7 ($SD = 4.13$) students were in each classroom, with a range of 1 to 34 children per class. Among the sample, teachers reported the ethnic composition of children as 75.4% non-Hispanic White; 15.9% Hispanic; 2.1% non-Hispanic Black; 2.6% Asian/Pacific Islander; 1.6% American Indian or Native Alaskan; 1.8% Multiple Origins, and .6% Other. About one-fifth (19.6%) of teachers reported having children in their classroom who were eligible for free lunch (M number of children = 4.29, $SD = 7.20$). Mean number of children enrolled in class who qualified for some form of special education services was reported as 1.59 ($SD = 1.93$).

Ethical Considerations

Prior to implementation of this study and distribution of survey packets, IRB approval was sought and obtained from the board at Utah State University. No foreseeable risks were identified.

Procedures

The Utah Kindergarten Transition Practices Study, of which the current study was a part, began by first obtaining a list of each of the school districts within the state of Utah. Through both phone call permission and approval via letter of intent (Appendix A) and follow-up application for some districts, superintendents informed the researchers as to whether their given district would participate in the study.

For those districts in which approval was given, the next procedural step consisted of contacting the kindergarten teachers. Names and addresses for kindergarten teachers, provided by the districts upon approval of the project, were attached to compiled survey packets which were then sent to the teachers within the first 6 weeks of the beginning of the school year. Because not all districts within the state follow the same schedule (some are “year-round” schools), the time of mailing for each district varied slightly.

Within each survey packet, kindergarten teachers found a letter of explanation about what participation in the study entailed, how and when to complete the form and return it in the included pre-paid postage envelope, and assurance that they would obtain a copy of the study’s results (Appendix B). Clearly stated within this letter to teachers were: first, the voluntary nature of the study; second, procedures for how to maintain

anonymity. Teachers developed an individual numerical code that helped researchers track which district the response was from, and which phase of the study they were participating in. Teacher names were not obtained, nor was any other identifying information requested.

Following initial mailing of the teacher packets, two reminder postcards were sent, asking the teachers once again for their participation. The first of the reminders was sent four weeks from the time of first mailing, followed by the second postcard 2 weeks later.

Measures

To investigate teachers' perceptions of children's transition to kindergarten and successful school entry as well as teacher developmentally appropriate beliefs and practices, two instruments were used: the Transition Practices Survey (National Center for Early Development and Learning [NCEDL], 1996) and the Teacher Beliefs and Practices Survey (Burts, Buchanan, & Benedict, 2001). For the purpose of aiding in teacher response, the two measures together comprised a single survey packet (Appendix C).

Transition Practices Survey

This first instrument is designed to gather information pertaining to teacher perceptions and practices in the area of children's transition to kindergarten and school entry. Also sought by way of this survey is information regarding prevalence of problematic issues during the transition process (Rimm-Kaufman et al., 2000). For the

current study, only sections 1 through 3 out of 6 were used from the Transition Practices Survey.

Specific to this research project, the Transition Practices Survey was the means by which important teacher demographics – highest degree obtained, years teaching total and years teaching kindergarten, specialized certifications/endorsements earned – and classroom demographics – rural/small town/suburban/urban location of school, child ethnicity, number of special education children in class, number of children in class qualified to receive free lunch, and total number of children enrolled in a teachers' class – were collected. Also, this survey obtained data as to specific transition problems teachers perceive. Thus, survey questions examined in these analyses include those asking for teacher and classroom characteristics, such as ethnic composition, number of students currently teaching, teacher education and certification/specialization levels, in addition to inquiries about percentage distribution of level of successful school entry, perceptions of specific entry/transition problems, as well as information about children's readiness for kindergarten.

Teacher Beliefs and Practices Survey

Second of the two instruments included in the kindergarten teacher survey packet was the two-part Teacher Beliefs and Practices Survey (Burts et al., 2001). Use of this survey's questions allows researchers to gather insight into teachers' developmentally appropriate beliefs as well as implementation of these beliefs in the classroom, or, developmentally appropriate practices.

Sample questions from Part I in which the teachers responded to 43 items using a Likert-type scale (1 representing “not at all important,” 5 meaning “extremely important”) include:

“It is _____ for activities to be responsive to individual children’s interests.”

“It is _____ that each curriculum area be taught as separate subjects at separate times.”

“A structured reading or pre-reading program is _____ for all children.”

Some items are reverse coded, with a higher number being indicative of more appropriate beliefs. The total of the teachers’ responses in this section makes up their “beliefs score.”

The 30 items in Part II ask teachers to evaluate how often children engage in specific activities within their classroom. The format is similar to Part I, with participants selecting answers based on a Likert-type scale where 1 represents “Almost Never” and 5 indicates “Very Often.” Sample questions include:

“How often do children in your class select from a variety of learning areas and projects (i.e., dramatic play, construction, art, music, science experiences, etc.)?”

“How often do children in your class use manipulatives (e.g., pegboards, Legos, Unifix Cubes)?”

“How often do children in your class engage in experiences that demonstrate the explicit valuing of each other (e.g., sending a card to a sick classmate)?”

Again, a higher score represents more developmentally appropriate practices within the classroom setting. For this study, scores calculated for each teacher for their responses in Part II become their “practices score.”

Reliability

To date, reliability statistics have not been published for the Transition Practices Survey. Cronbach's index of internal consistency was used to examine the reliability of the instruments used in this study, however. The Cronbach's coefficient for the 11 transition problems in question 26 of the Transition Practices Survey was .75.

For the Teacher Beliefs and Practices Survey, reported Cronbach's alphas for the beliefs and practices sections are .88 and .82, respectively (D.C. Burts, personal communication, September 2004). For this study, Cronbach's alphas for the beliefs and practices sections of the Teacher Beliefs and Practices Survey were .83 and .77, respectively.

CHAPTER IV

RESULTS

In this chapter, results for each of the study's eight research questions are presented. Descriptive analyses are provided to illustrate teachers' perceptions of children's transition to kindergarten, as well as beliefs and practices items rated as most and least developmentally appropriate. Correlations, ANOVAs, *t* tests, and chi-square analyses are then provided, where appropriate, to examine the relationships between teacher beliefs and practices and both teacher and classroom/school demographics. Finally, the relationship between teachers' perceptions of children's transition to kindergarten and developmentally appropriate beliefs and practices as well as teacher and classroom/school demographics are explored.

Research Question 1

What are kindergarten teachers' perceptions of children's transition to kindergarten? Teacher responses to questions 25, 26, and 27 from the Transition Practices Survey (National Center for Early Development and Learning [NCEDL], 1996) comprise the data used to answer this first research question. Survey questions 25 and 27 are concerned with the respective percentages of children deemed by teachers as varying in degree of successful entry to kindergarten and an overall estimate of children who are not ready for kindergarten. Question 25 reads, "Based on your experience, approximately what percentage of children who enter kindergarten fall into the following categories? Make sure these numbers total 100%." Teachers responded by selecting a

percentage of those children who experience “very successful entry, virtually no problems; moderately successful entry, some problems, mostly minor; difficult or very difficult entry, serious concerns or many problems.” As indicated in Table 1, over one-fifth ($M = 21.2\%$, $SD = 19.89$) of children were judged by teachers as experiencing a difficult entry into kindergarten. It is interesting to note that the range for this category was 0-100; in other words, some teachers are reporting that none of the children in their class experience difficult entry, while others judge serious concern and difficult entry for *all* of their children.

Examining question 27 yields similar results. Teachers were asked, “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.*” Teachers were then provided a blank line in which they were to enter a percentage reflective of their beliefs about the readiness of their class. The range for responses to this question, answered by 421 teachers, was 1-100%. Teachers reported a mean percentage of 25.2% ($SD = 24.02$) of children as not being ready for kindergarten. Breaking teachers’ responses to question 27 into quartiles indicates that 18.3% of teachers said that at least half of their class was not ready for kindergarten. Further, 7.5% of teachers estimated that at least 75% of their class was not ready for kindergarten.

Survey question 26 ascertains information about the frequency of various problems that teachers may judge as problematic for children upon kindergarten entry. Therefore, frequencies are the chosen descriptive analyses here. The question reads, “Based on your experience, for how many children in a typical class are the following characteristics a problem when they enter kindergarten?” Eleven characteristics were

Table 1

Teachers' Reported Percentages of Children's Levels of Success in Kindergarten Entry

Level of success in entry	<i>N</i>	<i>Range</i>	<i>M (%)</i>	<i>SD</i>
Percentage very successful entry	436	0-100	43.9	30.2
Percentage moderately successful entry	440	1-98	35.9	22.8
Percentage difficult or very difficult entry	424	0-100	21.2	19.9

listed: lack of academic skills; difficulty following directions; difficulty working as part of a group; problems with social skills, getting along with other children, difficulty working independently; difficulty communicating/language problems; lack of any formal preschool experience; highly academic preschool experience; non-academic preschool experience; disorganized home environments; and immaturity. The teachers were instructed to check whether “None” (0), “A few” (1), “About one-fourth of the class” (2), “About half of the class” (3), or “More than half the class” (4), of children had problems with each of the items. For purposes of analyses, the rating categories were combined into a 3-level variable, representing “About one-fourth of the class or fewer,” scored as a 1, “About half of the class,” scored as a 2, and “More than half of the class,” scored as a 3.

Table 2 depicts percentages for teachers' ratings of amount of children in their class for whom the 11 characteristics were problematic. As shown in Table 2, the items perceived by teachers as the most problematic for more of their students were “lack of academic skills,” “difficulty following directions,” “difficulty working independently,”

Table 2

Percentage of Teachers Reporting 11 Characteristics as Being Problematic at School Entry for One-Fourth, One-Half, and More Than One-Half of Class

Characteristic	N	About ¼ of class or less	About ½ of class	More than ½ of class
		n %	n %	n %
Lack of academic skills	379	221 58.3	85 22.4	73 19.3
Difficulty following directions	444	269 60.6	116 25.8	59 13.3
Difficulty working as part of a group	441	313 71.0	85 19.3	43 9.8
Problems with social skills, getting along with other children	444	383 86.3	44 9.9	17 3.8
Difficulty working independently	443	274 61.9	104 23.5	65 14.7
Difficulty communicating/ language problems	391	334 85.4	31 7.9	26 6.6
Lack of any formal preschool experience	441	305 69.2	83 18.8	53 12.0
Highly academic preschool experience	439	350 79.7	50 11.4	39 8.9
Non-academic preschool experience	433	343 79.2	58 13.4	32 7.4
Disorganized home environments	442	354 80.1	52 11.8	36 8.1
Immaturity	408	344 84.3	45 11.0	19 4.7

and “lack of any formal preschool experience.” Those characteristics which teachers did not perceive as a problem for many of the children in their class included: “problems with social skills, getting along with other children,” “difficulty communicating/language problems,” and “immaturity.” It is interesting to note that the percentages for the three items reflecting prior preschool experiences are all judged relatively the same based on the 3-level scale as to the amount of children for whom these experiences are rated as problematic. For example, a “highly academic preschool experience” and not having a “non-academic preschool experience” were rated by teachers as problematic for a “quarter or less” of their class by almost the exact same percentage of teachers, 79.7% and 79.2%, respectively.

Research Question 2

What are the developmentally appropriate beliefs of kindergarten teachers at the beginning of the school year? Data examined in response to Research Question 2 were teacher responses to the beliefs portion of the Teacher Beliefs and Practices Survey (Burts et al., 2001), the second section of the two-part Utah Kindergarten Transition Practices Study questionnaire. The 43 items in the beliefs portion of the survey asked teachers to reflect on their personal beliefs about early childhood education programs. Respondents indicated their beliefs by selecting on a scale of 1-5 how important each of the 43 items was; a choice of 1 regarded the item as “not at all important,” 2 meaning “not very important,” 3 representing “fairly important,” 4 being “very important,” and 5 indicating “extremely important.” Beliefs scores become more appropriate as they approach 5 on the scale, whereas less developmentally appropriate constructs are

represented by the lower numbers on the scale, with 1 being the least appropriate. Fifteen beliefs items were reverse coded to accurately represent DAP.

Table 3 shows the top five (most appropriate) and bottom five (least appropriate) beliefs items as rated by teachers. Interestingly, the ranges for the most appropriate beliefs items varied less than those items on which teachers scored least appropriate, the latter of which all covered the entire 1-5 scoring range. Teachers' beliefs were most appropriate in the inclusion of literacy, fostering self-esteem in children through positive teacher-child interactions, providing daily opportunities to develop social skills with peers, and management of children's behavior through use of limits, problem-solving, redirection, and individualized plans for guiding severe behavior problems.

Areas in which teacher's scored lowest in terms of developmentally appropriate beliefs included having planned activities for outdoor time, as well as the recoded items of using readiness and achievement tests to evaluate child progress, preschool instruction in letter and word recognition, teaching of isolated skills by way of repetition and recitation, and the importance of the teacher talking to the whole group or all of the children concurrently doing the same thing. However, it is interesting to note that even though the repetition and recitation and teacher talking to the whole group items appear on the list of lowest developmentally appropriate beliefs, the mean scores for these items actually reflect appropriate beliefs (3.16, $SD = 1.08$ and 3.44, $SD = .84$, respectively). This indicates that overall, teachers' beliefs about developmentally appropriate practice are generally high.

Table 3

Beliefs Items Rated as Most and Least Developmentally Appropriate by Teachers

Item ^a	<i>N</i>	<i>Range</i>	<i>M</i> ^b	<i>SD</i>
Beliefs—most developmentally appropriate				
It is ____ to read stories to children, individually and/or on a group basis.	446	3-5	4.92	.31
It is ____ for teacher-child interactions to help develop children's self-esteem and positive feelings toward learning.	447	2-5	4.79	.48
It is ____ to provide many daily opportunities for developing social skills (i.e., cooperating, helping, talking) with peers in the classroom.	447	3-5	4.69	.54
It is ____ for strategies like setting limits, problem solving, and redirection to be used to help guide children's behavior.	446	3-5	4.58	.58
It is ____ for teachers to develop an individualized behavior plan for addressing severe behavior problems.	447	2-5	4.57	.61
Beliefs—least developmentally appropriate				
As an evaluation of children's progress, readiness or achievement tests are ____. ^c	444	1-5	2.24	.94
It is ____ that outdoor time have planned activities.	445	1-5	2.39	1.01
Instruction in letter and word recognition is ____ in preschool. ^c	442	1-5	2.55	1.02
It is ____ to focus on teaching children isolated skills by using repetition and recitation (e.g., reciting ABC's). ^c	445	1-5	3.16	1.08
It is ____ for the teacher to talk to the whole group and for the children to do the same things at the same time. ^c	442	1-5	3.44	.84

^a Items rated from 1 (not at all important) to 5 (extremely important)

^b Higher scores indicate more developmentally appropriate beliefs

^c Item is reverse coded

Research Question 3

What are the developmentally appropriate practices of kindergarten teachers at the beginning of the school year? In the practices section of the survey, teachers were to mark how often the children in their class engage in a list of 30 activities, thus reflecting appropriateness of instructional practices. Table 4 presents the highest and lowest practices items, as reported by teachers. The mean is obtained from a Likert-type scale ranging from 1-5, in which 1 represents “almost never (less than monthly)” and 5 indicates “very often (daily).” Therefore, a higher mean is indicative of the activities (such as playing with blocks and manipulatives, exploring science materials, participating in music and movement activities, learning about people with special needs) being carried out more often in the classroom, as well as reflecting more appropriate practices. For the twelve items that were reverse coded for analysis (for example, participate in rote counting, use commercially-prepared phonics activities, get placed in time-out, and participate in whole-class, teacher-directed instruction) a higher mean reflects that the teacher uses these practices in developmentally appropriate ways; i.e., less often.

As reflected in the Table 4, teachers were most appropriate in practices involving music and movement in the classroom, integrating subjects, experimenting with drawing and inventive spelling, use of manipulatives, and displaying children’s artwork. Items for which teachers scored lowest in terms of DAP included time spent in whole-group, teacher-directed instruction, frequent use of rote counting and flashcards, as well as practicing handwriting on lines and assigning children to work in assigned ability-level groupings. Overall, means for individual items on both beliefs and practices items of the

Table 4

Practices Items Rated as Most and Least Developmentally Appropriate by Teachers

Item ^a	<i>N</i>	<i>Range</i>	<i>M</i> ^b	<i>SD</i>
Practices—most developmentally appropriate				
How often do children in your class sing, listen, and/or move to music?	447	1-5	4.61	.66
How often do children in your class do activities that integrate multiple subjects (reading, math, science, social studies, etc.)?	447	1-5	4.41	.76
How often do children in your class experiment with writing by drawing, copying, and using their own invented spelling?	445	1-5	4.36	.72
How often do children in your class use manipulatives (e.g. pegboards, Legos, and Unifix Cubes)?	447	1-5	4.17	.81
How often do children in your class have their work displayed in the classroom?	447	1-5	4.06	1.03
Practices—least developmentally appropriate				
How often do children in your class participate in whole-class, teacher-directed instruction? ^c	444	1-5	1.14	.77
How often do children in your class participate in rote counting? ^c	444	1-5	1.71	.97
How often do children in your class practice handwriting on lines? ^c	445	1-5	2.49	1.18
How often do children in your class use flashcards with ABC's, sight words, and/or math facts? ^c	447	1-5	2.59	1.25
How often do children in your class work in assigned ability-level groups? ^c	441	1-5	2.61	1.22

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

^bHigher scores indicate more developmentally appropriate practices

^cItem is reverse coded

survey support the general finding that practices scores ($M = 3.37, SD = .37$) are lower than beliefs scores ($M = 3.99, SD = .29$).

Research Question 4

Are teacher demographics (years of education, years of experience total, years teaching kindergarten, certifications) related to (a) beliefs scores, or (b) practices scores? Although Research Question 4 is comprised of two parts, data analyses for both beliefs and practices as related to teacher demographics are merged here for sake of comparison, and to allow the reader ease in examining potentially important and interesting trends between the two issues.

To examine the relationship of beliefs and practices scores with the continuous level teacher demographic items (total years teaching experience and years teaching at kindergarten level), Pearson correlation coefficients were calculated. Statistically significant relationships emerged between practices and both total years teaching ($r = .14, p = .003$), and years of experience teaching at the kindergarten level ($r = .14, p = .006$). This means that, as years of experience teaching in general, and teaching kindergarten specifically, increase, developmentally appropriate practices significantly increase as well. No statistically significant relationships between beliefs and years teaching, total or at kindergarten level, were discovered through these analyses.

With regard to years of education as marked by highest degree obtained, *t* test analyses showed a statistically significant difference between the developmentally appropriate practices of the master's/doctorate and bachelor's groups, $t(432) = -4.65, p = .000$. Teachers who had received graduate degrees ($N = 104, M = 3.51, SD = .38$) scored

statistically significantly higher on practices, meaning they were more developmentally appropriate in their implementation of curriculum, than those teachers who held a bachelor's degree alone ($N = 330$, $M = 3.32$, $SD = .36$). Although the calculated beliefs mean for the master's/doctorate group was higher than for the bachelor's group, this difference was not found to be statistically significant.

The relationship between beliefs and practices scores and the categorical level independent teacher demographic variable of teacher certification was analyzed using separate t tests. Results indicated a statistically significant relationship between early childhood licensure and beliefs score, $t(438) = -3.47$, $p = .001$. Teachers who had obtained an early childhood license had a significantly higher beliefs score ($M = 4.01$, $SD = .28$), than those who were not early childhood licensed ($M = 3.87$, $SD = .32$). With regard to practices, the only significant finding among these tests was that which compared the practices scores of teachers holding specialization in preschool teaching, $t(440) = -2.31$, $p = .021$. Those teachers with this certification ($N = 43$) had statistically significantly higher practices scores ($M = 3.49$, $SD = .41$) than those without the preschool certification ($N = 399$, $M = 3.36$, $SD = .36$). Table 5 presents the results of all t tests executed to examine teachers' certifications as related to beliefs and practices.

Research Question 5

Are classroom/school demographics (school location, number of children in class, number of children qualifying for free lunch, number of special education children in class, child ethnicity) related to (a) beliefs scores, or (b) practices scores? Pearson correlation coefficients were calculated to examine the relationship between beliefs and

Table 5

Independent t Test Values Comparing Teachers' Certifications and Beliefs and Practices Scores

Certification	Beliefs		<i>t</i> (df)	Practices		<i>t</i> (df)
	Without certification mean	With certification mean		Without certification mean	With certification mean	
Elementary Education	4.03	3.98	1.53 (438)	3.39	3.36	.66 (440)
Education	3.99	4.02	-.38 (438)	3.36	3.49	-1.60 (440)
Early Childhood	3.87	4.01	-3.47 (438)**	3.36	3.37	-.27 (440)
Special Education	4.00	3.95	.96 (438)	3.36	3.42	-.78 (440)
Preschool	3.99	4.04	-1.13 (438)	3.36	3.49	-2.31 (440)*
Gifted/Talented	3.99	4.04	-.66 (438)	3.37	3.44	-.78 (440)
Reading Endorsement	3.99	4.07	-1.61 (438)	3.37	3.40	-.59 (440)

* $p \leq .05$ ** $p \leq .01$

practices and the continuous level independent variables: number of children in class, number of children in class qualifying for free lunch, and number of special education children enrolled in current class. No statistically significant relationships emerged.

One-way ANOVAs were run to explore the relationship between beliefs and practices and school location (urban, suburban, small town, rural). There was not a statistically significant relationship between beliefs, or practices, and school location. Pearson's correlation coefficients were used to explore whether a relationship between child ethnicity and beliefs or practices scores existed. No statistically significant relationships emerged among these analyses.

Research Question 6

Are teachers' perceptions of children's transition to kindergarten related to (a) developmentally appropriate beliefs, or (b) developmentally appropriate practices? Correlation analyses were run to investigate the relationship between kindergarten teachers' beliefs and practices and children's level of success in kindergarten entry as measured by teachers' responses to survey questions 25. A statistically significant relationship was found between beliefs and teacher report of percentage of children who experience very successful entry into kindergarten ($r = .11, p = .019$). Although this coefficient is not high, the existence of the correlation's significance suggests a trend in the relationship between teachers' beliefs and their judgment of children's success in entering school.

Teachers' beliefs scores and practices scores as related to survey question 27, the percentage of children perceived as not ready for kindergarten, were also investigated

through calculating Pearson's correlation coefficients. No statistically significant correlations emerged. Further investigation of the relationship between teachers' beliefs and practices and the percentage of children judged as not ready for kindergarten was completed by dividing teacher responses to the beliefs section and then the practices section of the survey into quartiles, as an additional way to group and analyze the data. Separate one-way ANOVAs then analyzed the relationship between the resulting quartiles for beliefs and practices and reports of percentage of children not ready for kindergarten. No statistically significant relationships emerged. As illustrated in Table 6, additional examination of the quartile means yields no apparent meaningful trends, as the means of teachers' beliefs and practices scores vary little across their report of percentage of children not ready for kindergarten.

Table 6

Quartile Means and ANOVA Values Comparing Beliefs and Practices and Percentages of Children Judged as Not Ready for Kindergarten

Quartiles for responses to % children not ready	Beliefs			Practices		
	<i>n</i> (%)	(<i>N</i> = 413) <i>Mean</i>	<i>SD</i>	<i>n</i> (%)	(<i>N</i> = 415) <i>Mean</i>	<i>SD</i>
0 – 24%	249 (60.3)	3.98	.29	251 (60.5)	3.36	.36
25 – 49%	87 (21.1)	4.02	.27	87 (21.0)	3.41	.34
50 – 74%	45 (10.9)	4.01	.29	45 (10.8)	3.37	.45
75 – 100 %	32 (7.7)	3.95	.27	32 (7.7)	3.36	.40
		$F(3) = .60, p = .618$			$F(3) = .42, p = .742$	

Separate *t* tests were run to examine the relationship between teachers' beliefs and practices scores by reported frequencies of the question 26 items that represent potential problems children may have at the time of kindergarten entry. The *t* tests were the chosen method of analysis because the rating scale by which teachers reported the frequency of the items as problematic for children in their class were combined into a 2-level variable, representing "less than half" and "half or more." A statistically significant relationship emerged between practices and teachers' responses to question 26, item 9: "non-academic preschool experience," $t(425) = -3.48, p = .001$. This means that there were statistically significant group differences for practices scores between those teachers who judged that for "less than half" of their class not having a "non-academic preschool experience" was problematic and those who rated the item as a problem for "half or more" of their class. Comparing practices means for the "less than half" and "half or more" groups reveals that teachers who were less developmentally appropriate ($M = 3.34, SD = .37$), judged not having a "non-academic preschool experience" as a problem for fewer children. Conversely, those teachers who were more appropriate in their practices ($M = 3.50, SD = .34$) rated not having a "non-academic preschool experience" as a problem for "half or more than half" of their kindergarten class.

There was a statistically significant relationship between the kindergarten teachers' beliefs and responses regarding the number of children for whom social skills and getting along with other children was perceived to be a problem, $t(433) = 2.10, p = .036$. Teachers who reported that "less than half" of their class had this problem had higher average beliefs scores ($M = 4.01, SD = .28$) than those who responded that for "half or more" of their children social skills was an issue ($M = 3.92, SD = .31$). A

statistically significant relationship also emerged for beliefs and teachers' report of the frequency of "immaturity" as a problem for their children, $t(399) = 2.14, p = .033$.

Teachers who rated "less than half" of the class as struggling with immaturity had, on average, higher developmentally appropriate beliefs scores ($M = 4.01, SD = .28$) than those teachers who answered that "half or more" of their class was immature ($M = 3.92, SD = .28$).

Research Question 7

What is the relationship between teachers' perceptions of children's transition to kindergarten and teacher demographics? Pearson's correlation coefficients were calculated to explore the relationship between perceived level of success in kindergarten entry (very successful, moderately successful, or difficult entry) and both total years teaching and years teaching kindergarten specifically. A significant correlation emerged between years teaching kindergarten and percentage of children rated as experiencing moderately successful kindergarten entry ($r = .10, p = .034$). Additionally, statistically significant relationships were found between total years teaching and percent of children rated as experiencing "difficult entry with serious concerns or many problems" ($r = .10, p = .037$), as well as for children perceived as "very successful" upon entry. The latter of these correlations was negative ($r = -.12, p = .015$), again suggesting that the more years they have taught, the more likely teachers are to rate fewer children as experiencing successful entry to school.

The t test analyses were used to assess the relationship between the different levels of success in kindergarten entry and years of education, marked by teachers'

highest obtained degree. No statistically significant relationships emerged. Separate *t* tests were employed to explore whether teacher certification was related to teachers' assessment of children's level of transition success. Teachers with an education license ($n = 22$), as compared with those without this particular certification ($n = 418$), rated, on average, a smaller percentage of children as experiencing moderately successful entry ($M = 25.86, SD = 22.41$ and $M = 36.40, SD = 22.77$; respectively), $t(438) = 2.12, p = .035$. Statistically significant relationships emerged between the percentage of children perceived as experiencing difficult entry and both special education licensure $t(422) = -2.89, p = .004$ and gifted/talented endorsements $t(422) = -2.09, p = .037$. Teachers holding these certifications ($n = 33, M = 30.76, SD = 26.16$; $n = 13, M = 32.54, SD = 18.68$, respectively) rated higher percentages of children as having many problems at school entry than did their peers without these certifications ($n = 391, M = 20.43, SD = 19.09$; $n = 411, M = 20.88, SD = 19.84$, respectively).

Statistical analyses including Pearson's correlations, *t* tests, ANOVAs, and quartile cross-tabulations were employed, where appropriate, to identify any statistically significant relationships between the percentage of children judged as not ready for kindergarten and teachers' level of education (highest degree obtained), or total years teaching and at kindergarten level. No statistically significant findings emerged.

Investigation of the relationship between reported percentages of children not ready for kindergarten and teachers' certifications was conducted by way of separate *t* tests. Those teachers with a special education license were found to be statistically significantly different from teachers without the license, in terms of their judgment of children not ready for kindergarten $t(419) = -3.87, p = .000$, with special education

licensed teachers rating more children as not ready ($M = 41.00$, $SD = 32.49$ and $M = 23.93$, $SD = 22.81$).

The relationship between teachers' perceptions of kindergarten transition, as evaluated through the 11 transition problem items on survey question 26, and teacher demographics was analyzed through both t tests and chi-square tests of statistical significance. For these analyses, teacher responses were broken into two groups — those for whom the item was a problem for “less than half” of the class, and those for whom the item was a problem for “more than half” of the class. For each problem item, t tests were run to compare the mean years of teaching of those who reported the item was a problem for “less than half” of the class with the mean years of teaching of those who reported the item was a problem for “more than half” of the class. A similar procedure was followed for years teaching at the kindergarten level. As illustrated in Table 7 (and shown on Table 11 in Appendix D), total years teaching was found to be significantly related to over half of the problem items: lack of academic skills, difficulty following directions, difficulty working independently, difficulty communicating/language problems, lack of any formal preschool experience, and non-academic preschool experience. In all cases where statistically significant differences between responses to the “less than half” of the class and “half or more” of the class frequencies were found, teachers who rated “half or more” of their class as having problems with the items listed above had, on average, more years of total teaching experience. Years teaching kindergarten was found to be statistically significant for only one item, “non-academic preschool experience.” Those teachers who rated “half or more” of their class as experiencing difficulty with this item were found to have a statistically significantly

Table 7

Statistically Significant Independent t-Test Values Comparing Reported Frequencies of Kindergarten Transition Problems and Teachers' Total Years Teaching and Years Teaching Kindergarten^a

Transition problem	Mean of Total Years Teaching (SD)		t (df)	Mean of years teaching kindergarten (SD)		t (df)
	Less than half of class	Half or more of class		Less than half of class	Half or more of class	
Lack of academic skills	13.13 (8.65)	15.24 (9.50)	-2.22 (367)*			
Difficulty following directions	13.34 (8.55)	15.81 (9.85)	-2.69 (327)**			
Difficulty working as part of a group						
Problems with social skills, getting along with other children						
Difficulty working independently	13.64 (8.84)	15.55 (9.67)	-2.10 (429)*			
Difficulty communicating/ language problems	13.45 (8.87)	17.27 (9.81)	-2.93 (378)**			
Lack of any formal preschool experience	13.71 (8.97)	15.62 (9.52)	-2.01 (427)*			
Highly academic preschool experience						
Non-academic preschool experience	13.77 (9.22)	16.48 (8.73)	-2.47 (420)*	9.33 (7.64)	11.61 (6.91)	-2.52 (411)*
Disorganized home environments						
Immaturity						

^a = See Table 11, Appendix D for complete means and t values

*p ≤ .05

**p ≤ .01

$t(411) = -2.52, p = .012$ higher number of years teaching kindergarten ($M = 11.61, SD = 6.91$) than those who responded to the “less than half” category ($M = 9.33, SD = 7.64$).

In sum, these figures suggest the trend that as number of years teaching, overall and kindergarten specifically, increase, teachers are more likely to judge the children in their kindergarten class as experiencing a number of problems in the transition to kindergarten.

Chi-square analyses testing the relationship between frequency ratings of the 11 kindergarten transition problem items and each of the teacher certifications yielded a few interesting statistically significant relationships. Table 8 depicts the characteristic problems responses for which comparison with teacher certifications were found to be statistically significant (see Table 12 in Appendix D for all calculated chi-square values). These significant findings showed some intriguing trends; therefore, explanation of the results is organized according to each of the teacher certifications.

Special Education License

The relationship between teachers who held a special education license and the characteristic kindergarten transition problems was found to be significant for 8 out of the 11 items. Teachers with special education license were more likely than those without the license to say that “half or more” of their class had problems with “lack of academic skills” $\chi^2(1) = 19.91, p = .000$. While 61.3% of teachers without the license rated “less than half” (38.7% non-certified teachers rated “more than half”) of their class as having a problem with “lack of academic skills,” 78.6% of those licensed in special education judged “half or more” (21.4% of licensed teachers responded “less than half”) of their class as having this problem.

Table 8

Characteristics Reported as Problems for Children Entering Kindergarten, as Statistically Significantly Related to Teachers' Certification(s)^a

Problem characteristic	Certification					
	Education χ^2 (df)	Early childhood χ^2 (df)	Special ed. χ^2 (df)	Preschool χ^2 (df)	Reading χ^2 (df)	ESL χ^2 (df)
Lack of academic skills			16.92*** (1)			12.79*** (1)
Difficulty following directions	4.68* (1)		5.81* (1)			
Difficulty working as part of a group			7.87** (1)			7.98** (1)
Problems with social skills, getting along with others			10.77*** (1)	5.05* (1)		11.38*** (1)
Difficulty working independently			13.58*** (1)			
Difficulty communicating/language problems		5.15* (1)	30.91*** (1)			17.70*** (1)
Lack of any formal preschool experience						17.96*** (1)
Highly academic preschool experience		10.71*** (1)				
Non-academic preschool experience		5.90* (1)			16.65*** (1)	
Disorganized home environments			5.47* (1)			17.57*** (1)
Immaturity			9.17** (1)			

^a = See Table 12, Appendix D for complete χ^2 values

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

There was a statistically significant difference between ways in which teachers with a special education license and teachers without special education license responded to question 26, item 2: “difficulty following directions,” $\chi^2(1) = 5.81, p = .016$.

Teachers with this type of certification reported “more than half” of the children in their class as having “difficulty following directions” with a greater than expected frequency; standard residuals show that they were also less likely than expected to report this item as a problem for “less than half” of their children. Contrastingly, teachers not licensed in special education were more likely than expected to report “less than half” of their children as having difficulty following directions, and therefore did not report this item as a problem for “more than half” of their class as often as expected by chance alone.

Teachers with a special education license responded statistically significantly differently from teachers without a special education license $\chi^2(1) = 7.87, p = .005$ when looking at certification by “difficulty working as part of a group.” While 50% of those with a special education license answered that for “half or more” of their group this item was a problem, 72.7% of teachers without this particular license regarded working as part of a group problematic for “less than half” of their class.

Special education licensed teachers’ responses to question 26, item 4, “problems with social skills, getting along with other children” were found to be statistically significantly different than responses from teachers not licensed in special education, $\chi^2(1) = 10.77, p = .001$, as was the case for item 5, “difficulty working independently,” $\chi^2(1) = 13.58, p = .000$. While 64.3% of teachers not licensed in special education viewed “less than half” of their class as having “difficulty working independently,” a similar number, 67.6%, of teachers who held the license judged this item as problematic for “half

or more” of their class. A large percentage (88.3%) of teachers not licensed in special education perceived “difficulty communicating/language problems” as a problem for “less than half” of their class, while almost half (48.4%) of the special education licensed teachers felt that this was a problem for “half or more” of their students; this relationship was found to be statistically significant, $\chi^2(1) = 30.91, p = .000$.

It is interesting that special education licensure was not found to be a statistically significant factor for any of the items related to children’s prior preschool experience, but for all other transition problems. “Disorganized home environments,” and “immaturity” were the final items for which a relationship to teachers’ licensing in special education was found to be statistically significant, $\chi^2(1) = 5.47, p = .019$ and $\chi^2(1) = 9.17, p = .002$, respectively. For both of these items, a little more than a third of licensed teachers answered that “half or more” of their class experienced difficulty with these characteristics upon school entry, while the vast amount of teachers not licensed in special education rated these items as problematic for fewer (“less than half”) of their children, 81.4% for the disorganized home environments item, and 85.9% for immaturity.

ESL Endorsement

Having obtained an ESL endorsement was also found to be statistically significantly related to many (6 of 11) of the transition problem items. Teachers who held this endorsement were more likely than those without the endorsement to perceive “lack of academic skills” as problematic for a greater percentage of children in their class, $\chi^2(1) = 12.79, p = .000$. The item, “difficulty working as part of a group,” was also found to be statistically significantly related to ESL endorsement, $\chi^2(1) = 7.98, p = .005$.

Additionally, teachers with an ESL endorsement, as compared with teachers without an ESL endorsement, were found to be statistically significantly more likely to rate that half or more than half of the children in their class had “problems with social skills,” $\chi^2 (1) = 11.38, p = .001$.

ESL endorsement was also found to be statistically significantly related to the percentage of children teachers reported as having “difficulty communicating/language problems,” $\chi^2 (1) = 17.70, p = .000$. Cross-tabulations of the “less than half” and “half or more” groups by ESL endorsement demonstrated that teachers holding an ESL endorsement were more likely than expected to rate “half or more” of their class as having language problems, and less likely than expected to judge communication problems for “less than half” of their kindergarteners. Also found to be statistically significant was the relationship between ESL endorsement and “lack of any formal preschool experience,” $\chi^2 (1) = 17.96, p = .000$. While 72.9% of teachers without the endorsement rated that for “less than half” of their class “lack of any formal preschool experience” was a problem, 54.1% of ESL endorsed teachers judged this to be a problem for “half or more” of their class when they entered kindergarten. Finally, “disorganized home environments” was found to be statistically significantly related $\chi^2 (1) = 17.57, p = .000$ to obtaining an ESL endorsement. Forty percent of endorsed teachers responded that for “half or more” of their class “disorganized home environments” was an issue, whereas 16.8% of teachers who had not obtained the endorsement judged this item as a problem for “half or more” of the children in their class.

Early Childhood License

Early childhood licensure was found to be statistically significantly related to a number of kindergarten transition items. For “difficulty communicating/language problems,” an interesting finding emerged, yielding a different trend than all previous findings. Teachers without an early childhood license were found to rate difficulty communicating as problematic for “half or more” of their class with a statistically significantly greater than expected frequency, $\chi^2(1) = 5.15, p = .023$. While only 13.1% of teachers licensed in early childhood responded that “half or more” of their class had problems with communicating/ language, 25.5% of teachers without an early childhood license answered that this item was problematic for “half or more” of their children.

With regard to children’s prior preschool experience, early childhood licensure was found to be statistically significantly related to both transition problem items “highly academic preschool experience,” $\chi^2(1) = 10.71, p = .001$, and “non-academic preschool experience,” $\chi^2(1) = 5.90, p = .015$. Both of these relationships again exhibited the pattern of those teachers without an early childhood license answering with a greater percentage than those who are licensed in early childhood education that “half or more” of their class experienced problems due to a “highly academic preschool experience” or not having “non-academic preschool experience.” Thirty-seven percent of teachers not licensed in early childhood education responded that a “highly academic preschool experience” was a problem for “half or more” of their class, whereas 17.9% of early childhood licensed teachers rated this item as a problem for “half or more” of their class. One-third (33.3%) of non-licensed teachers reported that not having a “non-academic preschool experience” was a problem for “half or more” of their class, while 19.0% of

teachers licensed in early childhood education answered that this was a problem for “half or more” of the children in their class. Very interesting is that the counts and percentages for both of these cross-tabulations are very similar, as the items seem to represent the same problem—that of experiencing a strong push for academics in preschool, rather than having a traditional preschool experience, characterized by social and child-centered opportunities. Reading endorsement was statistically significantly related $\chi^2(1) = 16.65$, $p = .000$ to only one item, not having a “non-academic preschool experience,” as was education license, to “difficulty following directions,” $\chi^2(1) = 4.68$, $p = .031$.

Research Question 8

What is the relationship between teachers’ perceptions of children’s transition to kindergarten and classroom/school demographics? Analyses for Research Question 8 included calculating Pearson’s correlation coefficients for number of children enrolled in class, number of children qualifying for free lunch (calculated as a percent), and number of special education children in class (converted to percentage for purposes of analysis) by responses to percentage of children judged as not ready for kindergarten, as well as perceived level of success in navigating kindergarten entry.

With regard to percent of children judged as not ready for kindergarten, correlations showed a statistically significant, positive correlation ($r = .42$, $p = .000$) between percent of children qualified for free lunch and percentage of children deemed not ready. This correlation suggests that as the amount of children qualified for free lunch increased, teachers rated a higher percentage of their class as not being ready for kindergarten. A statistically significant relationship also emerged between percent of

children judged as not ready for kindergarten and number of special education children ($r = .15, p = .002$). As the percent of special education enrollment increased, so did the percent of children judged by kindergarten teachers as not ready for school.

Correlations for the level of success in kindergarten entry (difficult, moderate, very successful) and percent special education children, percentage of children qualified for free lunch, as well as number of children in class revealed that the percent of children qualified for free lunch was statistically significantly correlated with both percent of children judged as experiencing a very successful entry ($r = -.26, p = .000$) and percent of children judged as experiencing a difficult entry ($r = .43, p = .000$). Taken together, these results suggest that as the percent of children qualifying for free lunch increased, the percent of children perceived as having a successful entry went down, while the percent of children judged as experiencing a difficult entry went up. Percent of special education student enrollment was found to be statistically significantly related to the percentage of the class judged as falling into the difficult entry category ($r = .10, p = .05$). This positive correlation indicates that teachers rated a higher percentage of their class as experiencing difficult entry to kindergarten as the number of children enrolled qualified to receive special education services increased. Total number of children enrolled was not found to be significantly related to either level of success in entry or total percentage of children judged as not ready for kindergarten.

One-way ANOVAs were used to explore the relationship between teachers' responses about children's level of success at time of kindergarten entry, as well as percentage of children judged as not ready, and school location. Urban teachers were found to judge a statistically significantly higher percent ($M = 37.96, SD = 30.85$) of

children as not ready for kindergarten than all other location categories: suburban ($M = 22.60$, $SD = 21.93$), small town ($M = 19.62$, $SD = 18.53$), and rural ($M = 23.32$, $SD = 20.51$), $F(3) = 12.10$, $p = .000$. Further, urban teachers rated a statistically significantly $F(3) = 6.14$, $p = .000$ lower percentage of children experiencing a very successful entry into kindergarten ($M = 32.27$, $SD = 30.67$) than did suburban teachers ($M = 47.64$, $SD = 29.76$), small town teachers ($M = 47.49$, $SD = 29.85$), and rural teachers ($M = 44.94$, $SD = 27.59$). This trend continued as urban teachers judged a statistically significantly higher percentage ($M = 31.80$, $SD = 25.95$) of kindergarten children as experiencing a difficult entry than teachers in all other school locations: suburban ($M = 18.29$, $SD = 17.43$), small town ($M = 18.16$, $SD = 15.36$), and rural ($M = 18.74$, $SD = 18.99$), $F(3) = 11.69$, $p = .000$.

Child ethnicity, as related to total percentage of children judged as not ready for kindergarten and levels of success in kindergarten entry, was evaluated by calculating Pearson's correlation coefficients. Statistically significant correlations emerged for the relationship between percent of children not ready and the percent of American Indian/Native Alaskan children in class ($r = .17$, $p = .007$), as well as for percent Asian enrollment ($r = .14$, $p = .016$), percent Hispanic children ($r = .31$, $p = .000$), and White children ($r = -.21$, $p = .000$). Only the last of these coefficients listed, is negative, meaning that teachers judgment of percentage of children not ready for kindergarten went down (fewer children judged as not ready) as the percentage of White children in their classes increased; for all other child ethnicities listed, the percent of children judged as not ready increased as the numbers for each of these groups increased.

Similarly, as enrollment for both the American Indian/Native Alaskan and Hispanic groups increased, the overall percent of children experiencing difficult entry increased ($r = .21, p = .001$ and $r = .34, p = .000$, respectively). Conversely, an increase of percent White children enrollment was found to be correlated with a decrease in the percent of children judged as having a difficult entry ($r = -.20, p = .000$). Negative correlations between percent of children judged as experiencing a successful entry and each of the child ethnicity groups were found statistically significant for the Asian ($r = -.12, p = .033$), Black ($r = -.16, p = .006$), and Hispanic ($r = -.22, p = .000$) groups, meaning that, as percent of enrollment for each of these populations increased, teachers judgments of percent of children experiencing a very successful kindergarten entry decreased. Only one significant correlation was found for the “moderately successful entry” responses as related to child ethnicity: as percent of Black children enrolled increased, percent of children judged as experiencing moderately successful entry increased as well ($r = .13, p = .027$).

Classroom/School Demographics as Related to Transition Problems

The t tests were used to analyze the relationship between reported frequencies of the 11 kindergarten transition problem items and the continuous level child demographic variables: total number of children in class, percent of special education children in class, and percent of children in class who qualify for free lunch. Teacher responses were broken into two groups: those who rated the item as a problem for “less than half” of their class, and those who responded that the item was a problem for “more than half” of their class. For each item, t tests were run to compare the mean number of total children

in class of those who reported the item as a problem for “less than half” of their class with the mean number of total children in class of those who reported the item was a problem for “more than half” of their class. Similar procedures were followed for the analyses of percent of special education children and percent of children who qualified for free lunch.

Number of Children Qualified for Free Lunch

Table 9 displays the statistically significant *t*-test values (complete table in Appendix D, Table 13), and demonstrates the trend that the number of children qualifying for free lunch was statistically significantly different in classes where teachers responded that “less than half” of the children had a problem with the item, as compared with classes where teachers judged “half or more” of their children as having difficulty, with the exception of one item: not having a “non-academic preschool experience.” A “highly academic preschool experience” was the only significant item for which the mean number of children who qualified for free lunch was statistically significantly higher in the “less than half” than in the “half or more” group; for all other statistically significant items, the mean number of children qualified to receive free lunch was higher in the group where teachers responded that “half or more” of their class had problems.

Number of Special Education Children Enrolled

Table 9 shows that special education enrollment was also a factor in teachers’ judgment of transition problems. For all items where statistically significant relationships emerged, the mean number of special education children was higher in the group where teachers responded that “half or more” of their class experienced problems.

Table 9

Statistically Significant Independent t-Test Values Comparing Reported Frequencies of Kindergarten Transition Problems and Number of Total Children in Class, Number of Special Education Children, Number of Children Qualifying for Free Lunch^d

Problem characteristic	Number of total children in class	Number of special education children in class	Number of children in class qualifying for free lunch
Lack of academic skills		$t(183) = -2.30^{*ac}$	$t(213) = -6.53^{*ac}$
Difficulty following directions	$t(274) = -2.15^{*bc}$	$t(201) = -3.03^{***ac}$	$t(313) = -3.32^{***ac}$
Difficulty working as part of a group		$t(137) = -2.71^{***c}$	$t(179) = -4.79^{***ac}$
Problems with social skills, getting along with others			$t(70) = -4.47^{***ac}$
Difficulty working independently		$t(198) = -2.72^{***c}$	$t(281) = -4.49^{***ac}$
Difficulty communicating/language problems		$t(57) = -2.66^{***c}$	$t(65) = -6.76^{***ac}$
Lack of any formal preschool experience			$t(177) = -7.72^{***ac}$
Highly academic preschool experience			$t(169) = 2.90^{**bc}$
Non-academic preschool experience			
Disorganized home environments			$t(103) = -7.77^{***ac}$
Immaturity		$t(65) = -2.65^{***c}$	$t(76) = -4.50^{***ac}$

^a = Mean for "half or more" group is higher than "less than half" mean

^b = Mean for "less than half" group is higher than "half or more" mean

^c = Non-equal variance estimate used

^d = See Table 13, Appendix D for complete *t* test values

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

Total Number of Children in Class

The total number of children enrolled in a teachers' class did not make a statistically significant difference in teachers' judgment of transition problem frequency, with the exception of one item: "difficulty following directions." Interestingly, a lower average number of children were enrolled in the group where teachers' judged "more than half" of their class as having difficulty following directions.

Child Ethnicity

Table 10 shows the statistically significant results for the individual *t* tests that were run to examine the relationship between the reported frequencies of the 11 kindergarten transition problem items and child ethnicity (see Table 14, Appendix D for complete *t* test values). For the percentage of White children in class, in all cases where there were statistically significant differences between the "less than half" and "half or more" ratings of children as having difficulty, a higher mean percentage of white children were enrolled in the classes for which teachers rated "less than half" of their class as having difficulty with the items. Because the majority (75.4%) of children in the study were reported to be "White," all other "non-White" ethnicities are considered minority populations. With one exception, in all cases of statistically significant differences between frequency groups where minority ethnicities were considered, the "half or more" rating was given in classes where there were higher averages of minority children. The exception was for the "highly academic preschool experience" item, as related to percentage of Hispanic children enrolled; a statistically significantly higher number of

Table 10

Statistically Significant Individual t-Test Values for Reported Frequencies of Kindergarten Transition Problems as Related to Children's Ethnicity^d

Problem characteristic	American Indian/ Native Alaskan	Asian/Pacific Islander	Black, not Hispanic	Hispanic	White, not Hispanic	Other	Multiple origins
Lack of academic skills		$t(172) = -3.02^{***c}$	$t(111) = -2.91^{***c}$	$t(160) = -6.03^{***nc}$			$t(71) = -2.08^{*nc}$
Difficulty following directions		$t(311) = -2.32^{*n}$		$t(189) = -3.11^{***nc}$			
Difficulty working as part of a group		$t(310) = -3.31^{***n}$		$t(214) = -4.20^{***nc}$	$t(404) = 2.62^{**b}$		
Problems with social skills, getting along with others				$t(385) = -3.13^{**n}$	$t(406) = 2.24^{*b}$		
Difficulty working independently			$t(118) = -2.29^{*nc}$	$t(182) = -2.92^{***nc}$			
Difficulty communicating/language problems		$t(40) = -3.02^{***nc}$	$t(257) = -2.80^{**n}$	$t(342) = -7.31^{***n}$	$t(356) = 3.87^{***b}$		
Lack of any formal preschool experience		$t(308) = -2.24^{*n}$	$t(294) = -2.34^{*n}$	$t(249) = -6.20^{***nc}$	$t(404) = 3.37^{**b}$		
Highly academic preschool experience				$t(258) = 4.13^{***bc}$		$t(141) = 2.30^{*bc}$	
Non-academic preschool experience		$t(70) = -2.14^{*nc}$					
Disorganized home environments			$t(81) = -2.41^{*nc}$	$t(116) = -6.16^{***nc}$	$t(405) = 3.82^{***b}$		$t(42) = -2.05^{*nc}$
Immaturity				$t(80) = -3.62^{***nc}$	$t(373) = 2.13^{*b}$		

^a = Mean for "half or more" group is higher than "less than half" mean

^b = Mean for "less than half" group is higher than "half or more" mean

^c = Non-equal variance estimate used

^d = See Appendix G for complete table showing all calculated *t* values

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

Hispanic children were enrolled in classes where teachers rated “less than half” of their children as having difficulty due to a highly academic preschool experience.

School Location

The relationship between school location and the responses to the frequency of the 11 kindergarten transition problem items was evaluated by running chi-square tests. Urban teachers were repeatedly found to report statistically significantly higher numbers of children in the “half or more” category as experiencing transition problems (for all but the highly academic and non-academic preschool experience items) and fewer than expected numbers of children in the “less than half” classification as having difficulty with the characteristic problems. Among the suburban teachers, a statistically significantly lower than expected count was reported for “half or more” of the class as experiencing “difficulty with communicating/language problems.” Whereas for the transition item, “disorganized home environments,” urban teachers were more likely to rate “half or more” of their class as experiencing this problem, both suburban and small town teachers were found to report a statistically significantly lower than expected number of children in the “half or more” level as having issues attributed to disorganized home environments. All statistics reported for urban school location within Research Question 8 analyses suggest the trend that teachers within this type of setting perceive many children as not being ready for kindergarten, and facing specific transition problems as they navigate the process of entering kindergarten.

CHAPTER V

DISCUSSION

The purpose of this study was to explore kindergarten teachers' perceptions of children's success in the transition to kindergarten, as well as to assess teachers' developmentally appropriate beliefs and practices. Additionally, this study sought to determine if there were any relationships between beliefs and practices and teacher demographics, classroom/school demographics, as well as teachers' perceptions of children's transition to kindergarten.

Data analyzed for the purposes of this study were 450 Utah kindergarten teachers' responses to the Utah Kindergarten Transition Practices Survey. Responses to the two-part survey were analyzed to address the study's eight research questions. Results of the study's findings are herein discussed, organized by research question. Implications of, and limitations to, this study are then examined, followed by suggestions for future research.

Research Question 1

The first research question of this study asked, "What are kindergarten teachers' perceptions of children's transition to kindergarten?" Teachers' reported percentages of children's level of success in kindergarten entry indicated that about a fifth of children were perceived as having had difficult or very difficult entries into kindergarten. This percentage is higher than that found in the nationally representative Rimm-Kaufman et al. (2000) study (16%), which also employed use of the Transition Practices Survey to

obtain this information. However, teachers in the current study reported about a third of children experiencing moderately successful kindergarten entry, consistent with what Pianta and Cox reported. While over half of the children in the Pianta and Cox study were perceived to have experienced a successful entry, numbers in the current study reflect that just over 40% of children were judged by their teachers as experiencing this level of success. Additionally, an alarming quarter of children were perceived by teachers as not being ready for kindergarten at the time of entry, with some teachers reporting that their entire class was not ready for kindergarten. These findings reflect the fact that children enter kindergarten with a myriad of previous experiences, which may or may not provide them with the competencies and skills to match teachers' expectations about what it means to be ready for kindergarten. Thus, the need for teachers, parents, administrators, and legislators to better communicate definitions of, and expectations for, kindergarten readiness is brought to light. A better match between "ready children" and "ready schools" (Graue, 1992; Nelson, 2004) will better serve children in successfully navigating this transitional period, as the success of early school experiences is likely to affect success in later schooling (Bredekamp & Copple, 1997; Pianta, 2007; Rimm-Kaufman et al.).

When asked about specific transition problems, over one-third of the teachers answered that "about half" or "more than half" of the class had problems with lack of academic skills, difficulty following directions, and difficulty working independently at the time of kindergarten entry. "Immaturity," "problems with social skills, getting along with other children," and "difficulty communicating/language problems" were the problems lowest in prevalence. Considering the heightened focus on performance

expectations and academic success in kindergarten (Rimm-Kaufman et al., 2000), and that children's experiences prior to entering kindergarten are as diverse as the children themselves, it is not surprising that some children are judged as more successful than others in meeting the demands of the contemporary kindergarten structure. In the current era of accountability, it is telling that "lack of academic skills" was the problem reported as most prevalent for children entering kindergarten, with 41.7% of teachers rating this as a problem for half or more of their class.

Of further consideration is that "teacher's expectations of children at kindergarten entry influence their judgments of children's problems" (Rimm-Kaufman et al., 2000, p. 150). Teachers are likely to feel burdened when they perceive that children enter kindergarten with difficulty following directions and working independently, and have problems due to lack of academic skills, among other obstacles. Adding to the pressure to prepare children for the academic requirements of first grade, teachers may feel it obligatory and necessary to help children overcome these problems in order to achieve academic standards. This phenomenon demonstrates the pressure teachers are feeling as a result of increasingly rigorous academic performance expectations produced in large part from the enactment of "No Child Left Behind" (Fromberg, 2003; Goldstein, 2007; Hyun, 2003). Commenting on the effect that increased academic standards are having on teachers' expectations, Rimm-Kaufman and associates remark, "We can expect that teachers' judgments will show greater discrepancies between teachers' expectations and children's competencies" (p. 150).

It is clear, then, that teachers make instructional choices in a complex system, including their own expectations, children's family and prior school experiences, and

within the context of administrative program expectations. In order to provide a successful entry to kindergarten for children, it is important that teachers work to align the elements of this system, while also recognizing that there is no single definition of “readiness” (Graue, 1992; Rimm-Kaufman et al., 2000). The variance of teachers’ definitions of readiness is demonstrated in this study’s reported ranges of percent of children judged as not ready for kindergarten, as well as perceived levels of success in entry. It is unlikely that the teachers who rated none of their children as ready for kindergarten differ entirely in beliefs and practices from those who rated 100% of their class as ready; these teachers probably have different parameters of what they expect in terms of “readiness.” It is suggested, then, that in addition to the goals set forth by the National Education Goals Panel that all children come to school ready to learn, systemic changes be made to provide schools who are ready for kindergarten children, of all levels of development.

As stated above, the characteristic kindergarten transition problem rated as the least prevalent in this study was “immaturity,” reported by a total of 11% of teachers as problematic for “about half” of their class, with about 5% of teachers answering this item to be an obstacle for “more than half” of their class. This finding suggests that teachers are less concerned with children’s maturity level, and more cognizant of ability to perform skills that are academic in nature, reflecting the push to achieve more “back to basics” type skills. It is ironic that, based on this finding, teachers do not connect children’s level of maturity with their ability to perform academic skills. Stipek and Byler (1997) noted that when teachers report not being free to implement the program

they would like, nearly all would prefer to implement a program that is less-structured and more child-centered.

Not only is basic skills instruction a result of pressure to achieve well on high stakes tests mandated by NCLB, but also a response to pressure from parents. Both Knudsen-Lindauer and Harris (1989) and Stipek and Byler (1997) reported that parents rate skills that are academic in nature as higher priority for kindergarten readiness, than other areas of whole-child readiness, such as autonomy and creativity gained through exploratory processes. Rather than continue to view kindergarten readiness from a perspective that views the purpose of kindergarten as a dichotomy, comprised of either social or academic goals, it is suggested that teachers, administrators, parents, and policy makers recognize that readiness is not something a child possesses, but experiences, and that children need to enhance both academic and socio-emotional abilities. Policies and practices need to enhance, not restrict, the transition experience for young children (Goldstein, 2007; McClelland et al., 2006).

Research Question 2

“What are the developmentally appropriate beliefs of kindergarten teachers at the beginning of the school year?” Teachers in this study had a mean beliefs score of almost 4 on a scale of 5, with “5” being very appropriate, indicating that, overall, the teachers were very developmentally appropriate in their beliefs. Beliefs scores ranged from 3 to 5. Teacher responses for the most developmentally appropriate beliefs items showed that teachers believed the items to be, on average, either “very important” or “extremely important” to early childhood programs. Items for which teachers held the most

appropriate beliefs included the importance of daily literacy in the classroom, opportunities for positive interactions with both teachers and peers, and measures concerning positive methods for addressing children's behavioral needs. These items which teachers believed to be of great importance to early childhood programs demonstrate that teachers believe, regardless of requirements from external sources to implement otherwise, that these activities are important in the development of young children. The items rated most appropriate by the teachers covered a variety of developmental areas, showing that teachers believe in teaching from the whole-child perspective that is foundational to the principles of developmentally appropriate practice (Bredekamp & Copple, 1997).

Deal and White (2006) acknowledge the importance of using teacher education programs to better prepare novice teachers for the reality of putting their developmentally appropriate beliefs into practice, as many new teachers are easily influenced by external factors, including the pressure to achieve well on achievement tests. Teacher training programs are therefore encouraged to train candidates in ways that will help them navigate their own transition into teaching positions in elementary schools, and help them to be advocates for their beliefs about developmentally appropriate practice. As demonstrated in the 2004 work of Nelson and Smith, early childhood teachers can, in fact, benefit from training in how to adopt developmentally appropriate practices that meet their beliefs.

The items for which teachers reported having least appropriate beliefs included the use of readiness/achievement tests, having planned activities for outdoor time, and the appropriateness of letter and word recognition in preschool. There were two other items

included in the “least developmentally appropriate” list, although the means for these items reflect appropriate beliefs. These items represented beliefs about the focus of skill practice involving repetition and recitation, and whole-group instruction/activities. Two perspectives are suggested in considering these findings. First, the fact that two of the five “least developmentally appropriate” beliefs teachers held were actually considered high, or developmentally appropriate, indicates that teachers in this study can be regarded as having very developmentally appropriate beliefs. Second, the beliefs for which teachers were not considered developmentally appropriate are likely shaped by the current era of accountability, which often leaves teachers facing time constraints. Hence, it is understandable that teachers would not consider planning outside activities as a top priority in the face of all else they have to do in order to prepare their students to achieve academically. Explicitly responding to their beliefs about achievement tests, which are characteristic of NCLB mandates, teachers’ responses yielded a mean of 2.24 for this item, after reverse coding. On average, 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 this would be the item for which teachers were least developmentally appropriate in their beliefs, in light of the current high-stakes testing period being experienced throughout the nation. It is also interesting that the range of responses for this item was 1-5, indicating that large variation exists among teachers’ beliefs about the appropriateness of achievement tests. It may be that these tests are becoming so commonplace, that some teachers have accepted them as a normal element of their teaching. Others may express the belief that these evaluations are important, because the measured “success” of, and continued funding for, their school depends on test scores,

which reflect teachers' effectiveness in teaching test material. Pressure to perform well on the tests may circumscribe teachers' beliefs about the appropriateness of achievement tests. Because teachers' practices are associated with their beliefs, it is useful, then to measure the values and systems by which teachers filter the factors that influence their instructional methods, and then to evaluate the relationship between the constructs. Therefore, it is to the evaluation of teachers' developmentally appropriate practices that discussion now turns.

Research Question 3

“What are the developmentally appropriate practices of kindergarten teachers at the beginning of the school year?” Consistent with the literature (e.g., Bruns & Mogharreban, 2007; Parker & Neuharth-Pritchett, 2006), teachers' reported practices were found to be lower than their beliefs scores, $M = 3.37$, $SD = .37$ and $M = 3.99$, $SD = .29$, respectively. The discrepancy between the two is a matter of a large volume of continuing study, as researchers seek to ascertain factors that limit teachers from fully implementing what they believe to be best practice. Parker and Neuharth-Pritchett purport that both perception of instructional practices, and the types of practices used by teachers, are influenced by external factors, such as the high-stakes testing and accountability period that is currently transforming the nature of schooling in the United States. Goldstein (2007) has suggested that many kindergarten teachers are finding it difficult to balance their commitment to developmentally appropriate practices, while also fulfilling mandates to teach standards. It is further suggested by Goldstein and others (e.g., Chen & McNamee, 2006; Parker & Neuharth-Pritchett) that kindergarten

has, can, and must adapt to changing educational priorities, and that it is possible for teachers to respond to heightened accountability expectations, while also maintaining developmentally appropriate practices associated with the fundamental purposes of kindergarten.

The most developmentally appropriate practices of teachers in the current study seem to reflect that teachers are indeed implementing appropriate instructional practices within their classrooms, where they are required to also comply with academic standards. For example, teachers responded that the children in their classrooms participated in music and movement activities at least 2-4 times a week, if not daily. This was also true for integration of multiple subjects, opportunities to experiment with writing and invented spelling, using manipulative materials, and display of children's artwork in the classroom. As some of these items are avenues for teaching academic skills, these findings suggest that in some areas where teachers are focusing on academics, they are doing so in appropriate ways.

Teachers were least developmentally appropriate in the practice of using whole-class/teacher-directed instruction, rote counting, practicing handwriting on lines, flashcards, and assigning children to work in ability-level groups. All of these items occurred at least weekly. It is likely that teachers are employing these methods to fulfill prescribed academic curriculum requirements. Teachers may also be using these practices to appease school officials and parents, assuring children's ability to perform on academic tasks.

In sum, as kindergarten becomes more academic in nature, teachers feel pressure to abandon techniques of learning through play and exploration, in turn adopting more

didactic methods, focusing on instruction of basic skills. As pointed out by Parker and Neuharth-Pritchett (2006), while teachers who endorse more a teacher-directed style of practice do not feel as much pressure from upper grade teachers (as more child-centered teachers are reported to do) these teachers also do not feel that they have much control over their curriculum. Again this points to the dilemma of whether teachers feel free to implement DAP in the face of being obligated to meet proscribed academic curricula. Policy makers and teacher education programs have need to examine ways in which teachers can be supported in effectively teaching mandated academic standards, presenting the curriculum in ways that support the social, emotional, physical, and intellectual growth of the children in their classes (Goldstein, 2007).

Research Question 4

The fourth research question posed in this study was: “Are teacher demographics (years of education, years of experience total, years teaching kindergarten, certifications) related to (a) beliefs scores, or (b) practices scores? Data analyses showed positive correlations for both years teaching total and specifically at the kindergarten level as related to practices. This trend supports evidence offered by Wilcox-Herzog (2004), which illuminates the positive relationship between general education and specialized training and appropriate practices. In contrast, Wilcox-Herzog found that experience alone was found to be a negative predictor of sensitive teacher behaviors, therefore suggesting that years of experience need to be combined with education, including specialized training, to best impact outcomes of children’s development. Teachers in the current study who had obtained advanced degrees (master’s/doctorate) were found to be

statistically significantly more developmentally appropriate in their practices than those who reported only a bachelor's degree. This finding supports the trend that with specialized training, teachers may become more prepared to implement appropriate practices. Teachers who had obtained a bachelor's degree alone were still found to be developmentally appropriate in their practices ($M = 3.32$, $SD = .36$), highlighting the importance of college education programs in advancing the knowledge of DAP.

It is interesting that no statistically significant relationships emerged between beliefs and years teaching, either total or at kindergarten level. This invites the question as to whether teachers' beliefs are strongly grounded in their personal value systems, and thus not likely to change much with experience, or perhaps that teachers' beliefs are not as susceptible to change within teaching contexts as their practices may be. Beliefs, whether developmentally appropriate or inappropriate, may matter little when teachers are not free to implement those beliefs in the face of scripted curriculum mandates.

Examining the findings for beliefs and practices as related to teacher certification identifies teachers with an early childhood license as having statistically significantly higher beliefs scores than those without this particular certification, and teachers with specialization in preschool teaching were found to have statistically significantly higher practices scores than those without this specialization. Perhaps these teachers are more aware of the characteristics and needs of preschool- and kindergarten-aged children, as a result of their specialized training, and are therefore more likely to maintain and practice more appropriate expectations for this age group. It is important for school administrators and policy makers, both locally and nationally, to likewise comprehend how young children learn, in order to provide support for meaningful curriculum.

Research Question 5

Research Question 5 asked, “Are classroom/school demographics (school location, number of children in class, number of children qualifying for free lunch, number of special education children in class, child ethnicity) related to (a) beliefs scores, or (b) practices scores? None of the analyses examining these relationships yielded statistically significant results. This is very interesting, as teachers’ perceptions of children’s transition to kindergarten were found to be significantly related to classroom/school demographics, as discussed later in this chapter. Intuitive sense leads one to believe that the greater proportions of children in the classroom qualifying for free lunch, for example, the more likely teachers’ practices would be affected, as they devote time and attention to these children, as they likely face a number of risk factors associated with qualifying for these services. In sum, it is interesting that classroom/school demographics were not significantly associated with beliefs or practices—variables associated with teachers’ personal values and decisions—but with teachers’ perceptions of transition problems children experience.

Research Question 6

Research Question 6 asked, “Are teachers’ perceptions of children’s transition to kindergarten related to (a) developmentally appropriate beliefs, or (b) developmentally appropriate practices?” Teachers who reported a higher percentage of children as experiencing a successful or very successful entry into kindergarten were more developmentally appropriate in their beliefs, whereas teachers who judged a lower

percentage of children as having a successful entry had less appropriate beliefs.

Maintaining more developmentally appropriate beliefs is likely associated with teachers' knowledge of how young children learn, which is in turn reflected in teachers' expectations. Better knowing what to expect from young children's capacities, teachers are then more likely to perceive fewer children as experiencing difficulty in the kindergarten entry process. Teachers with more developmentally appropriate beliefs could also have better perspective on what issues constitute a "difficult entry, characterized by many problems."

Teachers' perceptions of children's kindergarten transition as reflected in the frequency judgments of the 11 transition problem items as related to practices was found to be statistically significant for teachers' responses pertaining to lack of a "non-academic preschool experience." Interestingly, teachers who rated this item as problematic for fewer children ("less than half" the class) were less developmentally appropriate in their practices than those teachers who reported not having a "non-academic preschool experience" as a problem for "half or more" of their class. These findings seem to indicate that teachers implementing more appropriate practices in their classrooms are not as concerned with children's prior exposure to academics, but instead recognize the value of having participated in a typical child-oriented, social setting. Perhaps teachers who are less appropriate are those not concerned with children's level of academics in preschool, as they feel they can quickly teach children the academic skills they need to know through teacher-directed, rote, recitation and repetition exercises.

Reported frequencies for "social skills, getting along with other children" and "immaturity" were both significantly related to teachers' beliefs; teachers who perceived

“less than half” of their class as having these problems had higher average beliefs scores than the teachers who answered social skills and immaturity as problems for “half or more” of their children. Again, teachers who are considered more developmentally appropriate are likely to have more appropriate expectations of children’s behaviors, and therefore see some social problems or issues of immaturity as typical, rather than necessarily problematic, for this age group.

Research Question 7

Research Question 7 asked: “What is the relationship between teachers’ perceptions of children’s transition to kindergarten and teacher demographics?” Rimm-Kaufman and colleagues emphasized the importance of examining this relationship when they state: “Teachers’ characteristics may influence their expectations, past experiences, and relationships with children, which in turn may affect their judgment of children’s problems” (2000, p.151).

Total years teaching was found to be positively correlated with the percent of children perceived as experiencing a difficult entry into kindergarten, and negatively correlated with the percentage of children rated as experiencing a successful entry. Perhaps the longer teachers have taught, the more changes they have seen in the structure of kindergarten, and they have come to view more children as unprepared to meet the new academic standards of kindergarten. The specific entry problems found to be rated as problematic for “half or more” of the class by teachers with more years of total teaching experience were: lack of academic skills, difficulty following directions, difficulty working independently, difficulty communicating/language problems, lack of

any formal preschool experience, and not having a non-academic preschool experience. The nature of these particular items connotes that experienced teachers have come, in large part, to emphasize academically-oriented transition skills. However, considering that teachers with more years of experience teaching kindergarten rated “half or more” of their class as having difficulty due to not having a “non-academic preschool experience” suggests that veteran teachers recognize the value of social and behavioral skills learned in a non-academic preschool environment.

Various teacher certifications were found to be significantly related to children’s level of success in kindergarten transition. Having a special education license or gifted/talented endorsement was associated with distinguishing a higher number of children as having a difficult entry. Teachers licensed in special education, compared with teachers who did not have this license, were also statistically significantly more likely to judge a higher percent of children as not ready for kindergarten. Having received training for these specializations, certified teachers may be more apt to look for, and subsequently distinguish, children as having problems that impede their success in school. Specific problems rated as an obstacle for “half or more” of their class by special education licensed teachers included: “lack of academic skills, difficulty following directions, difficulty working as part of a group, problems with social skills, difficulty working independently, difficulty communicating/ language problems, disorganized home environments,” and “immaturity.”

None of the preschool experience items were significantly related to having a special education license. Perhaps these teachers were not concerned as much with what

the children had experienced in the past, but based their judgments solely on what they saw the children as being able to do, or not do, at the time of kindergarten entry.

An ESL endorsement was also significantly related to more than half of the transition problem items. Data analyses detected that overlap in the teachers having a special education certificate and those who had obtained their ESL endorsement occurred for only six teachers. One can assume, then that these patterns are due to systemic issues reflecting the beliefs of teachers trained in these areas of specialization, rather than a mere overlap in the data.

Comparing teachers who were licensed in early childhood education with those who were not, non-licensed teachers reported more frequent difficulty with both highly academic and not having a non-academic preschool experiences and communicating/language for children entering kindergarten. These results are interesting and intuitive, as one would expect teachers trained specifically on the needs and characteristics of young children to regard a child-centered preschool experience as more important than one focused on academics. Finally, the relationship between teachers who had received their reading endorsement and judgment of not having a “non-academic preschool experience” demonstrates that receiving some of these specific certifications may lead teachers to better understand the abilities of preschool- and kindergarten-aged children, and therefore have appropriate expectations for the skills children should possess at school entry. It is important that teachers recognize the influence that their background exerts upon their judgment of children’s success in school.

Research Question 8

The final research question asked in this study was “What is the relationship between teachers’ perceptions of children’s transition to kindergarten and classroom/school demographics?” Whereas total number of children in class was not found to be significantly statistically related to either perceived level of success in kindergarten entry or percent of children judged as not ready for kindergarten, positive correlations emerged for number of special education children enrolled and number of children qualifying for free lunch. As each of these figures increased, so did teachers’ perceptions of the number of children not ready for school when they entered. Additionally, as the percentage of both of these groups of children increased, teachers reported a higher number of their children as experiencing a difficult entry.

To more closely investigate the relationship between percentage of children not ready for kindergarten and the number of children qualifying for free lunch, as well as the total number of children enrolled and number of special needs children in class, teachers’ responses to percent not ready were broken into quartiles and further analyzed with regard to each of the classroom variables. ANOVA results showed that a significantly higher number of special needs children were enrolled in the quartile reflecting teachers’ responses that 50-74% of their class was not ready than in either the 1-24% or 25-49% quartiles. Similarly, the mean percent of children qualifying for free lunch in the 50-74% and 75-100% quartiles was found to be significantly higher than the number of children in the 1-24% and 25-49% quartiles. None of these findings is surprising; it is expected

that as the proportion of children with special needs and/or various risk factors (such as qualifying for free lunch) increases, teachers feel strained to practically meet child needs.

Analyses examining the relationship between reported frequencies of the 11 kindergarten transition problems and total number of children in class, number of special needs children, and number of children qualifying for free lunch revealed that overall, teachers rated “half or more” of the class as having problems with all but one of the transition items, and in all of these instances but one (highly academic preschool experience), a higher number of children qualified for free lunch was in the “half or more” group, rather than the “less than half” category. Number of special education children was higher in the “half or more” group for 6 of the 11 transition problem items.

Another main group of findings for Research Question 8 was that of the relationship between teachers’ perceptions of children’s transition to kindergarten and school location (urban/suburban/small town/rural). Throughout this batch of tests, urban teachers were consistently found to report a higher, versus lower, percentage of children as not ready for kindergarten, and more children as experiencing a difficult entry into kindergarten, than teachers in all other school locations. For specific transition problems, urban teachers were again found to report “half or more” of their class as experiencing problems with all items but “highly academic preschool experience” and not having a “non-academic preschool experience.” This interesting finding suggests that teachers in urban schools perceive academic experiences prior to kindergarten entry as beneficial at school entry. Significant findings among other school location types were such that teachers from these areas reported lower than expected numbers of children as

experiencing given problems. In sum, these findings support the results of Rimm-Kaufman and colleagues' 2000 study, wherein teachers' reports of school entry problems varied as a function of school metropolitan status, among other variables.

Rimm-Kaufman and associates remarked that "teachers' perceptions of kindergarten adjustment problems vary as a function of certain structural variables (poverty, minority composition, and metropolitan status)," and further, "Urban schools are more likely to possess concomitants of risk, such as larger class sizes, greater density of at-risk children, and fewer and less intensive transition to kindergarten practices" (2000, p. 161). While the current study may face slightly different systemic issues due to the state-wide nature of the study, as compared with the nationally representative Rimm-Kaufman and colleagues research, these statements still offer help in interpreting this study's results. Further, these comments suggest the need to implement more widespread, quality kindergarten transition practices.

The final evaluation that was undertaken for research question 8 was that pertaining to child ethnicity as related to teachers' perceptions of children's transition to kindergarten. Because, as Rimm-Kaufman and others (2000) have suggested, little is known about the relation between classroom demographic features and teachers' perceptions and their implications for school success during the transition to kindergarten, this study sought to uncover some of the interactions of these constructs. Findings with regard to teachers' perceptions of children's transition and child ethnicity are consistent with the early childhood literature, in that (1) the teachers were mostly European Americans (White), (2) teachers' report of school entry problems varied based on school minority population, and (3) nonminority teachers rated a higher percentage of

difficult adjustments and specific transition problems for minority groups (Chen & McNamee, 2006; Rimm-Kaufman et al.).

Percent Asian, American Indian/Native Alaskan, and Hispanic children were significantly and positively related to teachers' judgment of the percent of children not ready for kindergarten. Likewise, the percent of children reported as experiencing a difficult entry to kindergarten increased as enrollment for the American/Indian/Native Alaskan and Hispanic groups rose. Conversely, for both of these constructs, as the percent of non-minority (White) children enrolled increased, the percent of children judged as not ready for school decreased, and furthermore, fewer children were judged as experiencing a difficult entry to kindergarten.

Where child ethnicity was examined as related to the 11 kindergarten transition problems, overall findings again support the literature cited above, as the rating of "half or more" of the class as experiencing difficulty with a number of items was given in classes where a higher number of minority children were enrolled. Chen and McNamee (2006) purported that teachers need to understand diverse learners — not only their cultural background, but also their individual needs and interests — rather than interpreting differences as deficits, and attributing poor performance to cultural, familial, or linguistic differences. Teaching is most likely to be effective when teachers have an understanding of children's individual abilities, regardless of their ethnic background. The issues highlighted in this section present yet another "fit" between teachers' expectations and children's competencies for which teachers must strive in order to provide developmentally appropriate environments, particularly at the time of school entry.

Limitations

There are a few limitations of the present study that require attention. First, teachers' developmentally appropriate beliefs and practices were assessed by way of self-report. The complexity of the multi-faceted foundation of teachers' beliefs is difficult to measure. However, because the format of the beliefs portion of the survey is inherently subjective, the results are taken as valid reflections of teachers' beliefs for the purposes of this study. Next, the practices section of the survey also asks teachers to self-report their actual classroom practices. Nelson and Smith (2004) substantiated the claim that teachers lean toward more developmentally appropriate practices when answering in a self-report format. Without verifying teachers' responses by way of actual classroom observation, it is unknown to what extent teachers' reports of their instructional practices are valid.

Another limitation to this study is that, although considered a state-wide project, not all superintendents complied with the request for distribution of the survey packets within their district. One such district is the largest in the state, representing 210 kindergarten teachers. Participation by these districts likely would have increased the sample size. However, this study's return rate, 42%, was consistent with the large-scale, nationally representative Rimm-Kaufman and others' (2000) study, 36%. As the largest of the districts included urban schools, inclusion of these teachers would have increased representation of this school location, and moreover, the generalizability of the study's findings to Utah as a whole. Because the results reported within this study represent the views of kindergarten teachers within the systemic parameters of Utah's education

policies, application of the study's implications outside of this single state setting are extremely limited.

A final limitation to this study is that because numerous tests were conducted with these data, the likelihood of committing Type I errors is high; it is possible that some of the findings were spurious. However, all statistically significant findings are reported and examined for important trends regarding teachers' perceptions of the transition to kindergarten.

Implications

There are numerous implications of this research. The first is that, clearly, the transition to kindergarten is an important process in the lives of young children. The issues presented in this study suggest a greater need for communities to anticipate the discontinuity that often exists between prior schooling/care experiences and the transition to kindergarten, and to provide resources to aid in positive merging of the two. The fact that teachers are perceiving a number of transition problems for a fair amount of children upon kindergarten entry again demonstrates the shift in experiences that children have as they leave preschool and home into the structure of kindergarten, and suggests the need for teachers to receive training for ways in which they can enhance children's transition to kindergarten. Also, if parents, preschool teachers, and child care professionals are made aware of the problems teachers are perceiving children as having during this period, they may become more conscious of the need to assist children in developing specific skills before they approach kindergarten transition.

Another implication of this study's findings is the poor "fit" between children's perceived competencies and teachers' expectations. Graue (1993) suggested that "as curricular demand increases, more children are found to be unready due to the tasks rather than inherent child characteristics" (p. 70). This view encourages teachers to better align the demands of their classroom with the needs and abilities of individual children, rather than viewing "readiness" as a one-dimensional construct, as a single definition of what it means to be "ready for kindergarten" is difficult to ascertain. Additionally, upper-grade teachers, principals, and district officials are called on to examine the pressures placed on kindergarten teachers to "ready" children for the academic rigors of first grade; doing so may lead to avenues of alleviating some of the pressure for kindergarteners to be "ready" upon school entry.

Many of the specific problems teachers report children as experiencing have to do with independence and the ability to perform well in the more academically structured environments teachers are feeling pressured to maintain. But, it is important for teachers to take the time to teach skills of self-regulation, following directions, and getting along socially in order to effectively teach academic skills. The concept of "ready schools" therefore becomes important, rather than simply expecting children to be ready for school. McClelland and associates' 2006 study focused on the importance of children's early learning-related skills as a measure of later academic success. They suggest that functional skills such as listening, inhibitory control, planning, responsibility, cooperation, social competence, and self-regulation comprise a set of skills (i.e., "learning-related skills") that are important for children to achieve academically. McClelland and colleagues note that research has demonstrated that children entering

school without these skills are at greater risk for difficulty in both social relationships and academic achievement throughout their schooling. Learning-related skills are consistent with principles of developmentally appropriate practice, and are learned in DAP settings. It is important, then, to teach early learning-related skills as they are foundational to school success (Bredekamp & Copple, 1997; McClelland et al., 2006).

The discrepancy between teachers' beliefs about developmentally appropriate practice and their actual implementation of these practices is the basis for the next implication of this study. Reasons why teachers deviate from their beliefs about best practice are extremely complex. However, research has addressed a few contributors to the issue. First, it is important for teachers to be aware that their beliefs about the purpose of early childhood education may differ from those of the parents with whom they work. The implication also exists for teacher training programs to address the connection between teacher beliefs and practices, and aid teachers in developing the skills to effectively implement developmentally appropriate practices. Teachers also need to develop the skills to discuss with parents the importance of implementing DAP. In a period of high-stakes testing and accountability, it is understandable that parents desire for their children to perform well; they may not be aware of the benefits of a child-centered approach to education. As parents become aware of the benefits of DAP, they can exert their influence in gaining the support of administration and policy makers. Because kindergarten policies vary across states, it is important for parents, teachers, principals, and district administrators to be involved in policy decisions at the state level.

Research has documented that teachers do not always believe they are free to implement practices consistent with their beliefs. It becomes important, then, for parents,

school and district administrators, and upper-grade teachers to recognize the influence they have on kindergarten teachers' instructional methods, and work to find ways in which curriculum expectations can be met through developmentally appropriate avenues. The findings of this study also highlight the need for teachers to develop effective schooling experiences for increasingly diverse student populations, and seek to achieve learning standards by linking individual child needs and abilities with the process of learning.

Suggestions for Future Research

The findings of this study were obtained from a sample of 450 Utah kindergarten teachers. Future study should seek to replicate or expand on these findings with a larger sampling frame. One of the limitations of this study was the self-report nature of teachers' implementation of developmentally appropriate practice; observation of teachers' actual practices is suggested. In order to verify teachers' actual instructional practices through trained observation, detailed observation could additionally assess the contexts in which teachers are making decisions about their practices, noting external sources of pressure to stray from DAP in effort to meet curriculum mandates. Additional insight could also be provided by asking teachers, through either interview or survey, what they feel are the sources, if any, that influence their choices about implementing DAP, and to what extent they feel they are free to implement a program that is consistent with their beliefs about how young children learn. Identifying sources of teacher stress is important in seeking steps to alleviate the pressures they feel. Of further interest for additional study would be to continue exploration of avenues by which teachers are able

to meet accountability standards in developmentally appropriate ways, potentially providing more insight into the discrepancy between beliefs and practices. Finally, longitudinal study could examine education outcomes of children who are perceived as not ready for kindergarten.

Conclusion

This study was an exploration of kindergarten teachers' perceptions of children's success in kindergarten entry, as well as an assessment of teachers' developmentally appropriate beliefs and practices with regard to early childhood education. The purpose of this study also included investigation of the relationship between teachers' beliefs and practices and: teacher demographics, classroom/school demographics, and teachers' perceptions of children's transition to kindergarten. The relationship between teachers' perceptions of the transition to kindergarten and both teacher and classroom/school demographics was also examined.

Teachers perceived one fifth of kindergarten children as experiencing a difficult entry to kindergarten, with 7.5% of teachers estimating that at least 75% of their class was not ready for kindergarten when they entered. Children were reported to enter kindergarten with a number of specific problems, including "difficulty following directions" and "difficulty working independently," with "lack of academic skills" reported as the highest in prevalence.

Overall, teachers' beliefs scores were higher than their practices scores (though both were considered developmentally appropriate) with reading to children and providing movement and music experiences items scored as the most developmentally

appropriate beliefs and practices, respectively. Items for which teachers were considered to be least developmentally appropriate were beliefs about the use of readiness/achievement tests and the practice of whole-class, teacher-directed instruction.

Higher practices scores were found to be associated with more years of total teaching experience and years teaching kindergarten specifically, as well as with having obtained an advanced degree (master's/doctorate). Teachers with an early childhood certificate had higher beliefs scores than teachers without this certificate, and teachers who specialized in preschool experience had higher practices scores than those without the preschool specialization. Interestingly, classroom/school demographics were not significantly related to teachers' developmentally appropriate beliefs or practices.

Percentage of children who were perceived to experience a very successful entry into kindergarten was positively correlated with teachers' DAP beliefs. Teachers who judged "half or more" of their kindergarten class as having problems with social skills and immaturity had lower beliefs than those teachers who rated "less than half" of their class as facing these obstacles. Teachers with higher DAP were found to judge "half or more" of their class as experiencing difficulty due to not having a "non-academic preschool experience" as compared with lower DAP teachers.

More years total teaching experience was related to an increase in the number of children perceived as experiencing a difficult kindergarten entry, and fewer children being perceived as successful in entry. Also, as years of total teaching experience increased, teachers reported a number of kindergarten transition problems for "half or more" of their class. Teachers with more years of kindergarten teaching experience rated a higher number of children experiencing problems from not having a "non-academic

preschool experience.” Teachers who had obtained a special education or early childhood license, as well as those who had earned their ESL endorsement consistently rated “half or more” of their class as having a number of transition problems.

Percentage of special education children enrolled, number of children qualifying for free lunch, and percentage of minority children enrolled were related to teachers’ general report that as the proportion of children in these groups increased, teachers perceived more children as experiencing difficult school entry, or not being ready for kindergarten. Teachers with higher proportions of special education and children qualified for free lunch, as well as minority children in their class responded “half or more” of their class as experiencing the majority of the transition problem items more often than teachers with fewer numbers of these children.

Urban school location was related to teachers’ perceptions of children’s kindergarten entry such that teachers teaching in urban schools reported few children as experiencing successful entry, and a large number of children as having a difficult entry to kindergarten, as well as a large percent of children as not ready for kindergarten. Teachers in urban districts repeatedly reported, more so than teachers in all other school location categories, “half or more” of their class as experiencing specific problem in the transition to kindergarten.

This study highlights the complex nature of both the contexts within which teachers make instructional choices, and the process of kindergarten entry for young children. Indeed, this is a time of transition, not only for the children beginning their years of formal schooling, but also for teachers, as current kindergarten is characterized by qualitative shifts in purpose. Teachers clearly need support in implementing

appropriate practices and creating learning environments that best support the diverse needs and competencies of the children they teach. Kindergarten teachers, parents, teachers in upper grades, administrators, legislators, and policy makers must work to provide avenues for meeting accountability standards through appropriate teaching methods. While many arguments are made about the purpose of kindergarten and the best practices for deriving successful achievement outcomes, what remains clear is that early school experiences matter—setting children on a trajectory of success or failure that persists over many years, long after the transition to kindergarten.

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APPENDICES

Appendix A: Letter to Superintendent

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

April 7, 2006

Dear Superintendent :

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 Salt Lake City 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 30 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 Salt Lake City 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.

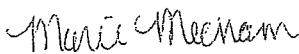
No other contact will be made with kindergarten teachers, and all teacher contact information will be destroyed at the conclusion of the study.

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

Utah State UNIVERSITY

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.

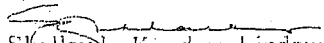
Your participation would entail filling out and returning a packet of two questionnaires within the last 6 weeks of the school year. It will take you approximately 30 minutes to complete the packet.

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,


Shelley L. Knudsen Lindauer, Ph.D.

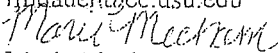
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Appendix C: Transition Practices Survey/Teacher Beliefs and Practices Survey Packet

Utah Kindergarten Transition Practices Study


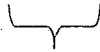


Dear Kindergarten Teacher:

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:

			
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.

2

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?
 1. Urban 2. Suburban 3. Small Town 4. Rural
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 kindergarten 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 | _____ 5. White, not Hispanic |
| _____ 2. Asian/Pacific Islander | _____ 6. Other |
| _____ 3. Black, not Hispanic | _____ 7. Multiple Origins |
| _____ 4. Hispanic | |
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) | _____ 4. Special Education |
| _____ 2. Education (K-12) | _____ 5. Preschool |
| _____ 3. Early Childhood/Primary Grades | _____ 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 →

4

20. 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 →

6

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 →

7

34. Who currently has responsibility for practices related to entry into kindergarten in your school?

Check all that apply.

- | | |
|---|---|
| <input type="checkbox"/> 1. District | <input type="checkbox"/> 7. School counselor |
| <input type="checkbox"/> 2. Principal | <input type="checkbox"/> 8. Family specialist |
| <input type="checkbox"/> 3. K-teacher | <input type="checkbox"/> 9. Behavioral specialist |
| <input type="checkbox"/> 4. Preschool teacher | <input type="checkbox"/> 10. Primary resource teacher |
| <input type="checkbox"/> 5. Parent | <input type="checkbox"/> 11. Don't know |
| <input type="checkbox"/> 6. Community | <input type="checkbox"/> 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.

- | | |
|--|--|
| <input type="checkbox"/> 1. Low income | <input type="checkbox"/> 5. Children with disabilities/special needs |
| <input type="checkbox"/> 2. Racial/ethnic minority | <input type="checkbox"/> 6. Children who transfer into the school |
| <input type="checkbox"/> 3. Limited English speaking | <input type="checkbox"/> 7. All children |
| <input type="checkbox"/> 4. No pre-K experience | |

Continue to next page →

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)

	Not at all Important	Not very Important	Fairly Important	Very Important	Extremely Important
2. As an evaluation of children's progress, readiness or achievement tests are _____.	1	2	3	4	5
3. To plan and evaluate the curriculum, teacher observation is _____.	1	2	3	4	5
4. It is _____ for activities to be responsive to individual children's interests.	1	2	3	4	5
5. It is _____ for activities to be responsive to individual differences in children's levels of development.	1	2	3	4	5
6. It is _____ for activities to be responsive to the cultural diversity of students.	1	2	3	4	5
7. It is _____ that each curriculum area be taught as separate subjects at separate times.	1	2	3	4	5
8. It is _____ for teacher-child interactions to help develop children's self-esteem and positive feelings toward learning.	1	2	3	4	5

Continue to next page →

	Not at all Important	Not very Important	Fairly Important	Very Important	Extremely Important
9. It is _____ for teachers to provide opportunities for children to select many of their own activities.	1	2	3	4	5
10. It is _____ to use one approach for reading and writing instruction.	1	2	3	4	5
11. Instruction in letter and word recognition is _____ in preschool.	1	2	3	4	5
12. It is _____ for the teacher to provide a variety of learning areas with concrete materials (writing center, science center, math center, etc.).	1	2	3	4	5
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).	1	2	3	4	5
14. It is _____ for children to work individually at desks or tables most of the time.	1	2	3	4	5
15. Workbooks and/or ditto sheets are _____ in my classroom.	1	2	3	4	5
16. A structured reading or pre-reading program is _____ for all children.	1	2	3	4	5
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.	1	2	3	4	5
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.	1	2	3	4	5
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.	1	2	3	4	5
20. It is _____ for teachers to regularly use punishments and/or reprimands when children aren't participating.	1	2	3	4	5

Continue to next page →

	Not at all Important	Not very Important	Fairly Important	Very Important	Extremely Important
21. It is _____ for teachers to develop an individualized behavior plan for addressing severe behavior problems.	1	2	3	4	5
22. It is _____ for teachers to allocate extended periods of time for children to engage in play and projects.	1	2	3	4	5
23. It is _____ for children to write by inventing their own spelling.	1	2	3	4	5
24. It is _____ for children to color with pre-drawn forms.	1	2	3	4	5
25. It is _____ to read stories daily to children, individually and/or on a group basis.	1	2	3	4	5
26. It is _____ for children to dictate stories to the teacher.	1	2	3	4	5
27. It is _____ that teachers engage in on-going professional development in early childhood education (e.g., attend professional conferences, read professional literature).	1	2	3	4	5
28. It is _____ for children to see and use functional print (telephone book, magazines) and environmental print (cereal boxes, potato chip bags).	1	2	3	4	5
29. It is _____ to provide many daily opportunities for developing social skills (i.e., cooperating, helping, talking) with peers in the classroom.	1	2	3	4	5
30. It is _____ that books, pictures, and materials in the classroom include people of different races, ages, and abilities and both genders in various roles.	1	2	3	4	5
31. It is _____ that outdoor time have planned activities.	1	2	3	4	5
32. It is _____ for parents/guardians to be involved in ways that are comfortable for them.	1	2	3	4	5

Continue to next page →

	Not at all Important	Not very Important	Fairly Important	Very Important	Extremely Important
33. It is _____ for strategies like setting limits, problem solving, and redirection to be used to help guide children's behavior.	1	2	3	4	5
34. It is _____ for teachers to integrate each child's home culture and language into the curriculum throughout the year.	1	2	3	4	5
35. It is _____ for teachers to solicit and incorporate parent's knowledge about their children for assessment, evaluation, placement, and planning.	1	2	3	4	5
36. 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.	1	2	3	4	5
37. 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.	1	2	3	4	5
38. 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.	1	2	3	4	5
39. It is _____ that teachers maintain a quiet environment.	1	2	3	4	5
40. It is _____ to provide the same curriculum and environment for each group of children that comes through the program.	1	2	3	4	5
41. It is _____ to focus on teaching children isolated skills by using repetition and recitation (e.g., reciting ABC's).	1	2	3	4	5
42. It is _____ to follow a prescribed curriculum plan without being distracted by children's interests or current circumstances.	1	2	3	4	5
43. It is _____ to plan activities that are primarily just for fun without connection to program goals.	1	2	3	4	5

Continue to next page →

12

FOR THE FOLLOWING QUESTIONS
PLEASE THINK ABOUT HOW OFTEN CHILDREN IN YOUR CLASSROOM DO THE
FOLLOWING ACTIVITIES

Instructional Practices Survey

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

HOW OFTEN DO CHILDREN IN YOUR CLASS:	Almost Never (less than monthly)	Rarely (monthly)	Sometimes (weekly)	Regularly (2-4 times a week)	Very Often (daily)
1. build with blocks	1	2	3	4	5
2. select from a variety of learning areas and projects (i.e., dramatic play, construction, art, music, science experiences, etc.)	1	2	3	4	5
3. have their work displayed in the classroom	1	2	3	4	5
4. experiment with writing by drawing, copying, and using their own invented spelling	1	2	3	4	5
5. play with games, puzzles, and construction materials (e.g., Tinker Toys, Bristle Blocks)	1	2	3	4	5
6. explore science materials (e.g., animals, plants, wheels, gears, etc.)	1	2	3	4	5
7. sing, listen, and/or move to music	1	2	3	4	5
8. do planned movement activities using large muscles (e.g., balancing, running, jumping)	1	2	3	4	5
9. use manipulatives (e.g. pegboards, Legos, and Unifix Cubes)	1	2	3	4	5

Continue to next page →

HOW OFTEN DO CHILDREN IN YOUR CLASS:		Almost Never (less than monthly)	Rarely (monthly)	Sometimes (weekly)	Regularly (2-4 times a week)	Very Often (daily)
10.	use commercially-prepared phonics activities	1	2	3	4	5
11.	work in assigned ability-level groups	1	2	3	4	5
12.	circle, underline, and/or mark items on worksheets	1	2	3	4	5
13.	use flashcards with ABCs, sight words, and/or math facts	1	2	3	4	5
14.	participate in rote counting	1	2	3	4	5
15.	practice handwriting on lines	1	2	3	4	5
16.	color, cut, and paste pre-drawn forms	1	2	3	4	5
17.	participate in whole-class, teacher-directed instruction	1	2	3	4	5
18.	sit and listen for long periods of time until they become restless and fidgety	1	2	3	4	5
19.	have the opportunity to learn about people with special needs (e.g., a speaker or character in a book)	1	2	3	4	5
20.	receive rewards as incentives to participate in classroom activities in which they are reluctant participants	1	2	3	4	5
21.	see their own race, culture, language reflected in the classroom	1	2	3	4	5
22.	get placed in time-out (i.e., isolation, sitting on a chair, in a corner, or being sent outside of the room)	1	2	3	4	5
23.	experience parents reading stories or sharing a skill or hobby with the class	1	2	3	4	5
24.	engage in child-chosen, teacher-supported play activities	1	2	3	4	5

Continue to next page →

14

HOW OFTEN DO CHILDREN IN YOUR CLASS:

	Almost Never (less than monthly)	Rarely (monthly)	Sometimes (weekly)	Regularly (2-4 times a week)	Very Often (daily)
25. draw, paint, work with clay, and use other art media	1	2	3	4	5
26. solve real math problems using real objects in the classroom environment that are incorporated into other subject areas	1	2	3	4	5
27. get separated from their friends to maintain classroom order	1	2	3	4	5
28. engage in experiences that demonstrate the explicit valuing of each other (e.g., sending a card to a sick classmate)	1	2	3	4	5
29. work with materials that have been adapted or modified to meet their needs	1	2	3	4	5
30. do activities that integrate multiple subjects (reading, math, science, social studies, etc.)	1	2	3	4	5

Continue to next page →

Comments or Reactions:

Continue to next page →

THANK YOU FOR PARTICIPATING IN THIS SURVEY!

WE APPRECIATE YOUR HELP!

PLEASE RETURN THE COMPLETED FORM.

Appendix D: Complete Analyses Tables

Table 11

Independent t-Test Values Comparing Reported Frequencies of Kindergarten Transition Problems and Teachers' Total Years Teaching and Years Teaching Kindergarten

Transition problem	Mean of total years teaching (<i>SD</i>)		<i>t</i> (df)	Mean of years teaching Kindergarten (<i>SD</i>)		<i>t</i> (df)
	Less than half of class	Half or more of class		Less than half of class	Half or more of class	
Lack of academic skills	13.13 (8.65)	15.24 (9.50)	-2.22 (367)*	9.92 (7.58)	9.23 (7.19)	.87 (359)
Difficulty following directions	13.34 (8.55)	15.81 (9.85)	-2.69 (327)**	9.48 (7.33)	10.16 (7.93)	-.90 (421)
Difficulty working as part of a group	14.01 (9.14)	14.94 (9.17)	-.96 (427)	9.70 (7.50)	9.84 (7.73)	-.18 (418)
Problems with social skills, getting along with other children	14.04 (9.04)	15.80 (9.82)	-1.39 (430)	9.55 (7.42)	10.83 (8.45)	-1.21 (421)
Difficulty working independently	13.64 (8.84)	15.55 (9.67)	-2.10 (429)*	9.49 (7.47)	10.39 (7.84)	-1.17 (420)
Difficulty communicating/ language problems	13.45 (8.87)	17.27 (9.81)	-2.93 (378)**	9.54 (7.31)	10.00 (8.08)	-.43 (370)
Lack of any formal preschool experience	13.71 (8.97)	15.62 (9.52)	-2.01 (427)*	9.63 (7.42)	9.94 (7.90)	-.40 (418)
Highly academic preschool experience	14.50 (9.18)	13.79 (9.14)	.64 (425)	9.76 (7.47)	10.06 (8.05)	-.32 (416)
Non-academic preschool experience	13.77 (9.22)	16.48 (8.73)	-2.47 (420)*	9.33 (7.64)	11.61 (6.91)	-2.52 (411)*
Disorganized home environments	13.90 (8.89)	15.97 (10.13)	-1.88 (428)	9.83 (7.56)	9.84 (7.81)	-.01 (419)
Immaturity	14.11 (9.21)	15.39 (9.49)	-.10 (394)	9.77 (7.63)	9.72 (7.66)	.05 (387)

* $p \leq .05$

** $p \leq .01$

Table 12

Characteristics Reported as Problems for Children Entering Kindergarten, as Related to Teachers' Certification(s)

Problem characteristic	Certification					
	Education X^2 (df)	Early childhood X^2 (df)	Special ed. X^2 (df)	Preschool X^2 (df)	Reading X^2 (df)	ESL X^2 (df)
Lack of academic skills	.12 (1)	2.92 (1)	16.92*** (1)	1.82 (1)	1.70 (1)	12.79*** (1)
Difficulty following directions	4.68* (1)	.15 (1)	5.81* (1)	.45 (1)	.55 (1)	2.43 (1)
Difficulty working as part of a group	1.59 (1)	.20 (1)	7.87** (1)	.27 (1)	2.25 (1)	7.98** (1)
Problems with social skills, getting along with others	1.31 (1)	.45 (1)	10.77*** (1)	5.05* (1)	2.98 (1)	11.38*** (1)
Difficulty working independently	.29 (1)	.18 (1)	13.58*** (1)	.02 (1)	2.19 (1)	3.20 (1)
Difficulty communicating/language problems	.23 (1)	5.15* (1)	30.91*** (1)	.09 (1)	1.62 (1)	17.70*** (1)
Lack of any formal preschool experience	.00 (1)	.18 (1)	.95 (1)	.37 (1)	.34 (1)	17.96*** (1)
Highly academic preschool experience	.79 (1)	10.71*** (1)	.00 (1)	1.03 (1)	.00 (1)	3.19 (1)
Non-academic preschool experience	.05 (1)	5.90* (1)	.09 (1)	.26 (1)	16.65*** (1)	.03 (1)
Disorganized home environments	3.37 (1)	.67 (1)	5.47* (1)	.34 (1)	.07 (1)	17.57*** (1)
Immaturity	.43 (1)	1.53 (1)	9.17** (1)	1.28 (1)	.14 (1)	.05 (1)

* $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

Table 13

Independent t-Test Values Comparing Reported Frequencies of Kindergarten Transition Problems and Number of Total Children in Class, Number of Special Education Children, Number of Children Qualifying for Free Lunch

Problem characteristic	Number of total children in class	Number of special education children in class	Number of children in class qualifying for free lunch
Lack of academic skills	$t(251) = -.90^c$	$t(183) = -2.30^{*ac}$	$t(213) = -6.53^{*ac}$
Difficulty following directions	$t(274) = -2.15^{*bc}$	$t(201) = -3.03^{*ac}$	$t(313) = -3.32^{*ac}$
Difficulty working as part of a group	$t(176) = .03^c$	$t(137) = -2.71^{*ac}$	$t(179) = -4.79^{*ac}$
Problems with social skills, getting along with others	$t(68) = .46^c$	$t(63) = -1.94^c$	$t(70) = -4.46^{*ac}$
Difficulty working independently	$t(277) = 1.47^c$	$t(198) = -2.72^{*ac}$	$t(281) = -4.49^{*ac}$
Difficulty communicating/language problems	$t(60) = 1.47^c$	$t(57) = -2.66^{*ac}$	$t(65) = -6.76^{*ac}$
Lack of any formal preschool experience	$t(212) = .95^c$	$t(438) = -.35$	$t(177) = -7.72^{*ac}$
Highly academic preschool experience	$t(430) = .69$	$t(436) = .24$	$t(169) = 2.90^{*bc}$
Non-academic preschool experience	$t(424) = .18$	$t(430) = -.82$	$t(429) = -1.21$
Disorganized home environments	$t(110) = .98^c$	$t(106) = -1.11^c$	$t(103) = -7.77^{*ac}$
Immaturity	$t(69) = 1.37^c$	$t(65) = -2.65^{*ac}$	$t(76) = -4.50^{*ac}$

^a = Mean for "half or more" group is higher than "less than half" mean

^b = Mean for "less than half" group is higher than "half or more" mean

^c = Non-equal variance estimate used

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

Table 14

Individual t-Test Values for Reported Frequencies of Kindergarten Transition Problems as Related to Children's Ethnicity

Problem characteristic	American Indian/ Native Alaskan	Asian/Pacific Islander	Black, not Hispanic	Hispanic	White, not Hispanic	Other	Multiple origins
Lack of academic skills	$t(94) = -1.69^c$	$t(172) = -3.02^{***c}$	$t(111) = -2.91^{***c}$	$t(160) = -6.03^{***c}$	$t(143) = 1.31^c$	$t(147) = .15$	$t(71) = -2.08^{*c}$
Difficulty following directions	$t(111) = -1.51^c$	$t(311) = -2.32^{*n}$	$t(296) = -1.26$	$t(189) = -3.11^{***c}$	$t(161) = .17^c$	$t(165) = -.28$	$t(72) = -1.17^c$
Difficulty working as part of a group	$t(83) = -1.18^c$	$t(310) = -3.31^{***n}$	$t(297) = -.48$	$t(214) = -4.20^{***c}$	$t(404) = 2.62^{**b}$	$t(164) = -.59$	$t(188) = -.04$
Problems with social skills, getting along with others	$t(34) = -1.48^c$	$t(310) = -1.41$	$t(297) = -1.83$	$t(385) = -3.13^{**n}$	$t(406) = 2.24^{*b}$	$t(165) = -.26$	$t(188) = .08$
Difficulty working independently	$t(98) = -1.66^c$	$t(311) = -1.32$	$t(118) = -2.29^{*c}$	$t(182) = -2.92^{***c}$	$t(155) = .01^c$	$t(166) = .62$	$t(189) = -.84$
Difficulty communicating/language problems	$t(31) = -1.68^c$	$t(40) = -3.02^{***c}$	$t(257) = -2.80^{**n}$	$t(342) = -7.31^{***n}$	$t(356) = 3.87^{***b}$	$t(148) = -1.59$	$t(169) = -1.60$
Lack of any formal preschool experience	$t(267) = .72$	$t(308) = -2.24^{*n}$	$t(294) = -2.34^{*n}$	$t(249) = -6.20^{***c}$	$t(404) = 3.37^{**b}$	$t(163) = .46$	$t(187) = -.67$
Highly academic preschool experience	$t(266) = -.72$	$t(307) = 1.21$	$t(294) = .60$	$t(258) = 4.13^{***bc}$	$t(401) = -.69$	$t(141) = 2.30^{*bc}$	$t(187) = .54$
Non-academic preschool experience	$t(261) = .55$	$t(70) = -2.14^{*c}$	$t(288) = -1.08$	$t(375) = .27$	$t(395) = .47$	$t(163) = -.84$	$t(187) = -.40$
Disorganized home environments	$t(55) = -1.50^c$	$t(81) = -1.50^c$	$t(81) = -2.41^{*c}$	$t(116) = -6.16^{***c}$	$t(405) = 3.82^{***b}$	$t(166) = -.03$	$t(42) = -2.05^{*c}$
Immaturity	$t(35) = -.96^c$	$t(45) = -1.57^c$	$t(270) = -1.37$	$t(80) = -3.62^{***c}$	$t(373) = 2.13^{*b}$	$t(157) = -.04$	$t(28) = -1.60^c$

^a = Mean for "half or more" group is higher than "less than half" mean

^b = Mean for "less than half" group is higher than "half or more" mean

^c = Non-equal variance estimate used

$p \leq .05$

$p \leq .01$

$p \leq .001$