

5-11-2012

Kindergarten Teachers' Knowledge and Perceptions of Early Learning-Related Skills and Their Relationship to Academic Achievement

Kathryn M. Powell
Georgia State University

Follow this and additional works at: http://scholarworks.gsu.edu/cps_diss

Recommended Citation

Powell, Kathryn M., "Kindergarten Teachers' Knowledge and Perceptions of Early Learning-Related Skills and Their Relationship to Academic Achievement." Dissertation, Georgia State University, 2012.
http://scholarworks.gsu.edu/cps_diss/82

This Dissertation is brought to you for free and open access by the Department of Counseling and Psychological Services at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Counseling and Psychological Services Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

ACCEPTANCE

This dissertation, KINDERGARTEN TEACHERS' KNOWLEDGE AND PERCEPTIONS OF EARLY LEARNING-RELATED SKILLS AND THEIR RELATIONSHIP TO ACADEMIC ACHIEVEMENT, by KATHRYN MARIE POWELL, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree Doctor of Philosophy in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

Kristen Varjas, Psy.D.
Committee Chair

Catherine P. Cadenhead, Ph.D.
Committee Member

Andrew T. Roach, Ph.D.
Committee Member

Gary E. Bingham, Ph.D.
Committee Member

Date

Brian J. Dew, Ph.D.
Chair, Department of Counseling and Psychological Services

R. W. Kamphaus, Ph.D.
Dean and Distinguished Research Professor
College of Education

AUTHOR'S STATEMENT

By presenting this dissertation as a partial fulfillment of the requirements for the advanced degree from Georgia State University, I agree that the library of Georgia State University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote, to copy direction it was written, by the College of Education's director of graduate studies and research, or by me. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential financial gain will not be allowed without my written permission.

Kathryn M. Powell

NOTICE TO BORROWERS

All dissertations deposited in the Georgia State University library must be used in accordance with the stipulations prescribed by the author in the preceding statement. The author of this dissertation is:

Kathryn Marie Powell
1874 Demilio Drive
Lithonia, GA 30058

The director of this dissertation is:

Dr. Kristen Varjas
Department of Counseling and Psychological Services
College of Education
Georgia State University
Atlanta, GA 30303 - 3083

CURRICULUM VITAE

Kathryn Marie Powell

ADDRESS: 1874 Demilio Drive
Lithonia, Georgia 30058

EDUCATION:

Ph.D.	2012	Georgia State University School Psychology
Ed.S.	1998	University of Delaware School Psychology
M.A.	1996	University of Delaware School Psychology
B.A.	1993	University of Delaware Math Education

PROFESSIONAL EXPERIENCE:

2008- Present	School Psychologist Rockdale County School District, Conyers, GA
2000- 2007	School Psychologist DeKalb County School District, Decatur, GA
1999- 2000	School Psychologist Capital School District, Dover, DE

PROFESSIONAL SOCIETIES AND ORGANIZATIONS

1996- Present National Association of School Psychologists

PRESENTATIONS AND PUBLICATIONS

Truscott, S. D., Proctor, S. L., Harper, E. A., Collins, A. S., Powell, K. M., & Huddleston, L. (August, 2009). *Comprehensive Model for Recruitment of African Americans in School Psychology*. A poster presented at the annual meeting of the American Psychological Association, Vancouver, Canada.

Proctor, S. L., Harper, E. A., Powell, K., Collins, A. S., Huddleston, L., & Truscott, S. D. (August, 2008). *African American School Psychologists' Perceptions of Minority Recruitment and Retention in School Psychology Training*. Poster presented at the annual meeting of the American Psychological Association, Boston, MA.

Harper, E. A., Proctor, S. L., Collins, A. S., & Powell, K. M. (February, 2008). *Recruitment and Retention of African American School Psychologists: Practitioner Perspectives*. Paper presentation at the annual meeting of the National Association of School Psychologists, New Orleans, LA.

- Proctor, S. L., Harper, E. A., Collins, A. S., Powell, K. M., Huddleston, L., & Truscott, S. (August, 2007). *Emic Perspectives: A Study of African American School Psychologists' Professional Experiences*. Poster presentation at the annual meeting of the American Psychological Association, San Francisco, CA.
- Proctor, S. L., Harper, E. A., Collins, A. S., Powell, K. M., Huddleston, L., & Truscott, S. (March, 2007). *African American School Psychologists' Training and Professional Experiences*. Paper presentation at the annual meeting of the National Association of School Psychologists, NY, NY.

ABSTRACT

KINDERGARTEN TEACHERS' KNOWLEDGE AND PERCEPTIONS OF EARLY LEARNING-RELATED SKILLS AND THEIR RELATIONSHIP TO ACADEMIC ACHIEVEMENT

by

Kathryn M. Powell

Historically, the kindergarten curriculum emphasized social-emotional development including interpersonal and learning-related (L-R) skills (Logue, 2007). Since the implementation of NCLB (2002), the kindergarten curriculum has incorporated more academic standards and goals (Fantuzzo et al., 2007) thereby decreasing time to address L-R skills. A triangulation mixed methods design (Creswell & Plano Clark, 2007) was utilized to investigate pre-NCLB to post-NCLB kindergarten teachers' perceptions of the effect of L-R skills on academic achievement. A sample ($N = 97$) of certified kindergarten teachers with one or more years of kindergarten experience was administered surveys. Concurrently, 30 participants from the larger sample participated in the qualitative (individual interviews) phase of the study. It was hypothesized that all teachers would rate L-R skills as precursors to academic achievement; however, pre-NCLB teachers would rate L-R skills as more important than their peers. The quantitative results suggested that there were no difference in kindergarten teachers' perceptions of the importance of L-R skills. There also were no significant differences in how kindergarten teachers rated the importance of school readiness skill constructs (L-R, interpersonal, academic). However, when asked to rank these skills regarding importance, there were significant differences between the two groups with pre-NCLB teachers identifying interpersonal skills as more important to school readiness than post-NCLB teachers and post-NCLB teachers indicating academic skills as more important than pre-

NCLB teachers. No significant differences were found between the groups in regards to teachers' beliefs about achievement or teacher efficacy. Qualitative data revealed level 2 codes (follows directions, listens, sits still, stays on task, works cooperatively in groups, tells needs and thoughts, motivation) describing the L-R skills that teachers identified as important for school readiness. Nine level 2 codes (builds confidence and motivation, foundation, helps access kindergarten curriculum, head start, increase learning capacity, not a determining factor, puts them behind, rate of learning, supports classroom management) emerged to describe teachers' perceptions of L-R skills effects on academic achievement. Qualitative findings also revealed possible explanations for the lack of significance found between these two groups regarding the importance of L-R skills. Limitations and implications for research and practice will be discussed.

KINDERGARTEN TEACHERS' KNOWLEDGE AND PERCEPTIONS OF EARLY
LEARNING-RELATED SKILLS AND THEIR RELATIONSHIP
TO ACADEMIC ACHIEVEMENT

by
Kathryn M. Powell

A Dissertation

Presented in Partial Fulfillment of Requirements for the
Degree of
Doctor of Philosophy
in
School Psychology
in
the Department of Counseling and Psychological Services
in
the College of Education
Georgia State University

Atlanta, GA
2012

Copyright by
Kathryn M. Powell
2012

ACKNOWLEDGMENTS

I would like to first give honor to God for supporting and guiding me through this process. It is only by his goodness and mercy that I was able to reach this goal. I dedicate this dissertation to my husband, William J. Harris III, and my children, Christopher and Zachary Harris, whose unending support, patience, and eternal belief in my abilities pushed me to achieve my goals. Next, I would like to thank my mother, Mary A. Powell, who prayed and asked for the prayers of others to see me through this journey. I also would like to thank my sister, Robin Powell, who has always been my role model and support. I am forever grateful to my family and friends for their encouragement and love throughout my graduate school career. I would also like to thank the graduate students and colleagues who volunteered their time and service to assist in the completion of this study, Janell Brooks, Nick White, Cheryl Toney and Mia Ballard, to whom I extend my sincerest appreciation and gratitude. Finally, I would also like to thank my committee members, Dr. Kris Varjas, Dr. Catherine Cadenhead, Dr. Andrew Roach, and Dr. Gary Bingham for their guidance, support, and encouragement throughout this process.

TABLE OF CONTENTS

	Page
List of Tables	v
List of Figures	vi
Abbreviations	vii
Chapter	
1	
HIGH-STAKES TESTING: THE IMPACT ON SOCIAL-EMOTIONAL INSTRUCTION IN EARLY EDUCATION	1
Introduction	1
Overview of High-Stakes Testing in Public Education	2
High-Stakes Testing: Impact on Early Education	3
Emphasis on Academics and Decreased Focus on Social Emotional Development	4
Impact of High-Stakes Accountability on School Readiness and Early Education	7
Concerns Regarding High-Stakes Testing and Its Impact on Young Children	13
Social-Emotional Development and Implications for Academic Achievement	18
Future Directions	25
Conclusion	32
References	34
2	
KINDERGARTEN TEACHERS' KNOWLEDGE AND PERCEPTIONS OF EARLY LEARNING-RELATED SKILLS AND THEIR RELATIONSHIP TO ACADEMIC ACHIEVEMENT	49
Introduction	49
The Relationship of Learning Related Skills to Academic Achievement	51
Perceptions of Kindergarten Teachers about the Importance of Learning Related Skills	56
Teachers' Perceptions of Efficacy in Learning Related Skills Instruction	58
Purpose of the Study	60
Method	61
Participants	61

Procedures	62
Measures	64
Qualitative Data Analysis	66
Results.....	69
Discussion	88
Limitations and Future Directions	96
References.....	99
Appendixes	106

LIST OF TABLES

Table	Page
1	Means and standard deviations of pre- and post-NCLB kindergarten teachers' perceptions of the importance of learning-related skills to school readiness.....71
2	Means and standard deviations of pre- and post-NCLB kindergarten teachers' perceptions of the importance of certain skill constructs (i.e., learning related, academic, or interpersonal).....82
3	Means and standard deviations of pre- and post-NCLB kindergarten teachers' rankings of school readiness skills.82
4	Means and standard deviations of pre- and post-NCLB kindergarten teachers' rankings of certain skill constructs (i.e., learning related, academic, or interpersonal) using Borda count method.....83
5	Beliefs About School Achievement (BASA) scale88

LIST OF FIGURES

Figures		Page
1	Learning Related school readiness skills coding hierarchy	74
2	Effects on academic achievement coding hierarchy	77
3	Teachers' role in the development of learning related skills coding hierarchy	84

ABBREVIATIONS

ANOVA	Analysis of Variance
ASPI	Adjustment Scales for Preschool Intervention
A-R	Attention Span-Restlessness
ASCD	Association for Supervision and Curriculum Development
AYP	Adequate Yearly Progress
BASA	Beliefs About School Achievement
CASEL	Collaborative for Academic, Social, and Emotional Learning
CAT	California Achievement Test
C-C	Cooperation-Compliance
CFBRS	Cooper-Farran Behavioral Rating Scales
ESEA	Elementary and Secondary Education Act
GKIDS	Georgia Kindergarten Inventory of Developing Skills
I-P	Interest-Participation
KTSSR	Kindergarten Teacher Survey on School Readiness
LRSES	Learning-Related Skills Self-Efficacy Scale
MANOVA	Multiple Analysis of Variance
MH	Mental Health
NAECS	National Association of Early Childhood Specialists in State Departments of Education
NAEP	National Assessment of Educational Progress
NAEYC	National Association for the Education of Young Children
NCES	National Center for Education Statistics
NCLB	No Child Left Behind

NRS	National Reporting System
PATHS	Promoting Alternative Thinking Strategies
PIAT-R	Peabody Individual Achievement Test-Revised
PLBS	Preschool Learning Behavior Scale
PPVT-R	Peabody Picture Vocabulary Test-Revised
SAT	Stanford Achievement Test
SBMH	School-Based Mental Health
SD	Standard Deviation
SEL	Social Emotional Learning
SES	Socioeconomic Status
SSRS	Social Skills Rating System
TRSSA	Teacher Rating Scale of School Adjustment
TWG	Technical Work Group
U. S. DOE	United States Department of Education

CHAPTER 1

HIGH-STAKES TESTING: THE IMPACT ON SOCIAL-EMOTIONAL INSTRUCTION IN EARLY EDUCATION

High-stakes testing is a growing phenomenon in today's public education system. Education policies (e.g., No Child Left Behind Act [NCLB], 2002) and programs (e.g., Head Start, Georgia Student Assessment Program) have emphasized the importance of standardized assessments and the consequences for all stakeholders (e.g., schools, administrators, teachers, students) based on student performance (Urrieta, 2004). This use of high-stakes testing has now been extended to the earlier grades. As a result, early childhood educators may feel pressure to focus more time and effort on academic instruction, leaving less time for other developmentally important areas such as social-emotional development (Fantuzzo et al., 2007; Logue, 2007; Meisels, 2007). There is a wealth of literature indicating the importance of social-emotional development to early school adjustment and long-term success of young children (Griffin, 1997; McClelland et al., 2000; Payton et al., 2008); therefore, it is imperative that early childhood educators continue to enhance the growth of social-emotional as well as academic skills for children in their classrooms.

For the purpose of this article, high-stakes testing is defined as standardized assessments of student performance whose results may carry consequences (e.g., retention, school re-staffing) for students, teachers, administrators, and/or schools (Urrieta, 2004). First, an overview of high-stakes testing in public schools and its impact on early education with a focus on social-emotional learning is provided. Second, concerns from early childhood experts regarding the implementation of high-stakes

testing with young children are presented. Next, the relationship of social-emotional development and academic achievement is highlighted. Finally, future directions and recommendations are presented on how early childhood educators can continue to address social-emotional instruction in the face of the high-stakes testing environment with support from mental health professionals (i.e., school psychologists, counselors, and social workers), administrators, and colleagues.

Overview of High-Stakes Testing in Public Education

High-stakes testing in public education dates back more than a century and emphasis on this phenomenon in schools today continues to expand. From the tracking programs of the early 1900's that utilized intelligence tests to identify students to receive either academic or vocational programming (Sacks, 2000) to the Head Start program evaluations of the 1960s (Vinovskis, 1999) and the reauthorization of the Elementary and Secondary Act (ESEA, 1965) resulting in NCLB (2001), policymakers have used high-stakes testing as an accountability tool to impact teaching and learning in our schools (Madaus & Russell, 2010; Wiliam, 2010). Proponents of high-stakes testing have indicated that its purpose is twofold, to improve instruction (Gay, 2007; Logue, 2007; Madaus & Russell, 2010) and to increase student achievement (Amrein-Beardsley, 2009; Smith, 2005). Current educational policies such as NCLB (2001) require school districts receiving federal aid to adopt curricular standards that will guide academic content (Logue, 2007; Mathis, 2006) and align with the state's annual high-stakes assessments (Schmidt, 2008). By attaching rewards and/or sanctions to the results of these mandated tests, policymakers are able to influence curriculum content and instructional practices (Amrein-Beardsley, 2009; Urrieta, 2004). As a result, teachers are expected to adjust their

instruction to prepare students for the impending test to avoid a range of consequences for poor student performance on these high-stake measures (Madaus & Russell, 2010; Urrieta, 2004).

Policymakers also utilize these assessments as accountability tools to determine which schools are making adequate yearly progress (AYP; NCLB, 2001) in educating students and raising student academic performance (Haertel & Herman, 2005). These accountability practices have become increasingly intense, with the promise of more stringent student consequences for low student performance (Schmidt, 2008) including student placement in a lower track, course failure, and/or grade retention (Amrein-Beardsley, 2009). Teachers may also fear being placed on a professional development plan or losing their jobs as a result of low student test scores (Smith, 2005). Finally, schools and school districts may receive sanctions, such as being required to dismiss staff, implement a new curricular program (Le Floch et al, 2006), loss of funding, take-over by the state, or conversion into a charter school (Shepard, 1990; Smith, 2005).

High-Stakes Testing: Impact on Early Education

High-stakes testing practices in U.S. schools have impacted the approach to education in early education settings (i.e., childcare, preschool and elementary) with intentional and unintentional effects on instruction and educational practices (Amrein-Beardsley, 2009). High-stakes testing implementation has resulted in several intentional educational practices. One such intentional practice is an increased number of instructional resources available for reading as a result of high-stakes testing focusing on student reading performance (Dever & Carlston, 2009). Another intentional practice is the increased use of scientifically-based research to guide efficient and effective

instructional practices (Collins, 2005; Roach & Frank, 2007). In addition, the implementation of the highly-qualified teacher initiative (Boe, Shin, & Cook, 2007; NCLB, 2001; Packer, 2007), which is a provision put in place by NCLB to strengthen teachers' preparation, both in content and effective teaching practices (Smith, 2005) resulted from high-stakes testing implementation. While the implementation of high-stakes testing has brought about several influential intentional outcomes, there also have been unintentional impacts. Unintentional impacts have included an overemphasis on academic achievement (Fantuzzo et al., 2007), a decreased focus on other developmental areas (e.g., social-emotional development) (Logue, 2007), the use of skills perspective in school readiness preparation (Gormley et al., 2005), and the narrowing of the early childhood curriculum (National Association for the Education of Young Children [NAEYC], 2009a). This section will address the unintentional impacts of high stakes testing in early education as it relates to social-emotional instruction, school readiness, teaching to the test, and the subsequent narrowing of the curriculum.

Emphasis on Academics and Decreased Focus on Social-Emotional Development

Historically, the focus of pre-school and/or early education programs (i.e., childcare, preschool, and kindergarten) was on social-emotional development (Fantuzzo et al., 2007; Logue, 2007). The pre-school and kindergarten classroom environments were places where children would be taught social and interpersonal skills which are prerequisites for students to fully and successfully participate in group and instructional settings (Logue, 2007). The social-emotional skills taught prepared students for classroom expectations needed to yield positive academic outcomes (Logue, 2007). Classroom activities focused on teaching students to share objects and attention, take turns, resolve conflicts with peers incorporating adult assistance, participate in group

activities, and adjust to different routines and a new set of rules (Logue, 2007). However, as a result of high-stakes testing practices migrating down to the preschool and elementary years (e.g., Head Start Reporting System, Georgia Kindergarten Inventory of Developing Skills [GKIDS]) a focus on the development of students' pre-academic, academic, and cognitive skills (Fantuzzo et al., 2007; Goldstein, 2008) has occurred thereby decreasing the amount of time focused on social-emotional instruction (Logue, 2007).

One example of high-stakes testing occurring in the preschool setting is the utilization of the National Reporting System (NRS) of the Head Start program to assess the development of all enrolled children during the year before students entered kindergarten (Paulsell et al., 2006; Tarullo et al., 2008). The NRS was developed and initiated in response to President Bush's *Good Start, Grow Smart* initiative that challenged Head Start to improve their operational effectiveness by developing a systematic, nationwide approach to assessing every child's school readiness. The Bush Administration's directive was to develop a strategy to ensure that every Head Start center assesses the standards of learning in early literacy, language, and numeracy skills (Tarullo et al., 2008). A battery of assessment tools was administered by local Head Start program staff to approximately 400,000 four and five year-old children at the beginning and end of each program year starting in fall 2003 (Paulsell et al., 2006). The NRS findings are used to meet the requirement that all Head Start programs use child outcomes as part of their self-assessment of their program performance. The data also provides the Head Start Bureau with information to enhance its current monitoring system and to assist in the development of targeted teacher training and technical

assistance (Paulsell et al., 2006). In the 2006-2007 program year, teacher assessments of children's social-emotional development were added into the assessment at the recommendation of program staff and a Technical Work Group (TWG) of 16 experts in child development, child assessment, measurement, and program evaluation that assisted in the initial development of the NRS assessment (Tarullo et al., 2008). The addition of social-emotional skills into this assessment process reflects the observed need by the Head Start program staff and the TWG that although pre-academics skills are an important focus for students, those skills are not the only abilities that need to be taught and measured to ensure future academic achievement and school success (Tarullo et al., 2008).

Many states have developed guidelines for instruction in the preschool setting (Scott-Little, Kagan, & Frelow, 2006) that include academic standards for the teaching and learning of literacy, math, science, and social studies (Logue, 2007) to prepare children for the more academic-focused elementary setting. Academic expectations once reserved for older children now have been placed on earlier grades and the focus of kindergarten has become more academic than ever before (Goldstein, 2008; Kim et al., 2005; Meisels, 2007). As a result, students are expected to enter kindergarten with pre-literacy and pre-math skills and the social maturity to comply with school routines (Logue, 2007) and are being exposed to what previously constituted the first grade curriculum (Marxen, Ofstedal, & Danbom, 2008; NAEYC, 1995, 2009a).

In some states, performance-based assessments are utilized in kindergarten to evaluate student progress on academic standards. For instance, the Georgia Kindergarten Inventory of Developing Skills (GKIDS) is used to assess kindergarten students'

developing skills in English Language Arts, Math, Science, and Social Studies. The GKIDS inventory includes domains addressing Personal/Social Development and Approaches to Learning. However, there are no stakes associated with these domains as are with the English Language Arts and Math domains. For this reason, these areas may receive less instructional attention. The academic domains included in this measure are aligned to the Georgia Performance Standards (GPS, 2008) developed by the Georgia Department of Education for kindergarten students. GKIDS data from the areas of English Language Arts and Mathematics are used as one indicator of first grade readiness. Because curriculum standards and assessments demonstrate a greater emphasis on academic development, instructional practices have followed suit.

NCLB (2001) requires all public schools receiving federal funds to administer standardized tests annually in grades three through eight and once in high school between grades 10 and 12 (Mathis, 2006, 2009; Smith, 2005; U.S. Department of Education [U.S. DOE], 2008). However, some states have chosen to administer standardized assessments to students as early as first grade. This allows schools to keep close track of student progress through standardized assessment on curriculum leading up to the required assessment occurring in third grade. These testing practices are evident of the pressure being placed on K-2 teachers, who in turn are looking to preschool teachers to help prepare students to demonstrate the required proficiencies that will be later evaluated (NAEYC, 2009a).

Impact of High-Stakes Accountability on School Readiness and Early Education

The increased academic expectations placed on earlier grades due to high-stakes testing has resulted in some unintentional effects (e.g., skill development approach to

instruction, narrowing of the curriculum) on childcare and preschool instruction as it relates to school readiness (Lamy, Barnett, & Jung, 2005; Logue, 2007; NAEYC, 2009b). A significant intentional change in early education instruction has been the focus on cognitive skills (Scott-Little et al., 2006); however, there may have been unintentional impacts on school readiness and early education as a result of this shift. Operationally, school readiness is defined as a quality that renders the child able to participate successfully in the public school general curriculum (May et al., 1994). Various theoretical perspectives have been espoused amongst experts about the best way to prepare children for school (Gormley et al., 2005; McBryde et al., 2004; Panter & Bracken, 2000; Wilson, 2004). Two such perspectives are the skill development (Gormley et al., 2005; Panter & Bracken, 2000; Wilson, 2004) and the multidimensional perspectives (McBryde et al., 2004; Panter & Bracken, 2000). The skill development perspective indicates that school readiness is based on the demonstration of specific learned skills or acquired knowledge (Gormley et al., 2005; Panter & Bracken, 2000; Wilson, 2004). Proponents of this view believe that the best way to foster school readiness is through direct teaching of specific skills. However, in reviewing the research that addresses the effectiveness of various approaches to school readiness a clear endorsement for the multidimensional approach emerges (Pianta & La Paro, 2003; McBryde et al., 2004; NAEYC, 1995, 2009b; Panter & Bracken, 2000; Wright, Diener, & Kay, 2000).

The multidimensional perspective takes into account the wide range of factors that affect children's success in school. Consistent with the multidimensional perspective, a report from the National Education Goals Panel (Kagan, Moore, & Bredekamp, 1995)

identified five dimensions that were essential components of readiness and academic success: physical well-being and motor development; language development; cognition and general knowledge; social and emotional development; and approaches to learning (Panter & Bracken, 2000). The multidimensional approach attempts to address all aspects of school readiness by preparing children to face the many different expectations of the classroom context (Panter & Bracken, 2000). However, in recent years, with the insurgence of educational policies such as NCLB that stress academic accountability, many schools have shifted their focus and efforts to the direct teaching of specific skills. Given that the curriculum in many traditional kindergarten classes focuses on pre-academic (e.g., readiness to learn to read, write and count) and academic (e.g., knowledge of letters, numbers) skills (Fantuzzo et al., 2007; Logue, 2007) many educators may feel that children who know their alphabet, can count to 20, and use scissors may have an advantage over those who do not (Gormley et al., 2005). However, this trend of narrowly focusing on pre-academic and academic skills is concerning to early childhood experts (NAEYC, 2009a, 2009b), who view an appropriate curriculum as being inclusive of all the developmental areas including social-emotional skills (NAEYC, 1996; 2009b).

Narrowing of the Curriculum. As a result of high-stakes testing and the increased academic expectations placed on young children, a growing null curriculum has been created (Kaniuka, 2009; Packer, 2007). The null curriculum is defined as the curriculum that has been eliminated or reduced due to the pressures placed on schools by high-stakes testing policies requiring all students to perform well on standardized achievement tests in academic areas, particularly reading and math (Kaniuka, 2009; McGuire, 2007). Some early childhood educators (Kaniuka, 2009), because of the basic

skill testing requirement of high-stakes accountability legislation, are reducing and/or eliminating instruction of subjects not assessed in order to spend more time preparing students for the test (Cawelti, 2007). Early childhood experts (NAEYC, 2009a, 2009b) indicate developmentally appropriate practice as multidimensional in nature and providing for children's physical, emotional, social, linguistic, aesthetic, and cognitive growth (NAEYC, 1996, 2009b). In addition, the NAEYC (1995, 2009a, 2009b) reported that children's social skills, physical development, intellectual abilities, and emotional adjustment are equally important areas of development and each contributes to a child's adaptation to school life (Association for Supervision and Curriculum Development [ASCD], 2006). They explained that when readiness expectations are based on a narrow range of skills and competencies and focus on only a few dimensions of development the true complexity of growth is overlooked (NAEYC, 1995; 2009b).

The significant narrowing of the curriculum limits instruction time in non-tested areas such as the arts, social studies, and the sciences (McGuire, 2007). These subjects are among the first choices to be eliminated or reduced so that increases in the instructional time allotted for reading and mathematics can occur (Kaniuka, 2009). As result of the pressure to increase instruction in tested areas, teachers may have less opportunity to directly address social-emotional skills (Logue, 2007). Instead the majority of their efforts may be placed on the teaching of discrete academic skills (Fantuzzo et al., 2007; Logue, 2007). Unfortunately, the null curriculum that has resulted with the implementation of high-stakes testing exacerbates the loss of instruction in social-emotional skills by eliminating or reducing instructional time in subjects such as science, social studies, physical education, other exploratory classes, and recess (Packer, 2007);

all areas that provide opportunities for students to practice and develop social skills. Therefore, not only are teachers unable to spend time directly teaching social skills, but subjects that easily lend themselves to social skill development and practice through indirect instruction are being eliminated as well.

Teaching to the Test. “Teaching to the test,” may be another unintentional phenomenon that has been associated with the implementation of high-stakes testing. Many educators faced with the pressures of preparing students for high-stakes assessments have resorted to designing their lessons and instruction to mirror what is expected on the assessments (Cawelti, 2007). Particularly those teachers who worked in schools with high a population of at-risk students felt the need to focus more of their instructional time on test preparation, including practicing similar items and presentations (Cawelti, 2007; Kaniuka, 2009; Moon, Callahan, & Tomlinson, 2003). Moon, Callahan, and Tomlinson (2003) surveyed a nationally stratified random sample of public school teachers and found that high stakes testing programs affected classroom practices to a greater extent for teachers in impoverished schools. Their findings suggested that teachers in these settings felt more pressure to focus on subjects that were to be tested and spent a considerable amount of time on test preparation. For this reason many children, particularly low achieving students who disproportionately hold high poverty and minority status, (Kaniuka, 2009) are spending most or all of their day receiving instruction in reading and math (subject areas assessed) as well as receiving more assessments (Cawelti, 2007).

The National Board on Educational Testing and Public Policy (Pedulla et al., 2003) conducted a national survey of teachers’ perceptions of the impacts of state testing

programs. The findings indicated that high-stakes testing led many teachers to adopt instructional practices that were not aligned with their beliefs about best teaching practices (Abrams, Pedulla, & Madaus, 2003). In this study, states were classified as high-stakes states (i.e., refers to states that delivered state-regulated or legislated sanctions of significant consequences for districts, schools, teachers, and/or students) or low-stakes states (i.e., refers to states that did not have any known consequences attached to test scores). The findings revealed that 76% of teachers working in high stakes states and 63% of teachers working in low-stakes states agreed with the statement that “. . . state testing programs has led teachers to teach in ways that contradict notions of good educational practice” (Abrams et al., 2003, p.24) In particular, teachers reported that the pressure resulting from high-stakes testing encouraged them to employ instructional and assessment strategies that mirror the state mandated test and to spend large amounts of time in test preparation activities. While dividing the states in this way may now constitute a false dichotomy, because all states have since attached high stakes to their tests, it does provide a historical context in which to view the impact of high-stakes assessment on teaching practices.

The study further revealed that teachers are spending a considerable amount of instructional time preparing students for the high stakes test. For example, 44% of teachers in high stakes states reported spending more than 30 hours per year preparing students specifically for the state test compared to 10% of teachers endorsing the same item from low-stakes states. High stakes testing seems to be influencing the frequency and manner in which teachers assess their students. The results suggested that teachers were constructing their exams to mirror the structure and format of the state test. Findings

indicated that 51 % of the teachers in high-stakes states reported their classroom tests are in the same format as the state test (i.e., multiple-choice) as compared to 29% of teachers in the low-stakes states. In addition, teachers in high stakes states were almost twice as likely (31% vs. 17%) as teachers in low-stakes states to use multiple-choice format classroom tests on a weekly basis.

Further evidence that teaching to the test is occurring is provided by analysis of the impact of high-stakes programs in 18 states conducted by Amrein and Berliner (2002), who concluded that students performed better on assessments that were used in their school systems, but did not necessarily show improvement on related tests that assessed the same subject. However, an analysis of state achievement growth as measured by the National Assessment of Educational Progress (NAEP) revealed that accountability systems had a positive impact on student achievement (Hanushek & Raymond, 2005). More specifically, the examination of the impact of high-stakes programs to student achievement found that schools that used clearer and stronger accountability tactics, such as attaching consequences to performance (i.e., takeover threats, monetary rewards), resulted in higher achievement scores on the NAEP than those who used weaker tactics, such as reporting results, without attaching consequences to performance (Hanushek & Raymond, 2005).

Concerns Regarding High-Stakes Testing and Its Impact on Young Children

The effect that high-stakes testing has had on early education curriculum, shifting from social-emotional development to pre-academic and academic development, has raised questions amongst educators about the developmental appropriateness of the shift (Fantuzzo et al., 2007; NAEYC, 2009a; Raver & Zigler, 2004; Rimm-Kaufman, Pianta,

& Cox, 2000). Teachers feared that this broader focus on academic development may result in the de-emphasis of social-emotional competencies putting students at risk for poor school adjustment and poor school performance (Fantuzzo et al., 2007). The possibility that the increased academic expectations will diminish time directly spent teaching social skills and organizing physical and social environments conducive to social learning is a major concern (Logue, 2007).

Another concern posited by early childhood educators about the use of high-stakes testing with young children (NAEYC, 2009a) is the impact that it may have on student motivation. High-stakes testing makes the assumption that attaching rewards and sanctions to standardized test performance will motivate students towards learning (Amrein & Berliner, 2003). However, this assumption may be false and some research indicates that high-stakes testing has the opposite effect on student motivation (Amrein & Berliner, 2003; Hoffman, Assaf & Paris, 2001; Wheelock, Bebell, & Haney, 2000) and lowers students' intrinsic motivation to challenge themselves and learn and students become less likely to engage in critical thinking (Amrein & Berliner, 2003; Pittman, Emery, & Boggiano, 1982; Sheldon & Biddle, 1998). For example, Pittman, Emery, and Boggiano (1982) conducted a study of second graders playing a shape-matching game. Children in the first group were asked if they wanted to play a game, while children in the second group were told they would get a "surprise" if they persisted and solved game puzzles. Students were then left alone in a room with simple, medium, and complex versions of the game. The students in the first group spent more time playing the intermediate version of the game (i.e. the one that was optimally challenging for their current level of development). However, the children in the rewarded group spent most of

their time playing with the simplest version and the least amount of time with the most complex version, becoming overly concerned about their performance at the expense of seeking challenge.

In addition, when high-stakes are linked with students' test performance, teachers tend to direct student learning rather than encourage exploration, lessening the likelihood that students become self-directed learners (Deci, Spiegel, Ryan, Koestner, & Kauffman, 1982; Sheldon & Biddle, 1998). A study conducted by Deci et al. (1982) examined the effects of two types of instructional sets on teacher performance. One group of teachers was told that their role was to facilitate the students' learning how to work with spatial relations puzzles. Further, that there were no performance requirements and that their job was to simply help students learn to solve the puzzles. The second group of teachers was told that their role was to ensure that the students learn to solve the puzzles. In addition, that it is a teacher's responsibility to make sure that student's perform up to standards. Results revealed that teachers in the "performance standards" condition talked more and used more controlling strategies, such as providing more criticisms and using more "should" statements in their presentation. Furthermore, they let the students solve far fewer puzzles on their own than teachers in the "learning only" group.

The use of high-stakes testing practices has resulted in increased academic expectations of young children (NAEYC, 2009a). While the mandated high-stakes testing of the NCLB policy may begin in the third grade, its effects have trickled down to the earlier grades and even preschool settings. For this reason, early education advocates, such as the NAEYC, cautioned against presenting developmentally inappropriate material and using developmentally inappropriate assessments with young children (NAEYC,

1995; 2009b). This trend of presenting curriculum expectations once reserved for older children to younger students is as a result of the push to improve student performance on standardized tests (Goldstein, 2008; Kim et al., 2005). The introduction of developmentally inappropriate expectations has resulted in children with average ability struggling and failing in school (NAEYC, 2009a). Even those children who have received every advantage prior to school entry are finding the inappropriate demands difficult to meet and are often experiencing great stress as well as having their confidence in their own capacities as learners undermined (NAEYC, 1995; 2009b).

NAEYC further believes that the expectations of the skills and abilities that young children bring to school must be based on knowledge of child development and how children learn (NAEYC, 2009a; NAEYC & National Association of Early Childhood Specialists in State Departments of Education [NAECS/SDE], 2002). It is important that educators and policy makers refrain from taking more complex concepts meant for older students and “watering them down” for presentation to younger students. If the tasks are not developmentally appropriate there is a risk that students will only superficially learn material that they cannot really grasp until they are much older (Neuman, Roskos, Vukelich, & Clements, 2003).

The structure and psychometric properties of high-stakes tests administered to young children are not always developmentally appropriate. First, psychometric properties such as the standardization sample, reliability, and predictive validity of the measure need to be considered (Bordignon & Lam, 2004). It is important that high-stake measures used to assess young students’ academic achievement have a norming sample representative of the diverse student population to be assessed. Further there are some

developmental limitations associated with testing young children (Bordignon & Lam, 2004). Therefore the structure and design of the assessment must be developmentally appropriate, in terms of the length of the test matching up with the young child's attention span, as well as the questions, task design and the required response style matching this age group's developmental capabilities (Bracken, 1987). Even with these test structure issues addressed, inappropriate responses from young children may not be the result of a skill deficiency, but may be attributed to their short attention span, impulsivity, or immaturity (Bordignon & Lam, 2004). Therefore dependence on one assessment for making important decisions about young children's education or teachers' performance may be risky and unreliable. The American Educational Research Association (AERA) Position Statement on High-Stakes Testing in Pre-K-12 Education (2000) stresses this point, indicating that other relevant information besides test scores should be taken into account to enhance the validity of decisions that affect student's educational opportunities.

Another concern early childhood educators may have about the use of high-stakes testing with young children is that it requires all students to reach developmental milestones at a prescribed time. A basic principle of child development is that normal variability includes a wide range of competence within an age group and therefore schools should be prepared to receive children functioning on different developmental levels (NAEYC, 2009a, 2009b). Therefore one must consider the diversity and inequity in children's early experiences and the broad variation in their learning and developmental patterns (Bordignon & Lam, 2004) when making decisions regarding the

appropriate course of action to take to assist a student in academic and developmental growth.

Lastly, high-stakes testing falls short in providing assessment in all areas that are important for young children's development. NAEYC (1995; 2009a, 2009b) reported that children's social skills, physical development, intellectual abilities, and emotional adjustment are equally important areas of development and each contributes to a child's adaptation to school life (Association for Supervision and Curriculum Development [ASCD], 2006). They explain that when readiness expectations are based on a narrow range of skills and competencies and focus on only a few dimensions of development the true complexity of growth is overlooked and children whose development is well within the normal range may be mistakenly characterized as inadequate (NAEYC, 1995; 2009b).

Social-Emotional Development and Implications for Academic Achievement

The increased academic expectation of early education students that has occurred as a result of high-stakes testing has simultaneously caused a de-emphasis in social-emotional learning. Now at school entry, children are expected to regulate their behavior, interact appropriately with teachers and peers, and exhibit sustained attention to tasks in order to learn an increased amount of academic material (Bierman et al., 2008; Logue, 2007). This trend is concerning to many educators because of the importance of social-emotional development to students' success in school (Zins, Bloodworth, Weissberg, & Walberg, 2007). Social-emotional competence is defined as the ability and the disposition to use and integrate social-emotional knowledge, regulatory abilities, empathy, perspective taking, and social skills in a seamless manner that is appropriate for the child within the given social context (Denham et al., 2003). Social-emotional skills include

self-regulation, self-concept, self-efficacy, and prosocial behaviors with teachers and peers (Fantuzzo et al., 2007). Social competencies linked to school success include both interpersonal skills (e.g., helping, sharing, cooperating) and work-related skills (e.g., following directions, attention, organization). Researchers have reported that social-emotional skills (Agostin & Bain, 1997; McClelland et al., 2000), and dimensions of the construct related to school readiness (Fantuzzo et al., 2007; Griffin, 1997; Welsh, Parke, Widaman, & O'Neil, 2001) and early school adjustment (Fantuzzo et al., 2007; Ladd, Birch, & Buhs, 1999) are positively correlated to early and future academic achievement and therefore attention to social-emotional development and its growth in the school setting is important. This section will examine these dimensions of social-emotional development and their relationship with school achievement.

Social-emotional skills are an important part of school readiness. Many studies have found that educators reported that healthy social-emotional development is a critical aspect of school readiness (Dockett & Perry, 2002; Heaviside & Farris, 1993; Webster-Stratton, Reid, & Stoolmiller, 2008). According to studies conducted across the country with kindergarten teachers, children need to be able to follow directions, not be disruptive, express their needs and ideas (Lewit & Baker, 1995; Lin, Lawrence, & Gorrell, 2003), and take turns and share (Lin, Lawrence & Gorrell, 2003) in order to successfully navigate the kindergarten routine. Griffin (1997) examined the relationship between 267 kindergarten children's (46% girls; 62% White and 38% African American) work-related classroom behavior and their entry-level achievement. Students' work-related skills were measured by teachers report on the Cooper-Farran Behavioral Rating Scale, (CFBRS; Cooper & Farran, 1991) administered in the fall of kindergarten.

Students were administered a battery of achievement tests at the beginning of kindergarten, consisting of the Peabody Picture Vocabulary Test-Revised (PPVT-R) and the Peabody Individual Achievement Test-Revised (PIAT-R), as well as the Stanford-Binet Intelligence Scale. The results revealed that work-related skills positively related to school readiness and students' ability to succeed in early academic subjects, when other demographics, such as cognitive ability and mother's education were controlled.

There is a wealth of research that points to the positive relationship of social-emotional skills to future school success (i.e., academic achievement) (Fantuzzo et al., 2007; Griffin, 1997; McClelland et al., 2000; Welsh, Parke, Widaman, & O'Neil, 2001). Two important studies investigating the relationship of early social-emotional skills as it relates to school readiness to future academic performance were conducted by Agostin and Bain (1997) and McClelland, Acock, and Morrison (2006). Agostin and Bain (1997) tested 184 students at the end of kindergarten using the Early Prevention of School Failure screening package and the Social Skills Rating Scale (SSRS; Gresham & Elliott, 1990). The students were then administered the Stanford Achievement Test a year later. Information about promotion and retention were gathered at the end of each school year. Results of the study revealed that two social skill areas, cooperation and self-control, predicted first grade academic success as well as promotion and retention in kindergarten and first grade. McClelland, Acock, and Morrison (2006) found a positive relationship between kindergarten learning-related skills to reading and math trajectories in 538 children between kindergarten and sixth grade. Learning-related skills include self-regulation and social competence. Latent growth curves revealed that learning-related skills, measured by teacher ratings on the Cooper-Farran Behavioral Rating Scales

(CFBRS; Cooper & Farran, 1991), had a positive unique effect on children's reading and math scores between kindergarten and sixth grade and further predicted positive growth in reading and math between kindergarten and second grade. The study also found that students with poor learning-related skills performed lower than their higher-rated peers on reading and mathematics measures between kindergarten and sixth grade.

Social-emotional adjustment has been found to be a foundational competency linked to early school adjustment (Fantuzzo et al., 2007; Kramer, Caldarella, Christensen, & Shatzer, 2010; Ladd, Birch, & Buhs, 1999; Welsh et al., 2001). Fantuzzo et al. (2007) study of 1,764 urban Head Start students, age 44 to 81 months, investigated dimensions of social-emotional classroom behavior (e.g., approaches to learning, problem behavior) as it relates to early school adjustment. Fantuzzo and colleagues examined the unique contribution of approaches to learning and emotional and behavioral adjustment (i.e., social-emotional or early school adjustment) to student academic achievement. The Adjustment Scales for Preschool Intervention (ASPI; Lutz, Fantuzzo, & McDermott, 2002) and the Preschool Learning Behavior Scale (PLBS; McDermott, Green, Francis, & Stott, 2000) were both administered in early fall. Results revealed two distinct and reliable higher order dimensions of classroom adjustment behavior: Regulated Behavior and Academically Disengaged Behavior. The Regulated Behavior factor consisted of high positive loadings for the Attention/Persistence and Attitude Toward Learning PLBS scales and negative loadings for Aggressive and Inattentive/Hyperactive ASPI scales. The Academically Disengaged Behavior factor consisted of positive loadings for Withdrawn/Low Energy and Socially Retacent ASPI scales and a negative loading for Competence/Motivation PLBS scale. Both dimensions contributed positive unique

variance to the prediction of early mathematic ability and general classroom competencies before kindergarten entry, controlling for demographics of the child. In addition, the findings indicated that each dimension contributed independently to the prediction of academic risk, controlling for child demographics.

Similarly, Ladd, Birch, and Buhs (1999) conducted a study with 200 kindergarten students examining the relationship of social skills to early school adjustment. Researchers used a sociometric rating procedure to determine students' level of peer acceptance and number of mutual friendships. In addition, the researchers observed student social skills, including both prosocial and antisocial behaviors, during free-play. Six specific social skills were tracked, three prosocial behaviors (social conversation, cooperative play, and friendly touch) and three antisocial behaviors (aggression, object possessiveness, and arguing). Teachers were asked to complete the Teacher Rating Scale of School Adjustment (TRSSA; Ladd, Kochenderfer, & Coleman, 1996) approximately three to four months into the kindergarten school year. The study found that children who exhibited more prosocial behavior showed a more positive adjustment to school as measured by their number of mutual friendships, level of peer acceptance, and class participation. Students who displayed more antisocial behavior manifested lower levels of school adjustment as indicated by higher levels of peer rejection, conflictual teacher-child relationships, and low levels of class participation.

Rimm-Kaufman et al. (2000) conducted a survey of a nationally representative group of kindergarten teachers ($N = 3595$) who indicated that their number one concern for incoming students was a failure to follow directions followed by behavior concerns and finally academic difficulties. In addition, research highlights the need for early

intervention with children who are exhibiting significant social-emotional difficulties (McIntyre, Eckert, Fiese, DiGennaro & Wildenger, 2007; Tewhey, 2006). According to a survey conducted by the National Center for Early Development and Learning with kindergarten teachers, 46% of the teachers surveyed reported that more than half of their students enter school lacking self-regulatory skills and emotional and social competence to function successfully and learn in kindergarten (West, Denton, & Reaney, 2001). With the change in focus seen in many early childhood education programs, the concern is that the structure of these settings may not provide a sufficient foundation for young children's future academic growth (Fantuzzo et al., 2007; Logue, 2007; Rimm-Kaufman et al., 2000). Further many research studies conducted over the last two decades indicated that the key attributes of social-emotional behavior in the classroom are malleable and easily influenced by intervention programs (Durlak & Weissberg, 2011; Kagan, Moore, & Bredekamp, 1995). These studies have found that social-emotional competencies such as prosocial behaviors, aggression control, emotional understanding, social-problem solving skills, and learning engagement can be developed through systematic instructional approaches in the classroom (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2005; Elias et al., 1997) as is seen in many social and emotional learning (SEL) programs. For example, a study conducted with 67 kindergarten students examined the effects of the "Strong Start" curriculum on social and emotional competence using a time-series design (Kramer, Caldarella, Christensen, & Shatzer, 2010). Teachers and parents completed behavior rating scales for each student on four separate occasions, twice before the intervention (pre) with a 6-week interval between them, and twice following the intervention (post) also with a 6-week interval

between them. The curriculum was made up of ten lessons covering topics such as recognizing one's own and others' feelings, handling anger and anxiety, being a friend, and solving problems. Topics were taught through direct instruction, example scenarios, and role-play activities. A stuffed animal was used as a mascot to enhance scenarios and role play. The program used popular children's literature to explore the topics and guide discussions. The findings revealed gains in students' prosocial behaviors and decreases in internalizing behaviors as rated by both teachers and parents (Kramer et al., 2010).

Similarly, a study examining the effects of the "I Can Problem Solve" program, which is designed to develop a set of interpersonal cognitive problem solving skills in preschool aged children, indicated gains in children's social problem-solving abilities and improvements in teachers' ratings of students' frustration tolerance, impulsivity, and task engagement (Shure & Spivak, 1982). In addition, the Incredible Years Social and Emotional Curriculum ("Dinosaur School") that targets children with behavior problems and teaches them prosocial skills, emotional understanding, self-regulation, and social problem solving skills revealed behavioral improvements at home and school and were maintained at follow-up, one year after the end of the program (Webster-Stratton et al., 2004). Given the confirmed positive relationship between social-emotional development and school readiness, early school adjustment, and academic achievement (Fantuzzo et al., 2007; Welsh et al., 2001) and the knowledge that early intervention programs and instruction have a positive influence on the development of prosocial behaviors (Kagan et al., 1995; Raver, 2002) it is important that time to focus on the development of these skills remains in the curriculum (NAEYC, 2009a; Ștefan, Balaj, Porumb, Albu, & Miclea, 2009).

Academic competence and social-emotional competence are not mutually exclusive, but are developmentally linked and reciprocal in nature (Fantuzzo et al., 2007; Griffin, 1997; McClelland, Morrison, & Holmes, 2000; Welsh, Parke, Widaman, & O'Neil, 2001; Wentzel, 1991). Research has indicated that kindergarten students who enter school with limited social-emotional skills are at greater risk for low academic achievement (Cooper & Farran, 1988; McClelland et al., 2006; Raver, 2002; Wentzel, 1991) while children with lower academic competence often have social-emotional difficulties (Raver & Knitzer, 2002). Given the nature of the relationship of these constructs, it is critical that an integrative, comprehensive approach to teaching that addresses both academic and social-emotional development simultaneously be taken when educating young children (Dodge, 1995; Nadeem, Maslak, Chacko, & Hoagwood, 2010). For this integrative, comprehensive approach to occur, teachers need to be supported in delivering this kind of instruction through education and professional development.

Future Directions

The impact of high-stakes testing has increasingly shifted early education curriculum and instruction to an academic focus and consequently de-emphasized social-emotional instruction. This is concerning because of the positive relationship that exists between social-emotional development and early school adjustment and future academic achievement (Fantuzzo et al., 2007; McClelland et al., 2006; Welsh et al., 2001). High-stakes testing practices appear to be here to stay and in fact are increasing in use and impact across the United States. For this reason it is important to determine how teachers can address social-emotional instruction in the face of high-stakes testing. This section

will also present ways that mental health professionals (i.e., school psychologists, counselors, and social workers), administrators, and colleagues can support teachers in the endeavor to provide social-emotional learning in today's schools. Please see Appendix A for practical suggestions describing how various stakeholders (i.e., administrators, school-based mental health professionals, and teachers) can assist early childhood educators in successfully integrating SEL into the classroom and the curriculum.

Curriculum supports. To ensure the appropriate implementation and integration of social-emotional learning into the curriculum, curriculum supports need to be provided for teachers. Curriculum supports, in this article, are defined by any implementation support (e.g., coaching, training) provided to teachers from school personnel (i.e., administrators, school-based mental health professionals, teachers) to aid in the appropriate implementation and integration of social-emotional learning into the curriculum. There is growing evidence that preventive interventions in social-emotional development delivered by school personnel are effective in improving students' growth in this area (Durlak, Weissberg, Dymnicki, Schellinger, & Taylor, 2011) as well as evidence that social-emotional learning is linked to academic performance (Payton et al., 2008). Teachers are in the ideal position to deliver SEL instruction to students (Strein, Hoagwood, & Cohn, 2003) however, it is important to ensure that the curriculum is delivered with fidelity to achieve positive program outcomes (Durlak & DuPre, 2008). The prevention/intervention research indicates that these curriculum supports will increase the likelihood that the SEL program will be implemented with fidelity and will produce positive outcomes (Ransford et al., 2009).

Another reason curriculum supports may be warranted in this high-stakes testing era is the impact that test-focused accountability has had on how teachers are trained (Marxen, Ofstedal, & Danbom, 2008). Some early education programs have made adjustments to their curriculum to prepare teachers for the increased academic expectations that exists because of the high-stakes phenomenon (Brown, 2009). The emphasis of kindergarten teachers' training once was child development. However, the NCLB requirement of highly qualified teachers shifted state licensing requirements to majoring in subject areas. This requirement change, prompted many teacher education programs to move the preparation of kindergarten teachers out of early childhood teacher education programs to the elementary/middle school programs (Marxen et al., 2008). Consequently, new teachers may not have received the child development training once received by early education teachers and some elementary education pre-service teachers (Brown, 2009; Marxen et al., 2008). Therefore, reasons such as lack of training for new teachers and lack of practice for older teachers in delivering social-emotional instruction may have resulted in a decline in teacher efficacy in the area of social-emotional instruction. Teacher efficacy has been found to contribute to school-based curriculum implementation (Ransford et al. 2009; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). More specifically, teacher efficacy has been linked to more successful implementation of prevention curricula (McCormick, Steckler, & McLeroy, 1995; Rohrbach, Graham, & Hansen, 1993). For these reasons, teachers' efficacy in the area of delivering an SEL curriculum needs to be increased through such supports as resources, training, and coaching provided by administrators, school-based mental health staff (i.e. counselors,

social workers, and school psychologists) and teachers (Brown, 2009; Ransford et al., 2009).

School administrators. School administrators play an important role in the implementation of SEL curriculums in early education settings (Durlak & Weissberg, 2011; Ransford et al., 2009; Rohrbach et al., 1993). Support from school administrators can take many forms, but usually includes verbal commitment, monitoring, accountability, and dedication of resources (Ransford et al., 2009). Principals that provide their teachers with the appropriate resources and allow teachers the flexibility to make decisions regarding classroom practices set the stage for teachers' efficacy to grow (Lee et al., 1991). Studies have indicated that teachers' perceptions of support from administrators have a positive effect on teacher efficacy (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Lee et al., 1991) as well as a positive effect (e.g., willingness to try new approaches, implement progressive and innovative methods, persist longer) on teacher implementation delivery (Allinder, 1994; Ransford et al., 2009; Rohrbach et al., 1993).

Researchers have indicated that if teachers perceive strong support from building administrators, implementation of a new program or curriculum is more likely to be successful (Ransford et al., 2009). The Ransford et al. (2009) study examined how kindergarten through fifth grade urban teachers' perception ($N = 156$) of administrative support were associated with their self-reported implementation dosage and quality of the Promoting Alternative Thinking Strategies (PATHS; Greenberg & Kusche, 1994) program. Dosage referred to how often teachers implemented the PATHS lessons or used the supplemental activities that were designed to integrate the PATHS curriculum with

academics. Quality referred to how well the teacher felt they implemented the lessons and how well they felt they were able to generalize the concepts throughout the day. The teachers were asked to indicate the degree of support they received from their administration for the implementation of PATHS, as well as rate their implementation dosage and quality using a Likert scale. Results indicated that teachers' perceptions of administrative support were not significantly related to their reports of lesson or supplemental activity dosage, but were positively related to reports of higher levels of implementation quality. See Appendix A for practical suggestions for how administrators can assist early childhood educators in successfully integrating SEL into the curriculum.

School-based mental health professionals. School-based mental health (SBMH) professionals are important school personnel that are perfectly positioned to provide training and support for early childhood educators in the area of social-emotional learning, given their specialized training and expertise in this area. Curriculum supports that have proven to have positive effects on the implementation of preventive interventions are training, coaching (Ransford et al., 2009) and consultation (Heller et al., 2011). Studies have shown that teachers, who received in-service training or professional development prior to putting into practice a new preventive intervention program, implemented the programs more effectively than those who did not (Durlak & Weissberg, 2011; Ransford et al., 2009). In addition, SBMH consultation is associated with an increase in teacher efficacy (Heller et al., 2011). SBMH professionals are trained to deliver this type of support and to develop these types of trainings. SBMH also can provide feedback to teachers throughout the implementation process.

Durlak and Weissberg's (2011) examination of the outcomes of 213 published

and unpublished SEL studies involving over 270, 000 students revealed that professional development is an important component to effective SEL programming implementation. According to the Ransford et al. (2009) study, teachers' perceptions of the quality of curriculum training (i.e. professional development) significantly predicted how many lessons they delivered, meaning that if teachers felt better prepared they completed more lessons. Similarly, teachers' perceived quality of curriculum training was positively related to how well teachers felt they were implementing the curriculum.

In addition, SBMH professionals can offer support to teachers in the delivery of SEL curriculum by providing coaching as a supplement to the professional development training. This strategy has been found to improve the quality of the curriculum implementation (Joyce & Showers, 2002). Coaching includes such strategies as demonstrations, consultation, practice, and feedback (Ransford et al., 2009). Ransford et al. (2009) reported a positive relationship between teachers' perceived quality of ongoing coaching and implementation dosage of lessons and supplemental activities as well as a positive relationship with the quality of lesson implementation and generalization of concepts.

Logue (2007) outlines ways that school social workers, using a process proposed by Tourse and colleagues (2005), can collaborate with teachers to promote social-emotional and academic success in kindergarten children. This process suggests that SBMH professionals use the language of the standards in the social-emotional domain of the curriculum to define a common goal in which to address simultaneously with the teacher. Both the SBMH professional and teacher should establish objectives to support the goal on the basis of their expertise as well as co-facilitate activities that support

children's mastery of social skills (Logue 2007).

Heller et al. (2011) conducted a study on the impact of Mental Health (MH) consultation on childcare teachers' efficacy and competence in the area of social-emotional development of children. The components of the model included classroom observations, in-class modeling, individual meetings with teachers, didactic group meetings, meetings with families, designing specific interventions for challenging behaviors, parent education, and referrals to outside agencies. The findings revealed that MH consultation is associated with an increase in teacher efficacy and teachers' report that MH consultation increased their competence in specific areas related to children's social-emotional development. See Appendix A for practical suggestions for how SBMH professionals can assist early childhood educators in successfully integrating SEL into the curriculum.

Teachers. In the face of high-stakes testing, teachers are looking to each other for support. Some teachers are using a community of practice to address the issues resulting in education from the implementation of high-stakes testing. A community of practice is a group of teachers that come together regularly to discuss their work (Reich & Bally, 2010). In these meetings teachers are looking for methods to take back their autonomy and ways that they can support their students' academic growth.

Doppelt et al. (2009) study examined the effects of professional development in the implementation of a science reform curriculum which included the facilitation of a collaborative community of teacher professionals along with two other features (e.g., 1 workshops distributed throughout the implementation, 2 engaging teachers in an active learning process situated in the curriculum). This study contrasted three groups of

teachers: teachers who continued to use the established curriculum ($N = 5$), teachers who implemented the reform curriculum without participating in the professional development sessions ($N = 5$), and teachers who implemented the reform curriculum while participating in the professional development sessions ($N = 13$). The findings revealed that teachers who participated in the professional development had approximately a one standard deviation advantage in their students' achievement over the teachers who did not. The study also revealed that the individual features of the professional development were also important. Finding that creating a community of teacher professionals who meet and share student materials and classroom practice during the implementation of a reform curriculum impacts both teacher practice and student learning. See Appendix A for practical suggestions on how colleagues can support each other in the delivery of social emotional curriculum.

Conclusion

This paper discussed the impact of high-stakes testing on early education curriculum and instructional practice. The use of high-stakes testing has resulted in the increased focus on academics (Meisels, 2007) and a de-emphasis on other important developmental areas such as social-emotional development (Fantuzzo et al., 2007; Logue, 2007) despite the compelling evidence regarding the impact social-emotional development has on students' adjustment and academic performance in school (Fantuzzo et al., 2007; Griffin, 1997; McClelland, Morrison, & Holmes, 2000; Welsh, Parke, Widaman, & O'Neil, 2001). Given this, the change in curriculum brought on by NCLB may be placing a whole generation of students at-risk for poorer school performance. Therefore, conscious efforts to put social-emotional instruction back into the curriculum

should be made. These efforts should include discussions about how teachers can provide students with instruction in social-emotional development in the face of high-stakes testing. To accomplish this, teachers need to feel supported in their endeavor to provide this instruction for their students by administrators, SBMH professionals and their colleagues.

References

- Abrams, L. M., Pedulla, J. J., & Madaus, G. F. (2003). Views from the classroom: Teachers' opinions of statewide testing programs. *Theory into Practice*, 42(1), 18-29.
- Agostin, T. M., & Bain, S. K. (1997). Predicting early school success with developmental and social skill screeners. *Psychology in the Schools*, 34, 219-228.
- American Educational Research Association (2000). **AERA Position Statement on High-Stakes Testing in Pre-K – 12 Education**. Washington, D. C.; Author.
- Amrein, A.L., & Berliner, D.C. (2002). The impact of high-stakes tests on student academic performance: An analysis of NAEP results in states with high-stakes tests and ACT, SAT, and AP test results in states with high school graduation exams. Tempe, Arizona: Educational Policy Research Unit, College of Education, Arizona State University (December).
- Amrein, A. T., & Berliner, D. C. (2003). The effects of high-stakes testing on student motivation and learning. *Educational Leadership*, 60(5), 32.
- Amrein-Beardsley, A. (2009). The unintended, pernicious consequences of “Staying the Course” on the United States’ No Child Left Behind policy. *International Journal of Education Policy & Leadership*, 4(6), 1-13.
- Association for Supervision and Curriculum Development (2006). *The whole child in a fractured world*. Prepared by H. Hodgkinson. Alexandria, VA: Author. Online: www.ascd.org/ascd/pdf/fracturedworld.pdf.
- Bierman, K. L., Domitrovich, C. E., Nix, R. L., Gest, S. D., Welsh, J. A., Greenberg, M. T., Blair, C., Nelson, K. E., & Gill, S. (2008). Promoting academic and social-

- emotional school readiness: The head start REDI program. *Child Development*, 79(6), 1802-1817.
- Boe, E. E., Sujie, S., & Cook, L. H. (2007). Does teacher preparation matter for beginning teachers in either special or general education? *Journal of Special Education*, 41(3), 158-170.
- Bordignon, C. M., & Lam, T. C. M. (2004). The early assessment conundrum: Lessons from the past, implications for the future. *Psychology in the Schools*, 41(7), 737-749.
- Bracken, B. A. (1987). Limitations of preschool instruments and standards for minimal levels of technical adequacy. *Journal of Psychoeducational Assessment*, 5(4), 313-326. doi:10.1177/073428298700500402
- Brown, C. P. (2009). Helping preservice teachers learn to teach for understanding in this era of high-stakes early education reform. *Early Childhood Education Journal*, 36(5), 423–430. doi: 10.1007/s10643-009-0303-6
- Cawelti, G. (2007). One consequence of NCLB: An unbalanced curriculum--And what you can do about it. Presentation at the ASCD annual conference. Collaborative for Academic, Social, and Emotional Learning. (2005). Safe and sound: An educational leader's guide to evidence-based social and emotional learning programs— Illinois edition. Chicago: Author.
- Collins, S. (2005). Scientifically based research and students with severe disabilities: Where do educators find evidence-based practices? *Rural Special Education Quarterly*, 24(1), 60-63.
- Cooper, D. H., & Farran, D. C. (1988). Behavioral risk factors in kindergarten. *Early*

Childhood Research Quarterly, 3, 1-19.

Cooper, D. H., & Farran, D. C. (1991). *The Cooper-Farran behavioral rating scales*.

Brandon, VT: Clinical Psychology Publishing Co., Inc.

Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence. *Child Development*, 74, 238-256.

Dever, M. T., & Carlston, G. (2009). No Child Left Behind: Giving voice to teachers of young children. *Journal of Educational Research & Policy Studies*, 9(1), 61-79.

Dockett, S., & Perry, B. (2002). Beliefs and expectations of parents, prior-to-school educators and school teachers as children start school: An Australian perspective. *Paper presented at the American Educational Research Association Annual Meeting*, 2-14.

Dodge, D. (1995). The Importance of curriculum in achieving quality child daycare programs. *Child Welfare*, 74(6), 1171-1188.

Durlak, J. A., & Dupre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41, 327-350.

Durlak, J. A., & Weissberg, R. P. (2011). Promoting social and emotional development is an essential part of students' education. *Human Development*, 54, 1-3. doi: 10.1159/000324337

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Schellinger, K. B., & Taylor, R. D. (2011). The impact of enhancing students' social and emotional learning: A meta-

- analysis of school-based universal interventions. *Child Development*, 82(1), 405-432. doi: 10.1111/j.1467-8624.2010.01564.x
- Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., Shriver, T. P. (1997). Promoting social and emotional learning: Guidelines for educators. Alexandria, VA: Association for Supervision and Curriculum Development.
- Fantuzzo, J., Bulotsky-Shearer, R., McDermott, P. A., McWayne, C., Frye, D., & Perlman, S. (2007). Investigation of dimensions of social-emotional classroom behavior and school readiness for low-income urban preschool children. *School Psychology Review*, 36(1), 44-62.
- Gay, G. (2007). The rhetoric and reality of NCLB. *Race Ethnicity and Education*, 10(3), 279-293.
- Goldstein, L. S. (2008). Kindergarten teachers making “street-level” education policy in the wake of No Child Left Behind. *Early Education & Development*, 19(3), 448-478.
- Gormley, Jr., W. T., Gayer, T., Phillips, D., & Dawson, B. (2005). The effects of universal pre-k on cognitive development. *Developmental Psychology*, 41(6), 872-884.
- Gresham, E. M., & Elliott, S. N. (1990). Social skills rating system (SSRS). Circle Pines, MN: American Guidance Service.
- Griffin, E. A. (1997). The role of children’s social skills in achievement at kindergarten entry and beyond. Poster presented at the biennial meeting of the Society for Research in Child Development, Washington D. C., April.

- Haertel, E. H., & Herman, J. L. (2005). A historical perspective on validity arguments for accountability testing. In J. L. Herman & E. H. Haertel (Eds.), *Uses and misuses of data for educational accountability and improvement: 104th Yearbook of the National Society for the Study of Education* (Part 2, pp. 1–34). Malden, MA: Blackwell.
- Hanushek, E. A., & Raymond, M. E. (2005). Does school accountability lead to improved student performance? *Journal of Policy Analysis and Management*, 24, 297–327.
- Heaviside, S., & Farris, E. (1993). *Public school kindergarten teachers views on children's readiness for school*. Contractor report. Statistical Analysis Report. Fast Response Survey System (NCES-93-410). Washington, DC: U. S. Government Printing Office.
- Hoffman, J., Assaf, L.C., & Paris, S. (2001). High stakes testing in reading: Today in Texas, tomorrow? *The Reading Teacher*, 54, 482–499.
- Kagan, S. L., Moore, E., & Bredekamp, S. (1995). Reconsidering children's early development and learning: Toward common views and vocabulary. Washington, DC: National Education Goals Panel.
- Kaniuka, T. S. (Sep2009). NCLB, school-based instructional policy and decision-making: a proposed research agenda. *College Student Journal*, 43(3).
- Kim, J., Murdock, T., & Choi, D. (2005). Investigation of parents' beliefs about readiness for kindergarten: An examination of National Household. Education Survey. *Educational Research Quarterly*, 29(2), 3-17.
- Kramer, T., Caldarella, P., Christensen, L., & Shatzer, R. (2010). Social and emotional

- learning in the kindergarten classroom: Evaluation of the Strong Start Curriculum. *Early Childhood Education Journal*, 37(4), 303-309. doi:10.1007/s10643-009-0354-8
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70(6), 1373-1400.
- Ladd, G. W., Kochenderfer, B. J., & Coleman, C. C. (1996). Friendship quality as a predictor of young children's early school adjustment. *Child Development*, 67, 1103-1118.
- Lamy, C., Barnett, W. S., & Jung, K. (2005). *The effects of Oklahoma's early childhood four-year-old program on young children's school readiness*. New Brunswick; Rutgers, The State University of New Jersey, National Institute for Early Education Research.
- Lee, V., Dedrick, R., & Smith, J. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education*, 64, 190-208.
- Le Floch, K. C., Taylor, J. E., & Thomsen, K. (2006). Implications of NCLB accountability for comprehensive school reform. *Journal of Education for Students Placed At-Risk*, 11(3&4), 353-366.
- Lewit E. M., & Baker, L. S. (1995). School readiness. *The Future of Children*, 5, 128-139.
- Lin, H.-L., Lawrence, F. R., & Gorrell, J. (2003). Kindergarten teachers' views of children's readiness for school. *Early Childhood Research Quarterly*, 18, 225-237.

- Logue, M. E. (2007). Early childhood learning standards: Tools for promoting social and academic success in kindergarten. *Children & Schools, 29*(1), 35-43.
- Lutz, M. N., Fantuzzo, J., & McDermott, P. (2002). Multidimensional assessment of emotional and behavioral adjustment problems of low-income preschool children: Development and initial validation. *Early Childhood Research Quarterly, 17*, 338-355.
- Madaus, G., & Russell, M. (2010). Paradoxes of high-stakes testing. *Journal of Education, 190*(1&2), 21-30.
- Marxen, C. E., Ofstedal, K., & Danbom, K. (2008). Highly qualified kindergarten teachers: Have they been left behind? *Journal of Early Childhood Teacher Education, 29*, 81-88.
- Mathis, W. J. (2006). The Accuracy and Effectiveness of Adequate Yearly Progress, NCLB's School Evaluation System. Tempe: Education Policy Research Unit. Retrieved 6/15/11 from <http://epsl.asu.edu/epru/documents/EPsL-0609-212-EPRU.pdf>
- Mathis, W. J. (2009). NCLB's Ultimate Restructuring Alternatives: *Do They Improve the Quality of Education?* Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit. Retrieved 6/15/11 from <http://epicpolicy.org/publication/nclb-ultimate-restructuring>.
- May, D. C., Kundert, D. K., Nikoloff, O., Welch, E., Garrett, M., & Brent, D. (1994). School readiness: An obstacle to intervention and inclusion. *Journal of Early Intervention, 18*, 290-301.
- McBryde, C., Zivani, J., & Cuskelly, M. (2004). School readiness and factors that

- influence decision making. *Occupational Therapy International*, 11(4), 193-208.
- McClelland, M. M., Acock, A. C., & Morrison, F. J. (2006). The impact of kindergarten learning-related skills on academic trajectories at the end of elementary school. *Early Childhood Research Quarterly*, 21, 471-490.
- McClelland, M. M., & Morrison, F. J. (2003). The emergence of learning-related social skills in preschool children. *Early Childhood Research Quarterly*, 18, 206-224.
- McClelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, 15(3), 307-329.
- McCormick, L. K., Steckler, A., & McLeroy, K. R. (1995). Diffusion of innovation in schools: A study of adoption and implementation of school-based tobacco prevention curricula. *American Journal of Health Promotion*, 9, 210-219.
- McDermott, P. A., Green, L. F., Francis, J. M., & Stott, D. H. (2000). *Learning Behaviors Scale*. Philadelphia, PA: Edumetric and Clinical Science.
- McGuire, M. (2007). What happened to social studies? The disappearing curriculum. *Phi Delta Kappan*, 88, 620-624.
- McIntyre, L., Eckert, T. L., Fiese, B. H., DiGennaro, F. D., & Wildenger, L. K. (2007). Transition to kindergarten: Family experiences and involvement. *Early Childhood Education Journal*, 35(1), 83-88. doi:10.1007/s10643-007-0175-6
- Meisels, S. (2007). Accountability in early childhood: No easy answers. In R. C. Pianta, M. J. Cox, & K. L. Snow (Eds.), *School readiness and the transition to kindergarten in the era of accountability* (pp.31-47). Baltimore, MD: Brookes.
- Nadeem, E., Maslak, K., Chacko, A., & Hoagwood, K. E. (2010). Aligning research and

policy on social-emotional and academic competence for young children, *Early Education & Development*, 21(5), 765-779.

National Association for the Education of Young Children & National Association of Early Childhood Specialists in State Departments of Education (2002). *Early learning standards: Creating the conditions for success*. Joint position statement. Online: www.naeyc.org/dap.

National Association for the Education of Young Children. (1995). Position statement on school readiness. Washington, D.C.; Author.

National Association for the Education of Young Children. (1996). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (NAEYC position statement) [Online]. Available:

http://www.naeyc.org/resources/position_statements/daptoc.htm

National Association for the Education of Young Children. (2009a). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. (NAEYC position statement) [Online].

Available: <http://www.naeyc.org/files/naeyc/file/positions/PSDAP.pdf>

National Association for the Education of Young Children. (2009b). *Where We Stand On School Readiness*. [Online]. Available:

<http://www.naeyc.org/files/naeyc/file/positions/Readiness.pdf>

Neuman, S. B., Roskos, K., Vukelich, C., & Clements, D. (2003). *The state of state prekindergarten standards in 2003*. Report for the Center for the Improvement of Early Reading Achievement (CIERA). Ann Arbor, MI: University of Michigan.

Packer, J. (2007). The NEA supports substantial overhaul, not repeal, of NCLB. *Phi*

Delta Kappan, 265-269.

Panter, J. E., & Bracken, B. A. (2000). Promoting school readiness. In K. M. Minke & G. C. Bear (Eds.), *Preventing school problems-promotion school success: Strategies and programs that work* (pp. 101-142). Bethesda, MD: National Association of School Psychologists.

Paulsell, D., Gordon, A., Nogales, R., DelGrosso, P., Sprachman, S., & Tarullo, L. (2006). Implementation of the Head Start National Reporting System: Spring 2005 update. *Mathematica Policy Research, Inc.*

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., Pachan, M. (2008). The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews. Chicago: Collaborative for Academic, Social, and Emotional Learning.

Pedulla, J., Abrams, L., Madaus, G., Russell, M., Ramos, M., & Miao, J. (2003). Perceived effects of state-mandated testing programs on teaching and learning: Findings from a national survey of teachers. Chestnut Hill, MA: Center for the Study of Testing, Evaluation, and Educational Policy, Boston College.

Pelco, L. E., & Reed-Victor, E. (2007). Self-regulation and learning-related social skills: Intervention ideas for elementary school students. *Preventing School Failure*, 51(3), 36-42.

Pianta, R. C., & LaParo, K. (2003). Improving early school success. *Educational Leadership* 60(7), 24-29.

Pittman, T. S., Emery, J., & Boggiano, A. K. (1982). Intrinsic and extrinsic motivational

orientations: Reward-induced changes in preference for complexity. *Journal Of Personality And Social Psychology*, 42(5), 789-797. doi:10.1037/0022-3514.42.5.789

Ransford, C. R., Greenberg, M. T., Domitrovich, C. E., Small, M., & Jacobson L. (2009).

The role of teachers' psychological experiences and perceptions of curriculum supports on the implementation of a social and emotional learning curriculum. *School Psychology Review*, 38 (4), 510–532.

Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Reports*, 16, 3–18.

Raver, C. C., & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children*. New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health.

Raver, C., & Zigler, E., (2004). Another step back? Assessing readiness in Head Start. *Beyond the Journal: Young Children on the Web*. 1-5. From <http://www.journal.naeyc.org/btj/200401/Raver.pdf>

Reich, G. A., & Bally, D. (2010). Get smart: Facing high-stakes testing together. *The Social Studies*, 101, 179–184. doi: 10.1080/00377990903493838

Rimm-Kaufman, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, 15(3), 147-166.

Roach, A. T., & Frank, J. L. (2007). Large-scale assessment, rationality, and scientific

- management: The case of No Child Left Behind. *Journal of Applied School Psychology*, 23(2), 7-25. doi:10.1300/J370v23n02_02
- Rohrbach, L. A., Graham, J. W., & Hansen, W. B. (1993). Diffusion of a school-based substance abuse prevention program: Predictors of program implementation. *Preventive Medicine*, 22, 237–260.
- Rohrbach, L. A., Grana, R., Sussman, S., & Valente, T. W. (2006). Type II translation: Transporting prevention interventions from research to real-world settings. *Evaluation and the Health Professions*, 29, 302– 333.
- Schmidt, T. (2008). Scratching the surface of *No Child Left Behind*: How *No Child Left Behind* unfairly affects schools with significant proportions of disadvantaged students.
- Scott-Little, C., Kagan, S. L., & Frelow, V. S. (2006). Conceptualization of readiness and the content of early learning standards: The intersection of policy and research? *Early Childhood Research Quarterly*, 21, 153-173.
- Sheldon, K. M., & Biddle, B. J. (1998). Standards, accountability, and school reform: Perils and pitfalls. *Teachers College Record*, 100(1), 164-180.
- Shepard, L. A. (1990). Negative policies for dealing with diversity: When does assessment and diagnosis turn into sorting and segregation? In Hiebert, E. (Ed.), *Literacy for a Diverse Society: Perspectives, Practices, and Policies*. New York: Teacher's College Press.
- Shure, M. B., & Spivack, G. (1982). Interpersonal problem solving in young children: A cognitive approach to prevention. *American Journal of Community Psychology*, 10, 341 – 356.

- Smith, E. (2005). Raising standards in American schools: the case of No Child Left Behind. *Journal of Education Policy*, 20(4), 507-524.
doi:10.1080/02680930500132403
- Ștefan, C. A., Bălaj, A., Porumb, M., Albu, M., & Miclea, M. (2009). Preschool screening for social and emotional competencies—Development and psychometric properties. *Cognition, Brain, Behavior: An Interdisciplinary Journal*, 13(2), 121-146.
- Strein, W., Hoagwood, K., & Cohn, A. (2003). School psychology: a public health perspective: II. Prevention, populations, and systems change. *Journal of School Psychology*, 41, 23–38.
- Tarullo, L. B., Vogel, C. A., Aikens, N., Martin, E. S., Nogales, R., & Del Grosso P. (2008). Implementation of the Head Start National Reporting System: Spring 2007. *Mathematica Policy Research, Inc.*
- The No Child Left Behind Act of 2001*: Public Law 107-110, enacted January 8, 2002.
- Tewhey, K. (2006). Children's support services: Providing a system of care for urban preschoolers with significant behavioral challenges. *Childhood Education*, 82(5), 289.
- Urrieta, L. (2004). Assistencialism and the politics of high-stakes testing. *The Urban Review*, 36(3), 211-226.
- U.S. Department of Education, *A Nation Accountable: Twenty-five Years After a Nation at Risk*, Washington, D.C., 2008.
- Vinovskis, M. A. (1999). Do federal compensatory education programs really work? A brief historical analysis of Title I and Head Start. *American Journal of Education*, 107(3), 187-209.

- Webster-Stratton, C., Reid, J., & Hammond, M. (2004). Treating children with early-onset conduct problems: Intervention outcomes for parent, child, and teacher training. *Journal of Clinical Child and Adolescent Psychology*, 33, 105 – 124.
- Webster-Stratton, C., Reid, M., & Stoolmiller, M. (2008). Preventing conduct problems and improving school readiness: Evaluation of the Incredible Years Teacher and Child Training Programs in high-risk schools. *Journal of Child Psychology & Psychiatry*, 49(5), 471-488. doi:10.1111/j.1469-7610.2007.01861.x
- Welsh, M., Parke, R. D., Widaman, K., & O'Neil, R. (2001). Linkages between children's social and academic competence: A longitudinal analysis. *Journal of School Psychology*, 39, 463-481.
- Wentzel, K. R. (1991). Relations between social competence and academic achievement in early adolescence. *Child Development*, 62, 1066-1078.
- West, J., Denton, K., & Reaney, L. M. (2001). The kindergarten year: Findings from the Early Childhood Longitudinal Study, kindergarten class of 1998–1999 (Publication No. NCES2001-023). Washington, DC: Department of Education, National Center for Education Statistics.
- Wheelock, A., Bebell, D. J., & Haney, W. (2000). What can student drawings tell us about high-stakes testing in Massachusetts? *Teachers College Record* [Online]. Available: www.tcrecord.org
- William, D. (2010). Standardized testing and school accountability. *Educational Psychologist*, 45(2), 107–122, doi: 10.1080/00461521003703060
- Wilson, P. (2004). A preliminary investigation of an early intervention program: Examining the intervention effectiveness of the *Bracken Basic Concept*

Development Program and the *Bracken Basic Concept Scale-Revised* with Head Start students. *Psychology in the Schools*, 41(3), 301-311.

Wright, C., Diener, M., & Kay, S. C. (2000). School readiness of low-income children at risk for school failure. *Journal of Children & Poverty*, 6(2), 99-117.

Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2004). The scientific base linking social and emotional learning to school success. *Journal of Educational and Psychological Consultation*, 17(2&3), 191-210.

CHAPTER 2

KINDERGARTEN TEACHERS' KNOWLEDGE AND PERCEPTIONS OF EARLY LEARNING-RELATED SKILLS AND THEIR RELATIONSHIP TO ACADEMIC ACHIEVEMENT

Historically, the kindergarten curriculum emphasized social-emotional development including interpersonal and learning-related skills (Logue, 2007). Researchers have confirmed that teachers valued instruction and activities to enhance social-emotional skills particularly related to learning-related skills (Heaviside & Farris, 1993; Lewit & Baker, 1995; Lin, Lawrence, & Gorrell, 2003; McClelland, Morrison, & Holmes, 2000). Since the implementation of No Child Left Behind (NCLB, 2002), the focus of kindergarten has changed to incorporate additional academic standards and goals (Fantuzzo et al., 2007). Researchers have indicated that teachers' perceptions may influence their instructional behavior and that their beliefs may affect their interactions with their students (Georgiou, 2008; Rimm-Kaufman, Storm, Sawyer, Pianta, & LaParo, 2006). It also has been found that teacher perceptions are shaped through practice and training experiences (e.g., Rimm-Kaufman et al., 2006). As a result, it would be important to assess kindergarten teachers' perceptions of the implications of NCLB (2002) and the subsequent impact on the content of the kindergarten curriculum as it relates to the importance of developing student learning-related skills. It also would be interesting to compare the perceptions of kindergarten teachers regarding the significance of learning-related skills to academic achievement for those who began teaching Pre NCLB to those who began teaching Post NCLB.

There is a wealth of quantitative research that confirms the positive relationship of social-emotional skills to academic achievement and early school adjustment (e.g., Fantuzzo et al., 2007; McClelland et al., 2000; Welsh, Parke, Widaman, & O'Neil, 2001). Researchers have divided social-emotional skills into two distinct constructs, interpersonal skills and learning-related skills, in order to investigate the individual effects on academic achievement (Bronson, 1994, 1996; Gresham & Elliott, 1990; McClelland et al., 2000). Cooper and Farran (1988) developed a behavior rating scale (Cooper-Farran Behavioral Rating Scale) that distinguishes between interpersonal skills and learning-related skills and results of factor analyses indicated that the two scales are relatively independent. Interpersonal skills are defined as the skills used by a person to properly interact with others and include behaviors such as interacting positively with peers, playing cooperatively, sharing and respecting other children (McClelland & Morrison, 2003). Learning-related skills include behaviors like listening and following directions, participating appropriately in groups (e.g., taking turns), staying on task, and organizing work materials (McClelland et al., 2000). These skills have been identified as important for children to possess in order to fully benefit from instruction and achieve academically (McClelland et al., 2006). Learning-related skills have been referred to and measured in different ways in various studies (Bronson, 2000; Diperna, 2006; Elliot, Huai, & Roach, 2007; Griffin, 1997). Other terms used to describe learning-related skills include mastery task behaviors (Bronson, 2000), academic enablers (Diperna, 2006; Elliot, Huai, & Roach, 2007), executive functioning skills (Bronson, 2000), work-related classroom behaviors (Griffin, 1997), and self-regulation (Pelco & Reed-Victor, 2007).

Researchers investigating the relationship of interpersonal skills and learning-related skills to academic achievement have found that learning-related skills were more predictive of students' academic performance than interpersonal skills (Cooper & Farran, 1988; Cooper & Speece, 1988; McClelland et al., 2000; Welsh et al., 2001). Cooper & Farran (1988) conducted a study on kindergarten children's ($N = 650$) interpersonal and work-related classroom behavior (i.e., learning-related skills) as rated by their kindergarten teachers on the Cooper-Farran Behavioral Rating Scales (CFBRS) in the fall and spring to identify behaviors critical for success. The work-related skills included items assessing disorganization, dependence, distractibility, and noncompliance with directions. Results of the analyses revealed that while there was a risk associated with being classified as having low work-related skills or low interpersonal skills at mid-year and/or spring with being classified as maladjusted, low work-related skills posed a greater risk for such an outcome than interpersonal skills. Learning-related skills also were reported by teachers as a priority over interpersonal skills (Foulks & Morrow, 1989; McClelland et al., 2000) and pre-academic and academic skills (Heaviside & Farris, 1993; McClelland et al., 2000; Lin et al., 2003) for early academic success. Therefore, this article will focus on kindergarten teachers' perceptions about the importance of learning-related skills to academic achievement and how they see their role in the development of these skills.

The Relationship of Learning-Related Skills to Academic Achievement

Learning-related skills play a significant role in the attainment of academic achievement (Diperna & Elliott, 2002; Griffin, 1997; McClelland & Morrison, 2003; McClelland, et al., 2000; Pelco & Reed-Victor, 2007; Welsh, et al., 2001). These skills

have been found to affect both early school success (McClelland et al., 2006; McClelland & Morrison, 2003; McClelland et al., 2000; Pelco & Reed-Victor, 2007) and future academic outcomes (Griffin, 1997; McClelland et al., 2006). Learning-related skills are linked to a child's academic success by providing the foundation for positive classroom behavior and setting the stage for later social behavior and academic performance (McClelland et al., 2000; McClelland et al., 2006). Research findings further indicated that kindergarten students who entered school with limited learning-related skills were at greater risk for low levels of academic achievement (Cooper & Farran, 1988; McClelland et al., 2000; McClelland, et al., 2006; Pelco & Reed-Victor, 2007). Individual aspects of learning-related skills, such as attention (Alexander, Entwisle, & Dauber, 1993; Howse, Lange, Farran, & Boyles, 2003; Nelson, Martin, Hodge, Havill, & Kamphaus, 1999), self-regulation (Alexander et al., 1993; Howse et al., 2003; Nelson et al., 1999; Pelco & Reed-Victor, 2007), participation (Alexander et al., 1993), independence (Cooper & Farran, 1991), and cooperation (Agostin & Bain, 1997) have yielded a positive relationship with various aspects of academic achievement. Researchers reported that children who had difficulty regulating their attention (e.g., Alexander et al., 1993; Howse et al., 2003; Nelson et al., 1999), emotions, and/or behavior showed lower academic achievement than their more regulated peers (Nelson et al., 1999; Pelco & Reed-Victor, 2007). Ladd, Birch, and Buhs' (1999) longitudinal study of 200 kindergarteners revealed that negative emotionality and poor self-regulation early in the year affected the types (e.g., prosocial, antisocial) of interpersonal relationships they developed with their peers and teachers. Data were collected through observations and sociometric rating procedures and classroom-based interpersonal relationships (e.g., teacher-child, mutual friendships,

peer acceptance) were found to predict the students' end-of-year achievement levels on standardized tests because of their relationship with students' classroom participation (Ladd et al., 1999). Children with more friends, greater peer acceptance, and closer teacher-child relationships tended to exhibit higher levels of classroom participation and achievement.

Further, students who demonstrated a deficit in a learning-related skill such as interest and involvement in class activities were found to be more at risk for poor school performance (Alexander et al., 1993). A longitudinal study investigating the effects of 790 first grader's classroom behavior on school performance over a 4-year period was examined. Data collection occurred in three out of the four years. Homeroom teachers' ratings of classroom behavior on 14 behavior items, using an instrument adapted from Wave 1 of the National Survey of Children, in the spring of their first, second, and fourth years of school were used to predict spring grades in reading and math and spring scores on verbal and quantitative subtests from the California Achievement Test (CAT) battery. The teachers' ratings clustered in three domains: Interest-Participation (I-P), Cooperation-Compliance (C-C), and Attention Span-Restlessness (A-R), which are all components of learning-related skills. The high I-P and A-R ratings, but not C-C ratings, revealed statistically significant standardized test score gains in first grade in reading and math and report card grades in all 3 years of the data collection in this study (Alexander et al., 1993).

Student cooperation and self-control, components of learning-related skills, were found to significantly predict promotion and retention of kindergarten children (Agostin & Bain, 1997). At the end of kindergarten, 184 children were tested using the Early

Prevention of School Failure screening package and the Social Skills Rating Scale (SSRS; Gresham & Elliot, 1990), and a year later using the Stanford Achievement Test. Information on promotion or retention was gathered in late spring for the two school years and four kindergarten screening areas were found to be predictive of first grade academic success: Receptive language, Visual Memory, Cooperation, and Self-Control, two of which are learning-related skills (i.e. Cooperation and Self-Control). The SSRS Social Skills subdomain consists of the following subscales: Cooperation, Self-Control, and Assertion. The Cooperation and Assertion subscales yielded a significant positive correlation at the .05 level with all four SAT subtests (i.e., Total Reading $r = .29$, $r = .14$; Total Math $r = .28$, $r = .15$; Language $r = .29$, $r = .14$; Listening $r = .20$, $r = .20$ respectively).

Relatively few studies (e.g., Griffin, 1997; McClelland et al., 2000; McClelland et al., 2006) have investigated the effect of the overall learning-related skills construct (e.g., including skills such as self-regulation, attention, cooperation, and participation) to academic achievement in comparison to the number of studies reviewed above which focused on the individual aspects of learning-related skills (e.g., Griffin, 1997; McClelland et al., 2000; McClelland et al., 2006). One such study using a sample of 267 kindergarten children revealed that early learning-related skills measured by the CFBRs (Cooper & Farran, 1991) predicted performance on standardized achievement measures including the Peabody Individual Achievement Test-Revised (PIAT-R) and the Peabody Picture Vocabulary Test-Revised (PPVT-R) (Griffin, 1997). The results indicated that learning-related skills assessed in the fall of kindergarten significantly predicted reading achievement during spring of kindergarten and spring of first grade. The f -squared

(Cohen, 1988) measuring the marginal effect size of adding fall of kindergarten learning-related skills to the regression model was 0.04 at both spring of kindergarten and spring of first grade - an f -squared of 0.04 is generally interpreted as a small effect. In addition, learning-related skills had a marginally significant positive effect on general knowledge measured in the fall of kindergarten and the spring of first grade and for mathematics measured in the spring of kindergarten and spring of first grade (Griffin, 1997).

The following studies used the same sample of 540 kindergarten through sixth grade students collected as a part of a longitudinal study of early individual differences. The first study revealed that children rated as having lower learning-related skills scored lower on academic outcomes at the beginning of kindergarten and at the end of second grade (McClelland et al., 2000). The second study performed a latent growth curve analysis and indicated that learning-related skills had a unique positive effect on children's reading and math scores between kindergarten and sixth grade and predicted growth in reading and math between kindergarten and second grade (McClelland et al., 2006). Finally, children with lower learning-related skills, as rated by teachers on the CFBRs, performed lower than their higher-rated peers on reading and math measures (PIAT-R and North Carolina End-of-Grade Tests) between kindergarten and sixth grade (McClelland et al., 2006). The performance gap widened from kindergarten to second grade (McClelland et al., 2000) and persisted from third to sixth (McClelland et al., 2006). These studies provided evidence of the predictive validity (i.e., predictive value from kindergarten through sixth grade) and stability of the learning-related skills construct and its relation to long-term reading, mathematics, and general knowledge (Griffin, 1997; McClelland et al., 2000; McClelland et al., 2006).

Perceptions of Kindergarten Teachers about the Importance of Learning-Related Skills

Over the last several decades, studies investigating kindergarten teachers' perceptions revealed that teachers find learning-related skills important to student success in kindergarten (Heaviside & Farris, 1993; Lewit & Baker, 1995; Lin et al., 2003; McClelland et al., 2000). Through the use of large-scale surveys, studies found that kindergarten teachers reported learning-related skills as critical to school readiness (Dockett & Perry, 2002; Heaviside & Farris, 1993; Lewit & Baker, 1995) and early school success (Foulks & Morrow, 1989). According to researchers, learning-related skills were perceived by teachers to set the stage for students to be able to engage in academic activities and as prerequisites to sustained academic performance (Dockett & Perry, 2002; Heaviside & Farris, 1993; Lewit & Baker, 1995; Lin et al., 2003; McClelland et al., 2000).

The National Center for Education Statistics (NCES) conducted a study surveying public school kindergarten teachers' beliefs and professional judgments regarding school readiness and found that teachers believed that learning-related skills are important at school entry (Heaviside & Farris, 1993; Lewit & Baker, 1995). The study surveyed 1,339 kindergarten teachers from a sample of 860 public schools selected from the 1990-91 list of public schools compiled by NCES using the Kindergarten Teacher Survey on School Readiness (KTSSR) (Heaviside & Farris, 1993; Lewit & Baker, 1995). The study used a quantitative methodology (i.e., self-report survey administration) and researchers indicated that social development, which includes learning-related social skills, was valued by kindergarten teachers as more important for kindergarten readiness than

knowledge of discrete skills (e.g., knowledge of alphabet, counting ability). More than three-fourths of the surveyed teachers indicated that children should be able to communicate needs, wants, and thoughts upon entering kindergarten (Heaviside & Farris, 1993; Lewit & Baker, 1995) and those students should be enthusiastic and curious when approaching new activities (Heaviside & Farris, 1993; Lewit & Baker, 1995). Further the findings revealed that kindergarten teachers reported that children needed to be able to follow directions, not be disruptive, and be sensitive to others feelings to be successful in school, all of which are learning-related social skills (Heaviside & Farris, 1993; Lewit & Baker, 1995).

Similar teacher perceptions about the importance of learning-related skills were found in two longitudinal studies of nationally representative group of kindergarten teachers (Rimm-Kaufman, Pianta, & Cox, 2000; Lin et al. 2003). The first study consisted of 3,595 kindergarten teachers who indicated that their number one concern for incoming students was the ability to follow directions, followed by behavior concerns, and finally, academic difficulties (Rimm-Kaufman et al., 2000). The participants of the next study (Lin et al., 2003) included 3305 kindergarten teachers from the Early Childhood Longitudinal Study- Kindergarten cohort in the 1998-1999 school year. The findings revealed that kindergarten teachers viewed the social aspects of learning (e.g., tells wants and thoughts, 83.9%; not disruptive of the class, 78.6%; follows directions, 77.5%; and takes turns and shares, 73.6%) as a higher priority than academic skill development (e.g., counts to 20 or more, 14.6%; knows most of the alphabet, 21.4%; names colors and shapes, 32.3%; and uses pencils, brushes, 36.0%).

Teachers' Perceptions of Efficacy in Learning-Related Skills Instruction

It is important to consider teachers' level of efficacy in particular areas of instruction as it has been found to contribute to school-based curriculum implementation (Ransford et al., 2009). Teacher efficacy is defined as an individual's belief that he or she has the teaching skills needed to influence a particular outcome (Bandura, 1997; Heller et al., 2011) and is one of the few teacher characteristics consistently related to teacher behavior and student achievement (Woolfolk & Hoy, 1990; Tschannen-Moran & Woolfolk Hoy, 2001; Heller et al., 2011). Teachers' perception of their level of efficacy in teaching certain skills has an effect on their willingness to accept responsibility for the development of those skills (Tschannen-Moran & Woolfolk Hoy, 2001). Therefore, gathering information about how confident teachers feel in their ability to provide good instruction in areas of importance, such as learning-related social skills is imperative to curriculum supporting the development of learning-related social skills being implemented with fidelity. Given the documented positive relationship of learning-related skills to student achievement (Griffin, 1997; McClelland et al., 2006; McClelland & Morrison, 2003; McClelland et al., 2000; Pelco & Reed-Victor, 2007) it is important to explore how teachers perceive their level of competence in this particular instructional area.

In addition, schools should provide support for the development of teacher efficacy in the instruction of learning-related social skills. Research has shown that providing consultation in the area of social-emotional development (including learning-related social skills) will help increase teachers feelings of competency (Heller et al., 2011). Providing teachers with support and feedback in consultation ultimately increases

the likelihood that teachers will approach their role in the development of social-emotional skills with a high level of commitment, enthusiasm, and persistence (Goddard, Hoy, & Hoy, 2000; Tschannen-Moran & Hoy, 2001).

Studies investigating the relationship of teacher experience to teacher efficacy have generally found that teacher efficacy is more likely to increase during the period of preservice training (Hoy & Woolfolk, 1990), stabilize after the teacher begins teaching full time, and then show a general decline as the teacher becomes more experienced (Klassen & Chiu, 2010). Klassen and Chiu (2010) found a nonlinear relationship in their study examining the relationship of teachers' ($N = 1430$) years of experience to three domains of self-efficacy (instructional strategies, classroom management, and student engagement). Teachers' years of experience showed a nonlinear relationship with all three domains of self-efficacy, increasing from early career to mid-career and then falling afterwards.

Georgiou (2008) found that experienced teachers ($N = 154$) tended to contribute student achievement to biologically determined factors, factors uncontrollable to the child, and factors stable over time (e.g., intelligence), while preservice or student teachers ($N = 159$) believed more in the role that teachers play (i.e., teachers' instruction) in student learning. These beliefs about what contributes to a student's achievement play a role in teachers' willingness to persist in the delivery of instructional strategies and intervention. Teachers' preconceived notions about what students can accomplish affect the level of challenge they present to particular students (Georgiou, 2008).

Ghaith and Yaghi (1997) investigated the relationship among teachers' experience, efficacy, and attitudes toward the implementation of instructional innovation.

Data was gathered through three questionnaires administered to 25 teachers immediately following a four day staff development program on cooperative learning. Results indicated that experience was negatively correlated with their sense of general teaching efficacy ($r = -.50$) and to their ratings of importance of implementing instructional innovation ($r = -.57$). However, experience was positively correlated with teachers' ratings of the difficulty of using the innovation ($r = .43$). The teachers' sense of personal teaching efficacy was found to be positively correlated with their ratings of the innovation as congruent with their current practices ($r = .62$), less difficult to implement ($r = -.39$), and important to use ($r = .55$).

Given the findings surrounding the relationship of teacher experience and teacher self-efficacy, it is important to investigate this relationship as it relates to efficacy in teaching learning-related skills. This study will specifically compare the perceptions of kindergarten teachers with less than 10 years of experience to those with 10 or more years of experience. This should give some insight to the relationship of years of experience to efficacy in this area, as well as explore how teaching both pre- and post-NCLB and teaching only post-NCLB effects teacher self-efficacy in the area of learning-related skills.

Purpose of the Study

This mixed methods study (Tashakkori & Teddlie, 1998) investigated kindergarten teachers' perceptions of the importance of learning-related skills to students' school readiness and academic achievement. A triangulation mixed methods design was used to allow the researchers to collect complementary data (i.e., to expand quantitative results with qualitative data) on the same topic (Creswell & Plano Clark, 2007). Survey

instruments were used to examine the perceptions of kindergarten teachers with less than 10 years of experience (working during NCLB implementation) and the perceptions of kindergarten teachers with 10 or more years of experience (working prior to and during NCLB) regarding the importance of learning-related skills to school readiness and academic achievement. Additionally, this study explored which set of skills (i.e., learning-related skills, interpersonal skills, or academic skills) kindergarten teachers rated as a priority to school readiness and academic achievement. Concurrent with this quantitative data collection, qualitative data (from semi-structured interviews) was utilized to explore how pre- and post-NCLB kindergarten teachers perceived their role in the development of learning-related skills. Finally, the perceptions of these two groups of kindergarten teachers were compared regarding their beliefs about school achievement and teacher efficacy in learning-related skills.

Method

Participants

Ninety-seven certified kindergarten teachers currently working in and around the metro Atlanta area with one or more years of kindergarten experience ($M = 8.95$, $SD = 6.45$) participated in this study. All of the subjects were female. The ethnicity of the participants in the sample was as follows: 32% African American, 62.90% Caucasian, 1.00% Asian, and 4.10% other. The teachers ranged in age from 23 to 64 ($M = 41.41$, $SD = 10.43$). Teachers' indicated that 54.60 % had less than ten years of kindergarten teaching experience and 45.40% had more than ten years kindergarten teaching experience. In regards to education, 28.90% of the participants had Bachelor's degrees, 52.60% held Master's Degrees, 16.50% held Specialist Degrees, and 2.10% held PhD

degrees. Finally, 19.60 % of the participants taught in an urban setting, while 80.40% taught in a suburban setting.

Thirty participants from the larger sample were included in the qualitative phase of the study. Using demographic information, a stratified sample, which is a sample of a population that is proportionally representative of all types of people of interest in the survey, was assembled considering the following variables: years of kindergarten teaching experience (less than 10 years or 10 or more years) and setting of school (urban, suburban). Stratifying the sample in this manner allowed us to compare the perceptions of teachers with teaching experience both pre and post NCLB with those with only post NCLB teaching experience. As well as allowed us to see differences in perceptions that exists between teachers working in an urban versus suburban setting. Individuals ranged in age from 26 to 62 ($M = 42.88$, $SD = 10.16$) with 100% being female. The ethnicity of the participants in the subgroup was as follows: 60% African American, 33.30% Caucasian, 3.30% Asian, and 3.30% other. Approximately half (53.33 %) of the participants had less than ten years of kindergarten teaching experience and 46.67% had more than ten years kindergarten teaching experience. About a third (33.30%) of the subgroup participants had Bachelor's degrees, 50.00% held Master's Degrees, and 13.30% held Specialist Degrees. Over half of the subgroup participants (56.70%) taught in a suburban setting, while 43.30 % of the subgroup participants taught in an urban setting.

Procedures

Participants for this study were recruited using criterion (i.e., selecting cases that meet a predetermined criterion) and chain sampling (Creswell, 1998, 2007), which is a

recruitment method through which the researcher identifies initial participants and referrals are requested for additional participants that would meet the identified criteria for enrollment. The recruitment process consisted of the researcher making contact and asking for the support of the counselors and/or psychologists in schools in the metro-Atlanta area in recruiting kindergarten teachers for participation in the study. An email containing the link and describing the study was sent to the counselors and/or psychologist and then forwarded to kindergarten teachers in the schools. This process continued until the desired sample size was met (Creswell, 1998, 2007).

During the first contact with each participant, the researcher provided a brief overview of the study and indicated criterion for participation (current, certified kindergarten teacher, year or more kindergarten teaching experience, working in a metro-Atlanta school). If the teacher met this criterion, consent for participation was requested. All participants were administered a demographic form, the Learning-Related Skills (LRS) survey, the Learning-Related Skills Self-Efficacy Scale (LRSES), and the Beliefs About School Achievement (BASA) scale online.

A subset of the teachers was asked to participate in a semi-structured interview. Individuals for this qualitative phase were sought until thirty participants meeting the study criteria were secured. This study was designed within a constructivist framework, using the principles of grounded theory (Glaser & Strauss, 1967, Strauss & Corbin, 1998). Grounded theory emphasizes the development of knowledge based in context and the generation of theory by the researcher engaged in an ongoing interpretive interaction with data (Henwood & Pidgeon, 2003). Therefore the sample size for this portion of the study was selected based on Creswell's (1998) recommendation that grounded theory

studies include between twenty and thirty participants. Using the demographic information, a stratified sample (i.e., a sample of a population that is proportionally representative of pre- and post-NCLB teachers) was assembled considering the participants years of kindergarten teaching experience (less than 10 years or 10 or more years). Stratifying the sample in this manner allowed us to compare the perceptions of teachers with teaching experience both pre- and post-NCLB with those with only post NCLB teaching experience.

Measures

Demographic form. During the first contact, a demographic form, consisting of 28 items, was administered to participants to collect demographic information and confirm that they met criteria for participation. The demographic form further collected information on gender, age, years of kindergarten teaching experience, ethnicity, and school/class demographics (see Appendix C).

Learning-Related Skills survey. The Learning-Related Skills survey was used to assess teachers' perceptions of the importance of learning-related skills to school readiness in comparison to interpersonal and early academic skills. This survey consists of 17 items reflecting early academic (e.g., "Knows most alphabet"), interpersonal (e.g., "Shares appropriately") and learning-related skills (e.g., "Follows directions"). Teachers were asked to rate the importance of the items to school readiness on a five point Likert scale ranging from "essential" to "of little or no importance." These items were administered in a survey used in a longitudinal study of a nationally representative group of kindergarten teachers with a reported internal consistency (Cronbach's alpha) coefficient of .88 (Lin et al., 2003). For this study, Cronbach's coefficient alphas were

calculated for each construct. The coefficient alphas for the learning-related skill ($\alpha = .86$), academic skill ($\alpha = .85$), and interpersonal skill ($\alpha = .78$) constructs were computed between .70 and .90, suggesting good reliability of the constructs. Teachers also were asked to rank the top 5 out of the 17 items presented, in terms of their importance to future academic success (see Appendix D).

Beliefs About School Achievement (BASA) scale. The BASA (Georgiou, 2008) is a 20 item instrument that produced five reliable factors (Cronbach alpha in the .70-.90 range) in terms of teacher attributions for student achievement: child ability, child effort, family, teachers, and gender. Sixteen of the 20 items, loading on the child ability, child effort, family and teachers factors, were administered in this study. The four questions related to gender were not administered in this study, because it was not a focus of this research. Examples of the statements on the scale are: “School achievement is an inherited talent”; “Even students who are not very smart can have high achievement, if they try”; and “A good teacher can improve the achievement level of all students, even those who are very weak.” This scale was completed by all participants. For this study, the Cronbach’s coefficient alphas for the individual factors were as follows: child ability = .63, child effort = .37, family = .55, teachers = .40. These alphas indicate poor internal consistency of the factors suggesting items on the scales are not highly correlated (see Appendix E).

Learning-Related Skills Self-Efficacy Scale (LRSES). The LRSES was administered to the participants and included four questions related to teacher efficacy to influence learning-related skills. This scale was developed specifically for this study by two faculty members at the designated university. The questions were modeled after the

Rand scale, consisting both of general teaching efficacy and personal teaching efficacy items (Berman et al., 1977). The following is an example of a teacher efficacy item: ‘I feel confident that I can provide a classroom environment that supports my students’ development of learning-related skills.’ A Cronbach alpha was calculated ($\alpha = .12$) indicating poor internal consistency for the factor (see Appendix E).

Semi-structured Interview. To study teacher perceptions of the importance of learning-related skills and their role in the development of these skills, qualitative data were collected using a semi-structured interview constructed by the researcher. The semi-structured interview consisted of 6 questions focused on teachers’ perceptions of the relationship of learning-related social skills to students’ school readiness and/or academic achievement and their perceived role in the development of these skills (see Appendix F). Probes were utilized as needed in order to clarify or gather additional information on a particular topic. The interview portion of the study ranged from approximately 10 to 20 minutes to complete.

Qualitative Data Analysis

Qualitative methodology was used to analyze the interviews. A multi-stage approach to qualitative data collection, analysis, and interpretation was used. The stages implemented were consistent with the deductive-inductive approach (Nastasi, 2009; Strauss & Corbin, 1990) and the principles of grounded theory (Glaser & Strauss, 1967, Strauss & Corbin, 1998). Grounded theory is a simultaneous, recursive process of data collection, coding, conceptualizing, and theorizing based on constant comparison of the collected data. The grounded theory approach is structured in a manner that allows important constructs regarding kindergarten teachers’ understanding of the importance

learning-related skills to emerge from the perspectives of pre- and post-NCLB kindergarten teachers. The stages of the current study's qualitative analysis consisted of preparation, making decisions about the coding process, preparing coders, coding the data (deductive, inductive), and theme/pattern analysis. Further, inter-coder agreement methods, interpretation procedures, and processes to ensure trustworthiness were implemented.

Preparation. In preparation for the study, the researcher immersed herself in the literature surrounding the topic of kindergarten teachers' perceptions of learning-related skills and its relationship to academic achievement. Once the interviews were conducted they were transcribed and uploaded to the computer for coding (Nastasi, 2009). The researcher reviewed the interviews in detail and added reflections to the margins of the transcript to facilitate data analysis and development of codes.

Deductive-Inductive Coding. Deductive-Inductive coding was implemented (Nastasi, 2009; Varjas, Nastasi, Moore, & Jayasena, 2005). First, the data was reviewed and a deductive approach to coding was used. Deductive coding refers to the process through which codes are developed from preexisting theory and research (Nastasi, 2009). Then inductive coding was implemented to capture data that did not fit into the preexisting constructs found in the literature (Nastasi, 2009; Varjas et al., 2005). During this process, the researcher conducted a line-by-line analysis of the transcribed interviews and developed codes of the participants' responses. The responses were entered into a qualitative software package (NVivo 9, QSR International Pty Ltd, Victoria, Australia) and placed under appropriate codes and subcodes, describing its content and expressing their unique points. A research team committee member (school psychology doctoral

student) and a PhD level school psychologist simultaneously use the developed code book to code an interview in an effort to build consensus. Coders met frequently to compare and analyze each other's breakdown of the data. During this consensus building process, definitions were developed, concepts and categories were discussed and codes were revised. This process continued until agreement was reached on the codes to be included.

The coding of each interview was compared and the agreements and disagreements discussed. This process was used to refine the coding manual and clarify code definitions. As a result, the coding manual was revised numerous times as the coders worked to establish a consensus. Each set of revisions was documented in a coding manual, notes were added indicating the reasoning for the changes made providing an audit trail of the team's coding process.

Inter-coder Agreement. In coding the interviews, inter-coder agreement was sought. The initial nine interviews were coded by two individuals. The coding of the interviews was conducted separately by the researcher and a PhD level school psychologist. The coded interviews were then compared for inter-coder agreement and discrepancies were resolved. The two individuals reviewed the interview transcriptions together and agreed upon appropriate codes. This process allowed the coders to reach a shared understanding and identify the issues in the application of the codes. Through this method several codes were revised or eliminated. This practice was continued until a mean score of 85% or better agreement was reached (Bakeman & Gottman, 1986). Agreement of 85% or above between coders was reached by the third interview and a mean score of at least 85% was reached by the 9th interview ($M = 85.12\%$). The

remaining interviews were coded by the researcher, while the second coder reviewed the codes for agreement to ensure consistent application of the codes and avoid coder drift. Inter-rater reliability for coder drift was maintained above 90% ($M = 95.1\%$; Nastasi, 1999).

Trustworthiness. Several techniques were implemented to ensure trustworthiness. Trustworthiness indicates the extent to which one can have confidence in the study's findings (Lincoln & Guba, 1985). In this study, a combined use of deductive and inductive coding and inter-coder agreement was utilized to assist researchers in monitoring theoretical sensitivity (i.e., biases to meaning and data based on knowledge and experience; Strauss & Corbin, 1990). In addition, the researchers utilized an audit trail (i.e., a detailed recording of the coding and analysis procedures) to ensure dependability (reliability) and confirmability (objectivity) of findings (Lincoln & Guba, 1985). In addition, the researcher used triangulation in data interpretation to take full advantage of having multiple data sources (Lincoln & Guba, 1985). Using multiple data sources in interpretation ensures a richer, more robust account of the findings. Furthermore, examples and direct quotes from the interviews were reported to support key findings (Nastasi, 2009) and to manage the threats to trustworthiness. These procedures utilized in qualitative research to establish rigor are an important way to increase our confidence that the voice of the participants is heard.

Results

Data were analyzed based upon research questions. Descriptive and inferential statistics were employed to describe and examine pre- and post-NCLB teachers' perceptions regarding: a) the importance of learning-related skills to students' school

readiness; b) the relative importance of types of skills (i.e., learning related, academic, or interpersonal) that relate to a student's school readiness; c) the relative importance of specific skills that relate to a student's future academic success; d) school achievement; and e) efficacy in teaching learning-related skills. Multivariate analysis of variance (MANOVA) was used to simultaneously test for differences between groups. If findings yielded significant results, univariate analyses of variance (ANOVA) were conducted to determine where differences existed. In addition, qualitative analysis was used to further analyze teachers' perceptions regarding the importance of learning-related skills to students' school readiness and academic achievement. Finally, teachers' perceptions about their role in supporting the development of learning-related skill were examined qualitatively.

A series of t-tests were generated to examine the comparability of the sample and sub-sample. These comparisons were made along demographic variables (i.e., Years of Teaching Experience & Age) as well as teachers' ratings of the importance of learning related skills, interpersonal skills, & academic skills. The t-tests revealed that the participants of each group were similar in age, years of kindergarten teaching experience and years of overall teaching experience. The t-tests also indicated that each set of participants responded similarly on items related to learning-related skills, interpersonal skills and academic skills. A chi-square test indicated that the samples differed significantly in terms of ethnicity, with 32% of the larger sample being African American and 63% of the larger sample being Caucasian, while 60% of the sub-sample was African American and 33% of the sub-sample was Caucasian. However, because both samples do not differ on other demographic variables and they responded in the same manner with

regard to the importance of learning-related, interpersonal and academic skills, the subsample's experiences, as articulated through the qualitative findings of this report, should be representative of the experiences of the total sample.

Research Question 1: How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their perceptions of the importance of learning-related skills to students' school readiness?

Table 1 presents the means and standard deviations for pre- ($n = 44$) and post-NCLB ($n = 53$) kindergarten teacher perceptions of learning-related skills indicated on question 1 of the Learning-Related Skills survey. The differences between these two group's perceptions of the importance of learning-related skills to students' school readiness were tested via multiple analysis of variance (MANOVA). The teachers' years of kindergarten experience (i.e., pre-NCLB or post-NCLB teacher) served as the independent variables while learning-related skills (i.e., seven learning-related items indicated on survey question one) served as the dependent variables. The results indicated no significant difference in pre- and post-NCLB teachers' perceptions of the importance of learning-related skills to students' school readiness, Wilk's $\lambda = 0.962$, $F(7, 89) = .504$, $p > .05$; partial $\epsilon^2 = .04$. These findings contradict Hypothesis 1.

Table 1. Means and standard deviations of pre- and post-NCLB kindergarten teachers' perceptions of the importance of learning-related skills to school readiness.

<u>Item</u>	pre-NCLB ($n = 44$)	post-NCLB ($n = 53$)	Total ($N = 97$)
	<u>M (SD)</u>	<u>M (SD)</u>	<u>M (SD)</u>
Follows directions	4.50 (0.67)	4.34 (0.71)	4.41 (0.69)
Participates appropriately in groups	3.93 (0.87)	3.91 (0.77)	3.92 (0.81)
Sits still and alert	3.57 (1.04)	3.58 (0.93)	3.58 (0.98)
Finishes tasks	3.66 (1.06)	3.64 (0.86)	3.65 (0.95)
Staying on task	3.93 (0.79)	3.94 (0.89)	3.94 (0.84)
Tells needs/thoughts	4.16 (0.91)	4.04 (0.76)	4.09 (0.83)
Organizing work materials	2.89 (0.90)	3.00 (0.88)	2.95 (0.88)

Qualitative data analysis comparing pre-NCLB teachers' perceptions to post-NCLB teachers' perceptions about the importance of learning-related skills to students' school readiness revealed a coding hierarchy containing two primary (i.e., Level 1) codes: *learning-related school readiness skills* and *effects on academic achievement*. There were seven level-two codes that fell under the learning-related school readiness skills code and included: *follows directions, listens, sits still, stays on task, works cooperatively in groups, tells needs and thoughts, and motivation* (see Figure 1). There were nine level-two codes which fell under the *effects on academic achievement* Level 1 code and included: *builds confidence and motivation, foundation, helps access kindergarten curriculum, head start, increase learning capacity, not a determining factor, puts them behind, rate of learning, and supports classroom management* (see Figure 2). The codes were defined and quotations from the teacher interviews were used to further describe the codes and examine the results.

Learning-related school readiness skills (Level 1)

When participants were asked to indicate skills, behaviors, and/or attributes that are important for kindergarten students' school readiness and academic success, many of the teachers indicated learning-related skills as central to student entry-level success and academic achievement. The level-one code, *learning-related school readiness skills*, was defined as a set of skills that were important for children to possess at school entry in order to fully benefit from instruction and academically achieve. Specific learning-related skills indicated by the teachers will be described in greater detail in the analysis of the level-two codes below (see Figure 1).

Follows directions. This Level 2 code was defined as the student's ability to understand and carry out directions given by the teacher. *Follows directions* was one of the most endorsed skills by pre-NCLB (6 out of 14 = 43%) and post-NCLB (8 out of 16 = 50%) teachers as an important school readiness skill. One pre-NCLB teacher indicated that it was important for students to "...follow directions..." Indicating that ... "if they can follow directions" then they can ... "get the concept of what is being taught." When asked to indicate an important school readiness skill, a post-NCLB teacher stated that "at the beginning if ... they follow directions, they'll be a great student." Another post-NCLB teacher indicated that "following directions, that's ... at the top of the list."

Listens. This Level 2 code (*listens*) was defined as the student's ability to listen, focus and pay attention in the classroom setting. This learning-related skill was valued by both pre-NCLB (6 out of 14 = 43%) and post-NCLB (8 out of 16 = 50%) teachers. One teacher stated that "...listening skills are probably the most important. I have noticed that students who can listen learn well and I think that's extremely important."

Sits still. This Level 2 code was defined as the student's ability to remain seated and still for an appropriate period of time. Pre-NCLB teachers indicated the importance of this learning-related skill at a rate of 5 out of 14 (36%) and 4 out of 16 (25%) post-NCLB teachers reported students' ability to sit still as important. One pre-NCLB teacher indicated that children "...should be able to sit...So I think that's, that's my biggest thing. Academics is strong for me, but if they can sit ...and not be so active...then the chances are that they're gonna learn." A post-NCLB teacher stated that children need to be "able to sit still long enough to, to get through some activities."

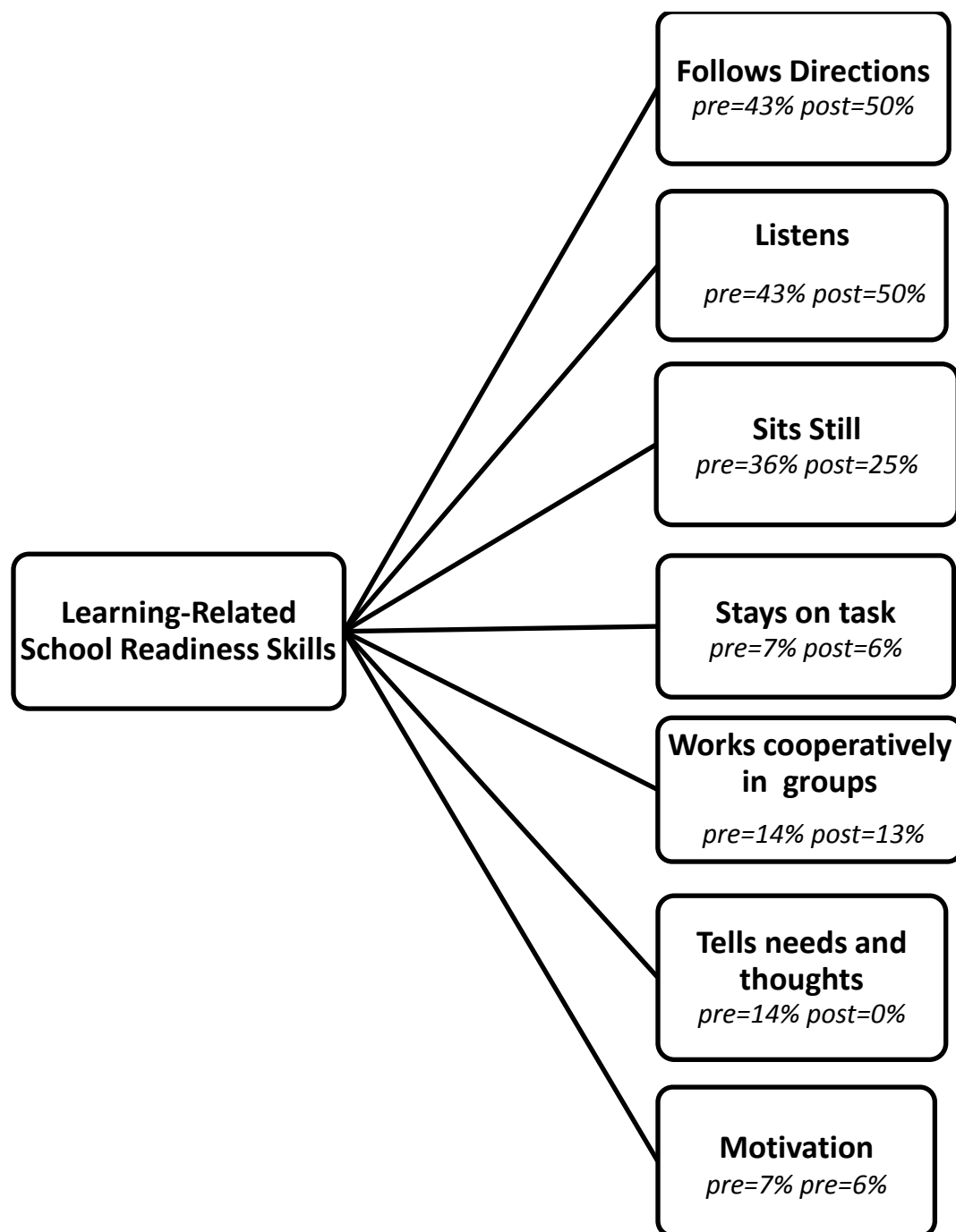


Figure 1. *Learning-related school readiness skills coding hierarchy*

Stays on task. A teacher who reported this Level 2 code as important to school readiness is expressing the need for students to be able to work through a presented task from start to finish or as long as expected by the teacher. When asked to indicate what entry-level skills, behaviors, and/or attributes were important for kindergarten students'

academic success only one pre-NCLB (7%) and one post-NCLB (6%) teacher responded the ability to stay on task was important. The pre-NCLB teacher stated that “being able to stay on task for more than a millisecond” was an important attribute for kindergarten students.

Works cooperatively in groups. *Works cooperatively in groups* (Level 2) was coded when teachers indicated that it is important for students entering school to be able to work along with their peers. This code was utilized when participants reported that such skills as turn-taking and participating in a group is important as an entry-level skill. However, this learning-related skill was not frequently endorsed by the participants of this study. Only 2 out of 14 (14%) pre-NCLB teachers and 2 out of 16 (13%) post-NCLB teachers reported it as an important school readiness skill. One pre-NCLB teacher indicated that “...most importantly at the beginning of the year, they [students] need to know...how to work cooperatively in groups.” The one post-NCLB teacher that indicated this learning-related skill as important stated that “... as far as them being able to just achieve academically it is very important that they are able to work together.” Indicating that “a lot of the things ... in the classroom now are center-based, so if there is an issue of being able to work with others ...then a lot of times its difficult for them to complete a lot of the assignments and tasks that are assigned ...”

Tells needs and thoughts. *Tells needs and thoughts* (Level 2) was coded when teachers indicated that children entering kindergarten need to be able to express their needs and thoughts. Only two teachers in this study indicated this learning-related skill as important to school readiness. Both of these teachers were pre-NCLB (14%) teachers. One of the teachers indicated that children’s “expressive language” was important and the

other teacher said that it was important for students to “...be able to communicate and talk...” with and to them.

Motivation. This level-two code was defined as a student’s tendency to show interest in school and learning. Students show this skill by cooperating and participating in class activities. One pre-NCLB (7%) teacher and one post-NCLB (6%) teacher indicated this as an important school-readiness skill. One teacher stated that students “... have to have an interest in school, a willingness to try, a willingness to learn...”

Effects on Academic Achievement (Level 1)

The Level 1 code, *effects on academic achievement*, was defined as the resulting influences of early learning-related skills to students’ academic achievement. The following 10 Level 2 codes fell under this Level 1 code: *builds confidence* and *motivation*, *foundation*, *helps access kindergarten curriculum*, *head start*, *increase learning capacity*, *not a determining factor*, *puts them behind*, *rate of learning*, and *supports classroom management* (see Figure 2).

Builds Confidence and Motivation. This Level 2 code indicated that possessing learning-related skills helps to build student’s confidence and motivation to learn. This code was only expressed twice in this study by two post-NCLB teachers (2 out of 16 = 13%). One teacher indicated that “it matters how...they learn because they need to be confident and so that...helps them be confident learners and helps them to...keep learning. It motivates them and makes them feel comfortable.”

Foundation. Teachers referred to students with learning-related skills as having a foundation or the prerequisites for school and lifelong learning. Results indicated that 9 out of 14 (64%) pre-NCLB teachers and 8 out of 16 (50%) post-NCLB teachers indicated that learning-related skills were a foundation to students’ academic achievement. A pre-

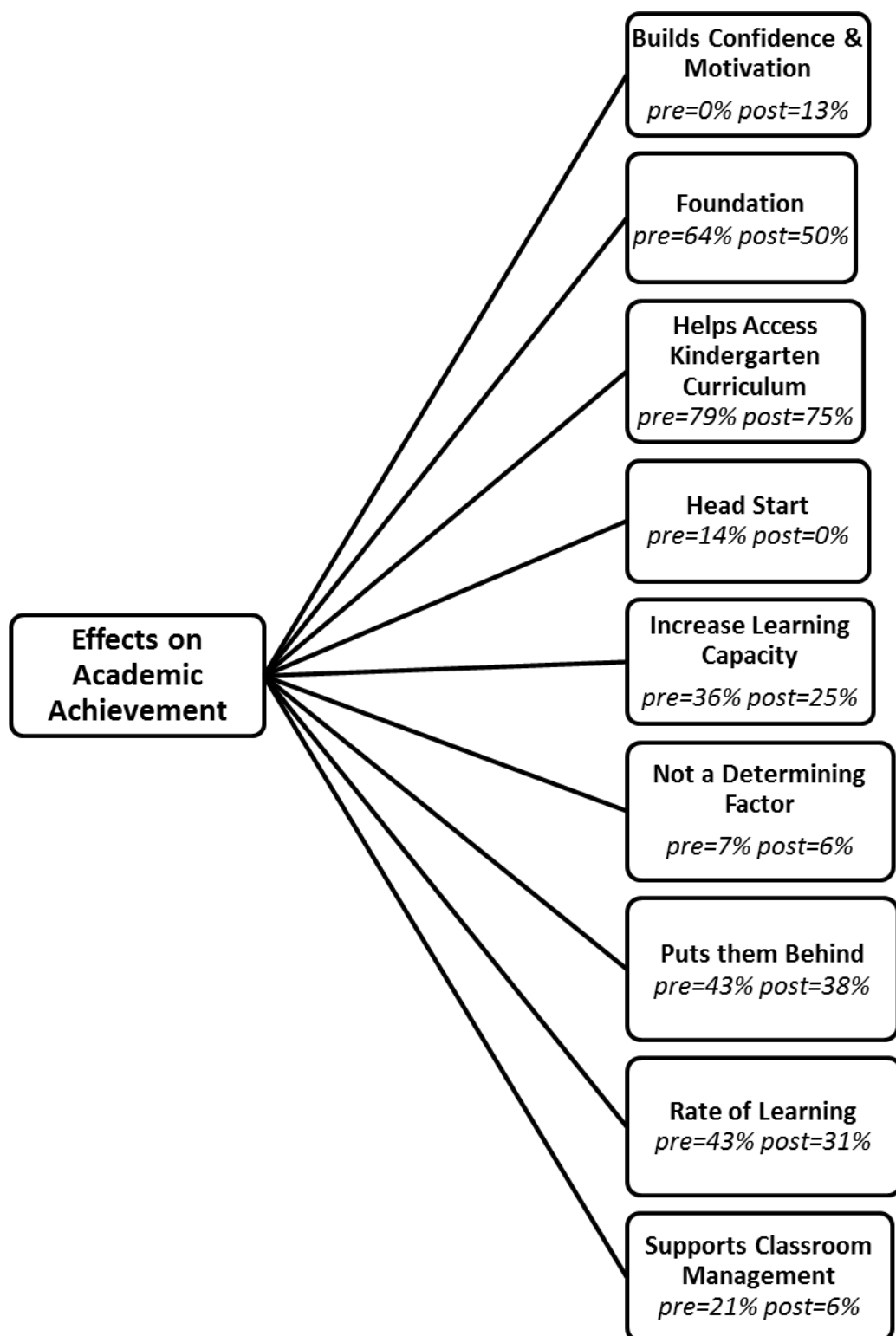


Figure 2. *Effects on academic achievement coding hierarchy*

NCLB teacher stated that “...if they [children] get those skills, those are... like lifelong skills, which will also help ... when they become adults and join the workforce.” A post-NCLB teacher reported that “these are skills the kids need to accomplish to be ready to go on the next grade level.”

Helps Access Kindergarten Curriculum. This Level 2 code indicated that entering school with learning-related skills considered to be prerequisites to kindergarten keeps students on track to accomplish expected academic goals. Further, teachers reported that these learning-related skills and behaviors supported and helped students access the curriculum or presented material. This Level 2 code was reported frequently with 11 out of 14 (79%) pre-NCLB teachers and 12 out of 16 (75%) post-NCLB teachers indicating it. Many of the teachers indicated that when students have the appropriate learning-related skills they are ready to receive and understand kindergarten level curriculum and instruction. A post-NCLB teacher stated that she thinks that students who have these skills “...have a better experience in kindergarten than the other students and... that does help their academics.”

Head Start. This Level 2 code (*head start*) was discussed infrequently in this study being endorsed by only two pre-NCLB teachers out of 14 (14%) and none of the post-NCLB teachers. This code was defined as the indication that entering school with particular learning-related skills gives students a head start. This suggests that the students possessing these skills already have skills that are going to be addressed or reviewed in kindergarten. For example, one pre-NCLB teacher stated that students “...having these skills when they come in initially will just give them an upper hand on what is expected of them.”

Increase Learning Capacity. *Increase Learning Capacity* (Level 2) was coded when teachers indicated that a learning-related skill increased the student's ability to learn or how much they learn. Teachers who expressed that students were more successful and learned more if they have mastered certain learning-related skills were represented in this category. Thirty-six percent (5 out of 14) of the pre-NCLB teachers and 25% (4 out of 16) of the post-NCLB teachers in this study indicated that learning-related skills increase student's learning capacity. One pre-NCLB teacher indicated that students "... learn more and... are more engaged..." when they have these skills. Similarly, a post-NCLB teacher indicated that "...it really does help them make um, more progress."

Not a Determining Factor. This Level 2 code was selected when teachers indicated that they did not perceive learning-related skills as a determining factor in students' achievement. Only one teacher in each teacher group, pre- (7%) and post-NCLB (6%), expressed this viewpoint. The pre-NCLB teacher stated that "... while some... [learning-related skills] may impact...learning, I don't think it is a determining factor of ... academic achievement." The post-NCLB teacher reported that "...somewhere it levels out even if they [students] know it all when they come in... those kids who didn't know a lot ... would gain, if they ...had the intellectual ability, they could gain all those skills and kind of level out, around second or third..."

Puts Them Behind. This Level 2 code was selected when teachers indicated that students entering school lacking in learning-related skills were starting off behind expectation and causing them to fall behind academically. Forty-three percent (6 out of 14) of pre-NCLB teachers and 38% (6 out of 16) of post-NCLB teachers in this study

reported that students who are still needing to develop appropriate learning-related skills tend to fall behind academically as a result. For example, one post-NCLB teacher indicated that developing these learning-related skills "...consumes so much of their [students] energy that their not necessarily focusing on what they should be doing." She reported that during an activity "...one or two children ... had so much trouble just following directions...and taking turns, that I am not really sure how much they got out of the activity."

Rate of Learning. This Level 2 code was selected when teachers indicated that learning-related skills affected student's ability to complete assigned work and/or the rate in which they were able to work through material. Forty-three percent (6 out of 14) of pre-NCLB teachers and 31% (5 out of 16) of post-NCLB teachers indicated that learning-related skills affects students' rate of learning. One teacher indicated that "If a child is disruptive, and....not listening, umm, they don't, they don't get the directions of what they're to do...so they're setting themselves up for failure of finishing the task correctly."

Supports Classroom Management. Under this Level 2 code teachers indicated that learning-related skills supported classroom management. This code was selected when teachers indicated that the development of learning-related skills helped their classroom structure to run more smoothly. The teachers expressed that students demonstrating learning-related skills such as the ability to follow directions, sit still, listen, and work together in groups helped to provide structure to the classroom. Three out of fourteen (21%) pre-NCLB teachers and one out of sixteen (6%) post-NCLB teachers responded with this code. One teacher indicated that "...it's something that we have to teach in order to be able to function in the classroom..."

Research Question 2: How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their rankings of the relative importance of specific skills that relate to a student's future academic success?

A comparison of the pre- and post-NCLB teachers' rankings of the 17 specific school readiness skill items indicated on the survey including learning-related, academic, and interpersonal skills was conducted via a MANOVA. First, the Borda count method (Borda, 1770) was performed. A Borda count was assigned to each item based on its ranking. Each item was assigned a certain amount of points corresponding to the position in which it was ranked by the participant (i.e., an item ranked most important received 5 points, items ranked 2nd most important received 4 points, etc.). All items that did not rank in the top 5 received 0 points (Dym, Wood, & Scott, 2002). The results revealed a significant difference in the rankings of pre-NCLB and post-NCLB teachers on particular items (see Table 2), Wilks' $\lambda = .650$, $F(17, 79) = 2.504$, $p < .05$, partial $\epsilon^2 = .350$. Power to detect the effect was .985. The means and standard deviations of pre- ($n = 44$) and post-NCLB ($n = 53$) kindergarten teacher's rankings is listed in Table 2.

Due to the significance of the overall test and in the interest of item reduction, a comparison of the teachers' rankings is examined in three Borda count groups. Based on the previous study, the items were grouped in three groups, Learning-Related, Academic, and Interpersonal (Lin et al., 2003). The results indicated significant differences between group rankings, Wilks' $\lambda = .842$, $F(3, 93) = 5.795$, $p < .05$, partial $\epsilon^2 = .158$. Power to detect the effect was .944. Given the significance of the overall test, the univariate main effects were examined. Significant univariate main effects for pre- and post- kindergarten teachers were obtained for Interpersonal Borda count, $F(1, 95) = 16.489$, $p < .05$, partial

Table 2. Means and standard deviations of pre- and post-NCLB kindergarten teachers' rankings of school readiness skills.

Item	pre-NCLB (n = 44)	post-NCLB (n = 53)	Total (N=97)
	M (SD)	M (SD)	M (SD)
Names colors & shapes (A)	0.43 (1.13)	0.25 (0.88)	0.33 (1.00)
Uses pencils & brushes (A)	0.20 (0.70)	0.34 (0.96)	0.28 (0.85)
Problem solving skills (A)	1.27 (1.74)	1.72 (2.10)	1.52 (1.95)
Knows most alphabet (A)	0.84 (1.40)	1.26 (1.95)	1.07 (1.73)
Counts to 20 or more (A)	0.25 (0.82)	0.26 (0.79)	0.26 (0.83)
Read simple words (A)*	0.16 (0.57)	0.70 (1.55)	0.45 (1.23)
Is not disruptive (I)*	2.20 (2.00)	1.09 (1.66)	1.60 (1.89)
Shares appropriately (I)	0.09 (0.47)	0.13 (0.62)	0.11 (0.56)
Sensitive to others (I)	0.11 (0.39)	0.15 (0.69)	0.13 (0.57)
Interacting positively with peers (I)*	1.30 (1.58)	0.55 (1.05)	0.89 (1.36)
Follows directions (L)	3.93 (1.66)	3.38 (1.76)	3.63 (1.73)
Participates appropriately in groups(L)	1.20 (1.40)	1.08 (1.44)	1.13 (1.42)
Sits still and alert (L)	0.59 (1.30)	0.62 (1.39)	0.61 (1.34)
Finishes tasks (L)	0.36 (0.99)	0.36 (0.81)	0.36 (0.89)
Staying on task (L)*	0.82 (1.26)	1.62 (1.78)	1.26 (1.61)
Tells needs/thoughts (L)	1.20 (1.77)	0.98 (1.41)	1.08 (1.58)
Organizing work materials (L)*	0.02 (0.15)	0.26 (0.76)	0.15 (0.58)

Note. A = Academic skill; I = Interpersonal skill; L = Learning-related skill. Adapted from Lin, H.-L., Lawrence, F. R., Gorrell, J. (2003). Kindergarten teachers' views of children's readiness for school. *Early Childhood Research Quarterly*, 18, 225-237.

* $p < .05$.

$\epsilon^2 = .148$, power = .980; and Academic Borda count, $F(1, 95) = 4.050$, $p < .05$, partial ϵ^2

= .041, power = .513. As seen in Table 3, the results revealed that pre-NCLB teachers (M

= .93) ranked interpersonal skills as more important to school readiness than did post-

NCLB teachers ($M = .48$). In addition, post-NCLB teachers ($M = .76$) ranked academic

skills as more important to school readiness than did pre-NCLB teachers ($M = .53$).

Table 3. Means and standard deviations of pre- and post-NCLB kindergarten teachers' rankings of certain skill constructs (i.e., learning related, academic, or interpersonal) using Borda count method.

Borda Groups	Pre-NCLB (n = 44)	Post-NCLB (n = 53)	Total (N = 97)
	M (SD)	M (SD)	M (SD)
Learning-Related Borda	1.16 (0.38)	1.19 (0.46)	1.18 (0.42)
Academic Borda	0.53 (0.50)	0.76 (0.60)	0.65 (0.57)
Interpersonal Borda	0.93 (0.59)	0.48 (0.49)	0.68 (0.58)

Research Question 3: How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their perceptions of the relative importance of types of skills (i.e., learning-related, academic, or interpersonal) that relate to a student's school readiness?

To examine a comparison of pre-NCLB and post-NCLB kindergarten teachers' perceptions of the relative importance of certain skill constructs (i.e., learning-related, academic, or interpersonal) to students' school readiness a MANOVA was conducted. The teachers' years of kindergarten experience (i.e., pre-NCLB or post-NCLB teacher) served as the independent variables and the skill constructs, learning-related, academic, and interpersonal skills, served as the dependent variables. The results of the MANOVA revealed that there was not a significant difference in how pre- and post-NCLB kindergarten teachers perceived the importance of school readiness skills, Wilk's $\lambda = 0.984$, $F(3, 93) = .491$, $p > .05$; partial $\epsilon^2 = .016$ (see Table 4).

Research Question 4: How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their perceptions of their role in the development of learning-related skills?

Qualitative data analysis comparing pre-NCLB teachers' perceptions to post-NCLB teachers' perceptions about the role teachers' play in the development of learning-

Table 4. Means and standard deviations of pre- and post-NCLB kindergarten teachers' perceptions of the importance of certain skill constructs (i.e., learning related, academic, or interpersonal).

	Pre-NCLB (n = 44)	Post-NCLB (n = 53)	Total (N = 97)
<u>Skill Construct</u>	<u>M (SD)</u>	<u>M (SD)</u>	<u>M (SD)</u>
Learning-related	3.81 (0.69)	3.78 (0.59)	3.79 (0.63)
Academic	3.58 (0.84)	3.59 (0.78)	3.59 (0.80)
Interpersonal	3.84 (0.70)	3.73 (0.61)	3.78 (0.65)

related skills was examined. This Level 1 code encompasses teachers' views about their responsibility and approach to helping students develop and hone learning-related skills. Under this Level 1 code (*Teachers' role in the development of learning-related skills*), six Level 2 codes emerged: *setting expectations*, *teaching*, *modeling*, *providing guidance*, *preparing students for future*, and *notifying parents* (see Figure 3).

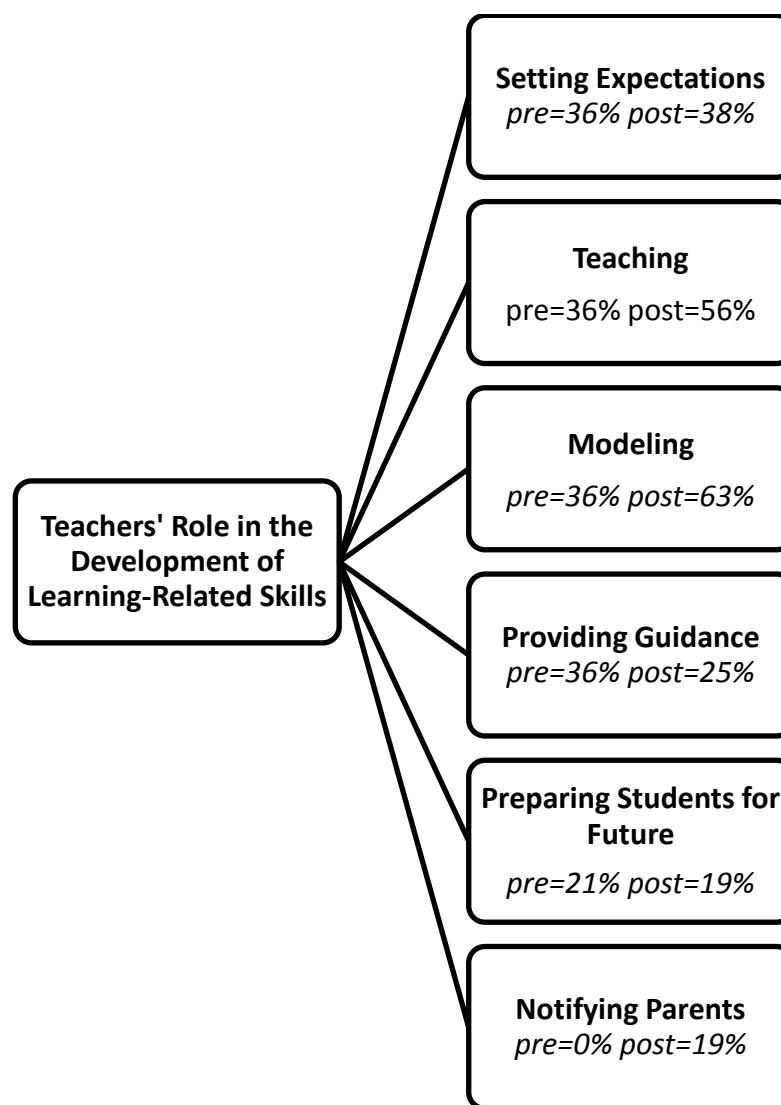


Figure 3. *Teachers' role in the development of learning-related skills coding hierarchy*

Setting Expectations. In this Level 2 code teachers expressed the importance of setting the tone in their classroom and making students aware of what was expected in terms of learning-related skills. In this study, 5 out of the 14 (36%) pre-NCLB teachers and 6 out of the 16 (38%) post-NCLB teachers indicated that it was their role to set expectations for their students to help them develop learning-related skills. For example, a post-NCLB teacher indicated that it was her responsibility to “to let them [students] know the minute they walk into the door your expectations.” She went further to say that “...once the students know your expectations...they’re able to, kind of, fall in suit.”

Teaching. This Level 2 code was selected when teachers indicated that it was their role to teach learning-related skills directly, reporting that some students come in “not having a clue about it [learning-related skills].” Only 5 out of 14 (36%) pre-NCLB teachers in this study indicated that direct instruction of learning-related skills was a part of their role as a teacher, while 9 out of 16 (56%) of post-NCLB teachers reported that directly teaching these skills was their obligation. Another teacher reported that teaching learning-related skills to kindergarten students was especially important, stating that “it is something that they have to learn.” She further indicated that “...as a teacher, we need to teach them [students] how to sit quietly, and pay attention, and listen, and focus on the teacher, and follow directions.

Modeling. This Level 2 code was selected when indicated that it was the teacher’s responsibility to go a step beyond giving students expectations and demonstrate expectations by modeling the skills for them. Only 5 out of 14 (36%) pre-NCLB teachers indicated that modeling was their responsibility, while 10 out of 16 (63%) post-NCLB teachers reported it as part of their role as a teacher. One teacher indicated that while it

was her responsibility to set expectations for students in this area she also must “...model, set examples for the kids, so that you’re not only telling them what’s expected, but you’re also showing them what’s expected.”

Providing guidance. The teachers that expressed this Level 2 code indicated that it was the teacher’s responsibility to take students through the process step by step in learning these skills. In this study, 5 out of 14 (36%) pre-NCLB teachers and 4 out of 16 (25%) post-NCLB teachers in this study. One teacher indicated that teachers should “guide the students through the process.” Another teacher explained that teachers are to “make sure that they [students] can do it,” while still another indicated that it was the teacher’s role “to guide them to make good choices.”

Preparing Students for Future. This Level 2 code was selected when teachers indicated that the teacher’s role in developing students’ learning-related skill was to prepare them for the future by building foundation. The data revealed 3 out of 14 (21%) pre-NCLB teachers and 3 out of 16 (19%) post-NCLB teachers reported that it was their role to prepare students for future academic endeavors and experiences beyond school. Kindergarten teachers reported that students will need these skills to be successful in later grades as well as in life. One teacher indicated that it was important to give students “...these lifelong skills.” Another teacher stated “...that’s what we do in kindergarten, you know, we prepare them for the skills that they need to know later in life...”

Notifying Parents. This Level 2 code was selected when teachers indicated that it was the teacher’s responsibility to talk to parents about their expectations of students in the area of learning-related skills and seek their assistance in the teaching and reinforcing of those skills at home. One teacher reported that:

...it's important that you communicate these expectations to parents. So that there is an understanding of what is okay in the classroom and what is not okay in the classroom. I think it's important that you build relationships with parents so that the reinforcing is there. What I send home, you're reinforcing... then the child also sees that, because of the relationship that is there between teacher and parent. A lot of times in situations like that, their behavior is different, their performance is different.

The data revealed that none of the pre-NCLB teachers reported soliciting parent involvement to support them in the instruction of learning-related skills, while 3 out of 16 (19%) post-NCLB teachers reported this as one of their responsibilities.

Research Question 5: How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their beliefs about school achievement?

Teachers were administered the BASA survey that examined their beliefs about factors that contribute to student achievement. The differences between these two group's beliefs about school achievement were tested via MANOVA. Teachers' years of kindergarten experience (i.e., pre-NCLB or post-NCLB teacher) served as the independent variable while the mean scores of their responses to survey items in individual factor groups (i.e., *Child Ability*, *Child Effort*, *Family*, *Teachers*) served as the dependent variables. The results indicated no significant difference in pre- and post-NCLB teachers' beliefs about school achievement, Wilk's $\lambda = 0.929$, $F(5, 90) = 1.382$, $p > .05$; partial $\epsilon^2 = .071$.

Research Question 6: How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their efficacy for teaching learning-related skills?

The Efficacy scale was developed by members of the research team. In order to determine if this scale should be a part of the BASA family of factors, a correlation

Table 5. *Beliefs About School Achievement (BASA) scale.*

<u>Skill Construct</u>	pre-NCLB (<i>n</i> = 43)	post-NCLB (<i>n</i> = 53)	Total (N=96)
	<u>M (SD)</u>	<u>M (SD)</u>	<u>M (SD)</u>
Child Ability	2.87 (0.69)	2.78 (0.77)	2.82 (0.73)
Child Effort	3.13 (0.60)	3.17 (0.57)	3.15 (0.59)
Family	3.18 (0.73)	2.97 (0.68)	3.07 (0.71)
Teachers	3.97 (0.60)	4.00 (0.52)	3.98 (0.55)
Efficacy	3.73 (0.40)	3.58 (0.38)	3.65 (0.39)

matrix was generated. It indicated that the Efficacy scale was related to the Child Ability ($r = .34$) and Child Effort ($r = .27$) scales. For this reason, the differences between these two group's perceptions of efficacy related to teaching learning-related skills were tested via MANOVA. The teachers' years of kindergarten experience (i.e., pre-NCLB or post-NCLB teacher) served as the independent variable while the efficacy skills as indicated on LRSSES served as the dependent variables. The quantitative results indicated no significant difference in pre- and post-NCLB teachers' perceptions of efficacy related to teaching learning-related skills, Wilk's $\lambda = 0.929$, $F(5, 90) = 1.382$, $p > .05$; partial $\epsilon^2 = .071$.

Discussion

This study was designed to explore the perceptions of pre- and post-NCLB kindergarten teachers regarding the importance of learning-related skills to school readiness and academic achievement. Since the implementation of NCLB (2002) in U.S. public schools, kindergarten curriculum has become more academically focused leaving less time for instruction in learning-related skills (Fantuzzo et al., 2007). The study was further designed to provide information for researchers and school practitioners about the possible effects of the implementation of NCLB on teachers' understanding of the benefits and relationship of learning-related skills to student academic performance. This

mixed method study (Creswell & Plano Clark, 2007) concurrently utilized survey instruments (i.e., quantitative data) and semi-structured interviews (i.e., qualitative data) to examine pre- and post-NCLB kindergarten teachers' perceptions and explore how teachers perceived their role in the development of these skills. This section will discuss the unique contributions of this study to the literature as it relates to the research design employed and the sample investigated.

The present study provided a unique contribution to the literature in that it explored kindergarten teachers' perceptions of the importance of learning-related skills to school readiness and academic achievement through the use of a mixed method approach (Tashakkori & Teddlie, 2009). Currently published studies in this area have investigated this relationship solely through quantitative analysis (Heaviside & Farris, 1993; Lewit & Baker, 1995; Lin et al. 2003; Rimm-Kaufman, Pianta, & Cox, 2000). This study extended the quantitative literature by integrating qualitative data with quantitative data. Use of mixed method approach furthers the investigation into teacher perceptions by implementing a triangulation mixed methods design which permits the researchers to collect complementary data on the same topic and integrate findings to produce a better, more comprehensive understanding of the findings (Creswell & Plano Clark, 2007). Triangulation of data provides greater breadth and depth of information to answer research questions (Tashakkori & Teddlie, 2009).

Interpretation of the qualitative data provided possible explanations for understanding the quantitative findings (Onwuegbuzie & Leech, 2004). For example, both quantitative and qualitative analyses revealed no differences in pre- and post-NCLB teachers in terms of their perceptions of the importance of learning-related skills.

However, qualitative analysis provided descriptors explaining how, why and in what way pre- and post-NCLB teachers perceived the importance of learning-related skills to student achievement, extending our understanding beyond the fact that no significant (quantitative) differences existed. This qualitative data helped the researcher understand teachers' experiences that led to the commonality in their perceptions. For instance, both pre- and post-NCLB kindergarten teachers reported that their classroom experiences helped them to understand the value of learning-related skill development. The majority of participants from both groups (pre=79%; post=75%) expressed the view that these skills were important prerequisite skills students needed to successfully access the kindergarten curriculum. Teachers reported that students need to be able to follow directions, sit still, and listen to do well in school. With the role that teachers are reporting these skills play in student achievement, it would be important that teachers are receiving the training to provide appropriate instruction for students in this developmental area.

Another benefit of using a mixed method design was adding the flexibility in being able to organize the administration of the qualitative (i.e., interviews) and quantitative (i.e., surveys) parts of the study in a strategic way. That is, participants were initially asked in a qualitative format to indicate entry-level skills, behaviors, and/or attributes that they felt were important to students' school readiness. Later, they were administered a closed-format survey that asked them to indicate the level of importance of a pre-determined list of items using a Likert scale. The order of the administration of the various data collection techniques allowed the researcher to compare kindergarten teachers' spontaneously listed important entry-level skills to what the research has

identified as important entry-level skills to survey, as measured by the close-ended or forced-choice items represented in the quantitative portion of the study [adapted from a previous study] (Lin et al., 2003). The teachers' spontaneous responses may also provide the researcher a better understanding of what skills the teachers feel are most important to address and develop based on their experiences. During the open-ended, qualitative phase of this study, teachers shared a range of skills, including academic, interpersonal, and learning-related skills, as well as other school readiness skills (e.g., conduct, personal information, school routines, and self-help). However, many of the teachers indicated individual learning-related skills as central to student entry-level success and academic achievement with well over half of the pre-NCLB teachers (64%) and post-NCLB teachers (69%) noting a learning-related skill in their response. The findings revealed that all of the learning-related skills (*follows directions, listens, sits still, stays on task, works cooperatively in groups, tells needs and thoughts, and motivation*) reported by the participants were skills that were inquired about in previous quantitative studies looking at teacher perceptions of learning-related skills (Heaviside & Farris, 1993; Lewit & Baker, 1995; Lin et al. 2003; Rimm-Kaufman, Pianta, & Cox, 2000). However, a couple of the items (*organize work materials, finishes tasks*) that were asked of the teachers in the quantitative survey administered in this study, did not appear in the teachers' unprompted responses as important to school readiness. However, when these items were presented to teachers on the survey in a forced-choice format, they rated these skills as important to essential to school readiness (see Table 1). The quantitative survey items in this study aligned well with the participants unprompted responses and appear to be reflective of teachers' views.

Another unique contribution of this study was the investigation of pre- and post-kindergarten teachers' perceptions regarding the importance of learning-related skills to school readiness and academic achievement. Previous researchers have examined kindergarten teachers' perceptions in this area as a group (Foulks & Morrow, 1989; Heaviside & Farris 1993; Lewit & Baker, 1995; Lin et al., 2003; McClelland et al., 2000; Rimm-Kaufman et al., 2000), but have not investigated perceptions of teachers as it relates to number of years in the field and how the introduction of educational policies may have influenced kindergarten curriculum and instruction. Comparing the perceptions of pre- and post-NCLB kindergarten teachers provided information about the possible impact of the implementation of NCLB on teachers' understanding of the relationship of learning-related skills to academic achievement and their level of efficacy in terms of providing instruction in this content area.

Evaluating how pre- and post-NCLB teachers prioritized school readiness skills yielded several meaningful and significant findings. Teachers were asked to indicate the level of importance of three school readiness constructs (i.e., learning-related skills, academic skills, interpersonal skills) to students' academic achievement. It was predicted and confirmed that both pre- and post- NCLB teachers would prioritize learning-related skills over interpersonal and academic skills. This finding was consistent with previous research that indicated that teachers prioritized the learning-related skills construct over academic (Lin et al., 2003; Rimm-Kaufman et al., 2000) and interpersonal skill constructs (Foulks & Morrow, 1989; McClelland et al., 2000). The previous studies investigating this relationship were conducted prior to the implementation of NCLB and the findings of this study indicate that teachers' perceptions in this area have not changed significantly

since the implementation. This finding may suggest that the impact of NCLB on early education curriculum has had minimal effect on teachers' perceptions of the importance of learning-related skills to academic achievement for this sample. In addition, the findings demonstrated that teachers' understanding of the importance of learning-related skills align with previous studies that indicated that learning-related skills correlate more closely with student academic achievement than interpersonal skills (Cooper & Farran, 1988; Cooper & Speece, 1988; McClelland et al., 2000; Welsh et al., 2001).

Qualitatively, teachers reported that they see it as the teacher's role to address learning-related skills in their classrooms. The hypothesis of this study was that pre-NCLB teachers will perceive it to be their role to teach learning-related skills more than post-NCLB teachers. However, the data suggests that post-NCLB teachers are reporting at a higher rate that providing instruction in this area is their role. Fifty-six percent of the post-NCLB teachers indicated that it is their role to directly teach these skills as compared to 36% of the pre-NCLB teachers. Further, 63% of the post-NCLB teachers reported that it was their role to model appropriate learning-related skills for students as opposed to 36% of the pre-NCLB teachers. This finding is contrary to the literature that suggests that training and experience would raise the likelihood that a teacher would implement instruction in a given area (Durlak & Weissberg, 2011; Ransford et al., 2009). Given this finding indicating that post-NCLB teachers are finding it important to teach learning-related skills, it would be important for teacher training programs to continue to prepare early education teachers to provide instruction in this area.

This study found a significant difference in how pre- and post-NCLB kindergarten teachers prioritized interpersonal skills and academic skills in terms of

importance to students' school readiness. The results revealed that pre-NCLB teachers valued interpersonal skills more than post-NCLB teachers, while post-NCLB teachers valued academic skills more than pre-NCLB teachers. Prior to the implementation of NCLB, kindergarten curriculum was more focused on social-emotional development (Logue, 2007), which includes interpersonal and learning-related skills. One hypothesis to explain this finding may be that the differences in pre- and post-NCLB kindergarten teachers perceptions in the area of interpersonal and academic skills is an implication of NCLB implementation in the schools. Therefore, the findings may suggest that the stronger focus on academics in kindergarten curriculum as a result of NCLB, causing a lesser focus on social-emotional development, impacted kindergarten teachers' perceptions of the interpersonal aspect of social-emotional development. Pre-NCLB teachers, who taught when the kindergarten curriculum focused on social-emotional development, seemed to place more value on the development of interpersonal skills (a subset of social emotional skills) for school readiness than their counterparts. Teachers who value interpersonal skills more may structure their classrooms differently and present instruction in different ways than teachers who place a lower value on this developmental skill. It would be interesting for researchers to conduct observation studies to investigate what this may mean for the future of curriculum, instruction and practice.

Quantitative findings also revealed that post-NCLB kindergarten teachers valued academic development more as a school readiness skill than pre-NCLB kindergarten teachers. This finding supported the hypothesis of the study in that kindergarten teachers who solely taught (post-NCLB) during the NCLB era with the increased focus on academics, would value the development of academic skills more so than kindergarten

teachers (pre-NCLB) who experienced teaching before and during the implementation of this policy. Observational studies investigating the classroom structure and practices of teachers with this perspective would provide interesting information on how teachers' perspectives affect their teaching practices.

Finally, quantitative findings revealed no significant difference in pre- and post-NCLB kindergarten teachers' beliefs about school achievement as indicated by teachers' responses on the BASA scale. The results of the previous study (Georgiou, 2008) found that in comparison to preservice teachers, inservice teachers tended to attribute achievement more to factors that are biologically determined, such as intellectual ability and family background. In contrast, preservice teachers believed more in the role that teachers play in student learning and in the importance of student effort. The difference in the findings of the current study and the Georgiou (2008) study may be as a result of the differences in comparison groups used, preservice (mean age =22.8 years; 0 years teaching experience) compared to inservice (mean age=42.7 years; 16.3 years teaching experience) teachers versus two groups of inservice teachers (pre-NCLB: mean age=47.2 years; 21.0 years teaching experience and post-NCLB: mean age=36.8 years; 9.6 years teaching experience). In addition, the teachers in the original study taught in a different country and the cultural differences experienced by these teachers and the current sample may have contributed to the differences in findings. Also, the larger sample size used in the original study may have played a role in the overall reliability of the results found.

Limitations and Future Directions for Research

While the results presented here add to our understanding of the perceptions of pre- and post-NCLB kindergarten teachers, results cannot be generalized due to the small quantitative sample ($N = 97$) and restricted geographic region from which the sample was taken. However, the purpose of the current study was not to generalize results at this time, but rather to obtain pertinent information about the impact of educational policy on instructional practices in a particular area of the country. Future researchers are encouraged to replicate this study with a larger, national sample of kindergarten teachers.

A large qualitative sample was used (Creswell, 1998) to investigate the perceptions of kindergarten teachers regarding learning-related skills. However, the sample was taken from a restricted geographic region. It is recommended that future studies expand the region to a national sample of kindergarten teachers to get a more comprehensive understanding of pre-and post-NCLB teacher perceptions of the importance of learning related skills. Further, another potential limitation of the current study included the brief interview protocol. While the qualitative portion of the study supported a clearer understanding of the results, a longer, more in depth interview may have resulted in richer information surrounding the topic. Additionally, more probes requesting explanation from participants about their responses to questions may have encouraged the participants to think more deeply or broadly and extended our understanding of perceptions of pre- and post-NCLB teachers regarding learning-related skills (Schensul, Schensul, & LeCompte, 1999).

The quantitative portion of current study had a disproportionate representation of kindergarten teachers working in suburban school settings (80.40%). In addition, the

majority of teachers in the quantitative sample worked in Title I (82%) school settings. Therefore, systematic analysis of differences in perceptions of kindergarten teachers regarding the importance of learning-related skills based on these demographic characteristics was not possible. Future research should consider gathering information from a broader range of settings and include a more equal representation of participants working in suburban and urban school settings as well as teachers working in Title I and non-Title I schools. Current research indicates that teachers working in these settings and with these different populations have different teaching experiences resulting from the implementation of high-stakes testing policies such as NCLB (Cawelti, 2007; Kaniuka, 2009; Moon, Callahan, & Tomlinson, 2003). Therefore, examination of the perceptions of these different subsets of kindergarten teachers regarding learning-related skills may yield important findings.

Another limitation of this study was the poor inter-reliability of three of the four factors (child effort = .37, family = .55, teacher = .40) on the Beliefs About School Achievement (BASA) scale and on the Learning-Related Skill Self Efficacy Scale (LRSSES) scale measuring teacher efficacy ($\alpha = .12$). The dividing of an already small sample size ($N = 97$) into smaller subsets (pre-NCLB kindergarten teachers = 44 and post-NCLB kindergarten teachers = 53) for comparison purposes may have caused some problems with reliability. One limitation was using an instrument (BASA) that was designed to examine the beliefs of teachers in another country. Cultural differences between the sample used in the original study and the current study may account for the differences in the findings. The structure of the BASA scale did not appear to fit our sample and may indicate that more research is needed on this measure with teachers

working in the United States. Future research should examine the factor structure of the BASA in multiple populations. Also, the LRSSES was designed by the researchers to examine pre- and post-NCLB teachers' perceptions regarding efficacy. The poor reliability on this scale indicated that the items together did not capture teachers' sense of efficacy. The low reliability seen in the factors of both the BASA and LRSSES scales may be a function of having a small number of items (4) in each scale. Future research may further develop the scales by expanding the item count in each scale to improve reliability.

References

- Agostin, T. M., & Bain, S. K. (1997). Predicting early school success with developmental and social skill screeners. *Psychology in the Schools, 34*, 219-228.
- Alexander, K. L., Entwisle, D. R., & Dauber, S. L. (1993). First-grade classroom behavior: Its short- and long-term consequences for school performance. *Child Development, 64*, 801-814.
- Bakeman, R., & Gottman, J. M. (1986). *Observing interactions: An introduction to sequential analysis*. New York, NY: Cambridge University Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Berman, P., McLaughlin, M., Bass, G., Pauly, E., & Zellman, G. (1977). *Federal programs supporting educational change: Vol. 7. Factors affecting implementation and continuation*. Santa Monica, CA: Rand.
- Bronson, M. B. (1994). The usefulness of an observational measure of young children's social and mastery behaviors in early childhood classrooms. *Early Childhood Research Quarterly, 9*, 19-43.
- Bronson, M. B. (1996). *Manual for the Bronson Social and Task Skill Profile (teacher version)*. Chestnut Hill, MA: Boston College.
- Bronson, M. B. (2000). *Self-regulation in early childhood: Nature and nurture*. New York, NY: The Guilford Press.
- Bronson, M. B., Tivnan, T., & Seppanen, P. S. (1995). Relations between teacher and classroom activity variables and the classroom behaviors of prekindergarten children in Chapter 1 funded programs. *Journal of Applied Developmental Psychology, 16*, 253-282.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (second

- ed.). Cooper, D. H., & Farran, D. C. (1988). Behavioral risk factors in kindergarten. *Early Childhood Research Quarterly*, 3, 1-19.
- Cooper, D. H., & Farran, D. C. (1991). *The Cooper-Farran behavioral rating scales*. Brandon, VT: Clinical Psychology Publishing Co., Inc.
- Cooper, D. H., & Speece, D. L. (1988). A novel methodology for the study of children at risk for school failure. *The Journal of Special Education*, 22, 186-198.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five traditions* (2nd Ed). Thousand Oaks, CA: Sage.
- Diperna, J. (2006). Academic enablers and student achievement: Implications for assessment and intervention services in the schools. *Psychology in the Schools*, 43(1), 7-17. DOI:10.1002/pits
- Diperna, J. C. & Elliott, S. N. (2002). Promoting Academic Enablers to Improve Student Achievement: An Introduction to the Mini-Series. *School Psychology Review*, 31(3), 293.
- Dockett, S. & Perry, B. (2001). Starting school: Effective transitions. *Early Childhood Research & Practice*, 3(2), 2-19.
- Dockett, S. & Perry, B. (2002). Beliefs and expectations of parents, prior-to-school educators and school teachers as children start school: An Australian perspective. *Paper presented at the American Educational Research Association Annual Meeting*, 2-14.
- Dym, C. L., Wood, W. H., & Scott, M. J. (2002). Rank ordering engineering designs:

- pairwise comparison charts and Borda counts. *Research In Engineering Design*, 13(4), 236.
- Elliot, Huai, & Roach, A. (2007). Universal and early screening for educational difficulties: Current and future approaches. *Journal of School Psychology*, 45, 137-161.
- Fantuzzo, J., Bulotsky-Shearer, R., McDermott, P. A., McWayne, C., Frye, D., & Perlman, S. (2007). Investigation of dimensions of social-emotional classroom behavior and school readiness for low-income urban preschool children. *School Psychology Review*, 36(1), 44-62.
- Foulks, B., & Morrow, R. D. (1989). Academic survival skills for the young child at risk for school failure. *Journal of Educational Research*, 82, 158-165.
- Georgiou, S. N. (2008). Beliefs of experienced and novice teachers about achievement. *Educational Psychology*, 28(2), 119-131. doi: 10.1080/01443410701468716
- Ghaith, G., & Yaghi, H. (1997). Relationships among experience, teacher efficacy, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, 13(4), 451-458.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Chicago: Aldine.
- Gresham, E. M., & Elliott, S. N. (1990). Social skills rating system (SSRS). Circle Pines, MN: American Guidance Service.
- Griffin, E. A. (1997). The role of children's social skills in achievement at kindergarten entry and beyond. Poster presented at the biennial meeting of the Society for Research in Child Development, Washington D. C., April.
- Griffin, E. A., & Morrison, F. J. (1997). The unique contribution of home literacy

environment to differences in early literacy skills. *Early Child Development and Care*, 127, 233-243.

Heaviside, S., & Farris, E. (1993). *Public school kindergarten teachers views on children's readiness for school*. Contractor report. Statistical Analysis Report. Fast Response Survey System (NCES-93-410). Washington, DC: U. S. Government Printing Office.

Heller, S., Boothe, A., Keyes, A., Nagle, G., Sidell, M., & Rice, J. (2011).

Implementation of a mental health consultation model and its impact on early childhood teachers' efficacy and competence. *Infant Mental Health Journal*, 32(2), 143-164. Doi: 10.1002/imhj.20289.

Henwood, K., & Pidgeon, N. (2003). Grounded theory in psychological research. In P. M. Camic, J. E. Rhodes, & L. Yardley (Eds.), *Qualitative research in psychology: Expanding perspectives in methodology and design* (pp.131-156). Washington, DC: APA.

Howse, R. B., Lange, G., Farran, D. C., & Boyles, C. D. (2003). Motivation and self-regulation as predictors of achievement in economically disadvantaged young children. *Journal of Experimental Education*, 71, 151-174.

Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756.

Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's Social and Scholastic Lives in Kindergarten: Related Spheres of Influence? *Child Development*, 70(6), 1373-1400.

- Lewit E. M. & Baker, L. S. (1995). School readiness. *The Future of Children*, 5, 128-139.
- Lin, H.-L., Lawrence, F. R., Gorrell, J. (2003). Kindergarten teachers' views of children's readiness for school. *Early Childhood Research Quarterly*, 18, 225-237.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks: CA. Sage.
- Logue, M. E. (2007). Early childhood learning standards: Tools for promoting social and academic success in kindergarten. *Children & Schools*, 29(1), 35-43.
- McClelland, M. M., Acock, A. C., & Morrison, F. J. (2006). The impact of kindergarten learning-related skills on academic trajectories at the end of elementary school. *Early Childhood Research Quarterly*, 21, 471-490.
- McClelland, M. M., & Morrison, F. J. (2003). The emergence of learning-related social skills in preschool children. *Early Childhood Research Quarterly*, 18, 206-224.
- McClelland, M. M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, 15(3), 307-329.
- Nastasi, B. K. (2009). Advances in qualitative research. In T. B. Gutkin & C. R. Reynolds (Eds.), *The Handbook of School Psychology* (4th ed.; pp. 30–53). Hoboken, NJ: Wiley & Sons.
- Nelson, B., Martin, R. P., Hodge, S., Havill, V., & Kamphaus, R. (1999). Modeling the prediction of elementary school adjustment from preschool temperament. *Personality and Individual Differences*, 26, 687-700.
- Onwuegbuzie, A. J., & Leech, N. L (2004). Enhancing the interpretation of “significant” findings: The role of mixed methods research. *The Qualitative Report*, 9, 770-792.

- Pelco, L. E. & Reed-Victor, E. (2007). Self-regulation and learning-related social skills: Intervention ideas for elementary school students. *Preventing School Failure, 51*(3), 36-42.
- Rimm-Kaufman, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly, 15*(3), 147-166.
- Rimm-Kaufman, S. E., Storm, M. D., Sawyer, B. E., Pianta, R. C. & LaParo, K. M. (2006). The teacher belief Q-Sort: A measure of teachers' priorities in relation to disciplinary practices, teaching practices, and beliefs about children. *Journal of School Psychology, 44*, 141-165.
- Schensul, S. L., Schensul, J. J. & LeCompte, M. D. (1999). *Essential Ethnographic Methods: Observations, Interviews, and Questionnaires*. Walnut Creek, CA: AltaMira Press.
- Speece, D. L., & Cooper, D. H. (1990). Ontogeny of school failure: Classification of first-grade children. *American Educational Research Journal, 27*, 119-140.
- Stipek, D. J., & Ryan, R. H. (1997). Economically disadvantaged preschoolers: Ready to learn but further to go. *Developmental Psychology, 33*, 711-723.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA: SagePublications, Inc.
- The No Child Left Behind Act of 2001*: Public Law 107-110, enacted January 8, 2002.
- Tschannen-Moran, M. & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783-805.

- Varjas, K., Nastasi, B. K., Moore, R. B., & Jayasena, A. (2005). Using ethnographic methods for development of culture-specific interventions. *Journal of School Psychology, 43*, 241–258.
- Welsh, M., Parke, R. D., Widaman, K., & O’Neil, R. (2001). Linkages between children’s social and academic competence: A longitudinal analysis. *Journal of School Psychology, 39*, 463-481.
- Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82*(1), 81-91.
doi:10.1037/0022-0663.82.1.81

APPENDIXES

APPENDIX A

PRACTICAL SUGGESTIONS FOR SCHOOL PERSONNEL TO
IMPLEMENT SEL CURRICULUM

School Personnel	Professional Development: Roles
Administrators	<p>Allot time, space, equipment, and materials for professional development on the delivery of social-emotional learning curriculum.</p> <p>Schedule speakers (possibly recruit SBMH) to deliver trainings.</p> <p>Provide teachers with release time and coverage to attend conferences and/or professional development sessions.</p>
School-Based Mental Health Professionals (SBMH)	<p>Deliver training on the relationship of social-emotional development to academic achievement and provide practical ways that SEL can be addressed in the classroom.</p> <p>Help rollout school SEL curriculum by delivering training on its implementation</p>
Teachers	<p>Seek out trainings on SEL and get professional leave time to attend</p> <p>Attend in-house trainings on the impact of social-emotional development to academic achievement</p> <p>Attend trainings on the delivery of SEL curriculum.</p>
School Personnel	Coaching: Roles
Administrators	<p>Provide teachers with frequent feedback on their delivery of the SEL curriculum.</p> <p>Provide teachers with feedback on their integration of SEL into the academic curriculum.</p>
School-Based Mental Health Professionals (SBMH)	<p>Provide teachers with demonstrations, practice and feedback on implementing and integrating SEL curriculum.</p>
Teachers	<p>Teachers who have experience delivering the curriculum can provide their colleagues with demonstrations.</p> <p>Teachers with curriculum delivery experience can also provide their colleagues with feedback on their delivery of the curriculum.</p>

School Personnel	Monitoring: Roles
Administrators	<p>Conduct observations of teachers delivering the SEL curriculum.</p> <p>Observe teachers delivering academic curriculum and note the integration of SEL into the lesson.</p> <p>Read teacher lesson plans and note SEL integration</p>
School-Based Mental Health Professionals (SBMH)	Monitor the growth of teachers in the delivery of SEL curriculum through observations and determine what further professional development training is needed.
Teachers	Monitor their personal growth in delivering and integrating SEL curriculum and seek assistance when needed.
School Personnel	Resources: Roles
Administrators	<p>Allot funding for the purchase of resources that support SEL curriculum implementation (e.g., SEL curriculum, books, DVDs, etc.).</p> <p>Allot funding to secure substitutes for coverage of teachers' classes while attending professional development or conferences.</p>
School-Based Mental Health Professionals (SBMH)	Can take the lead in researching and requesting appropriate SEL curriculums and materials.
Teachers	Research and request materials that support SEL instruction
School Personnel	Community of Practice
Administrators	<p>Give teachers time and opportunity to collaborate and discuss implementation strategies.</p> <p>Give teachers opportunity to observe each other.</p>
School-Based Mental Health Professionals (SBMH)	Provide teachers with consultation through individual meetings, didactic group meetings, designing specific interventions for challenging behaviors, and referrals to outside agencies
Teachers	Collaborate with colleagues about the best approaches and strategies to integrate and deliver SEL curriculum
School Personnel	Integrate SEL
Administrators	<p>Allow teachers time to develop lesson plans that integrate SEL activities</p> <p>Provide teachers with feedback on the integration of SEL into the curriculum aspect of their lesson plans.</p>
School-Based Mental Health Professionals (SBMH)	Assist teachers with strategies to integrate SEL into the curriculum and classroom management.
Teachers	When planning, consider ways to integrate SEL into each lesson. Consider if SEL can be addressed through the topic or the structure of the lesson.

APPENDIX B

RESEARCH QUESTIONS AND HYPOTHESES

Research Questions	Hypothesis	Data Used	Analysis
How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their perceptions of the importance of learning-related skills to students' school readiness?	Prediction: Pre-NCLB teachers will value learning-related skills more highly than post-NCLB teachers	A. The 7 learning-related skills items on survey question 1 B. Interview question 1	A. Descriptive Statistics: Ns, means & standard deviation(SD), ranges for each of 2 groups MANOVA to simultaneously test for differences between groups for the 7 items. If significant, follow up with ANOVAs (with Bonferroni or similar correction) to test main effects B. D/I
How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their rankings of the relative importance of specific skills that relate to a student's future academic success?		Assign Borda count to each item based on its ranking.	Descriptive statistics with respect to Borda scores MANOVA, if significant followed by ANOVA for contrasts
How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their perceptions of the relative importance of types of skills (i. e. learning-related, academic, or interpersonal) that relate to a student's school readiness?	Prediction: Both pre- and post-NCLB teachers will prioritize learning-related skills over interpersonal and academic skills	A. Group items in survey question 1 by type of skill (i.e. learning-related, academic, or interpersonal) and determine average score for each group of items.	A. Descriptive Statistics: Ns, means & standard deviation(SD), ranges for each of 2 groups MANOVA to simultaneously test for differences between groups for the 3 types of skills. If significant, follow up with ANOVAs (with Bonferroni or similar correction) to test main effects

How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their perceptions of their role in the development of learning-related skills?	Prediction: Pre-NCLB teachers will perceive it to be their role to teach learning-related skills more than post-NCLB teachers will.	<i>Interview – Ques. 5, Ques. 6</i>	D/I
How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their beliefs about school achievement?	Prediction: Pre-NCLB teachers will contribute student achievement to characteristics of the student and post-NCLB will contribute student achievement to teacher performance and effort.	<i>BASA</i>	Descriptive Statistics: Ns, means & standard deviation(SD), ranges for each of 2 groups MANOVA. If significant, followed by ANOVA for contrasts
How do pre-NCLB kindergarten teachers compare to post-NCLB kindergarten teachers with respect to their efficacy for teaching learning-related skills?	Prediction: Pre-NCLB teachers will feel more efficacy to teach learning-related skills than post-NCLB teachers.	<i>LRSES</i>	Descriptive Statistics: Ns, means & standard deviation(SD), ranges for each of 2 groups MANOVA. If significant, followed by ANOVA for contrasts

APPENDIX C

Demographic Information

Teacher Demographic Information

Gender

- ☐ Male
- ☐ Female

Please enter your age.

Please indicate your race/ethnicity.

- ☐ African American
- ☐ Hispanic
- ☐ Native American
- ☐ Caucasian
- ☐ Asian
- ☐ Other

Please indicate your number of years of teaching experience.

Please indicate your number of years teaching kindergarten

Please list all grades previously taught

Please check all degrees held

- ☐ Bachelor's
- ☐ Master's
- ☐ Specialist's
- ☐ Doctorate

For Bachelor's degree indicate year obtained and major.

For Master's degree indicate year obtained and major.

For Specialist's degree indicate year obtained and major.

For Doctorate degree indicate year obtained and major.

Please indicate the college/university where you received your teaching degree.

Class Demographic Information

Please indicate the number of students in your class.

Please indicate the # of boys in your class.

Please indicate the # of girls in your class.

Please indicate the # of African American students in your class.

Please indicate the # of Hispanic students in your class.

Please indicate the # of Asian students in your class.

Please indicate the # of Caucasian students in your class.

Please indicate the # of Native American students in your class.

Please indicate the # of students in your class from other race/ethnic backgrounds. Please specify..

Please indicate the # of students that receive Free/Reduced Lunch.

Please indicate the # of ELL students in your class.

Please indicate the # of students receiving special education services in your class.

School Demographic Information

Please indicate the name of your school.

Please indicate school setting.

- ☐ Urban
- ☐ Suburban

Please indicate if you teach at a Title I school.

- ☐ yes
- ☐ no

Please indicate if your school met AYP in the 2009/2010 school year.

- ☐ yes
- ☐ no

APPENDIX D

Learning-Related Skills Survey

Rate the importance of the following items to school readiness using the following Likert scale ranging from "Essential" to "Of little or no importance."

	Essential	Very Important	Important	Somewhat Important	Of Little or No Importance
Names colors, shapes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is not disruptive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Follows directions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uses pencils, brushes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shares appropriately	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participates appropriately in groups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uses problem solving skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sensitive to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sits still and alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finishes tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knows most alphabet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interacts positively with peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stays on task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counts to 20 or more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tells needs/thoughts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizes work materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reads simple words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which one of these items is the MOST important to students' future academic success?

Names colors, shapes 

Which one of these items is the SECOND MOST important to students' future academic success?

Names colors, shapes 

Which one of these items is the THIRD MOST important to students' future academic success?

Names colors, shapes 

Which one of these items is the FOURTH MOST important to students' future academic success?

Names colors, shapes 

Which one of these items is the FIFTH MOST important to students' future academic success?

Names colors, shapes 

APPENDIX E

Beliefs about School Achievement

The following statements refer to your beliefs about school achievement. Choose the extent to which you agree or disagree with each statement.

	I fully agree	I somewhat agree	Undecided	I somewhat disagree	I fully disagree
School achievement is an inherited talent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A good teacher can improve the achievement level of all students, even those who are very weak.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Children of well-educated parents do better at school than children of less educated parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Even students who are not very smart can have high achievement, if they try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Factors beyond my control have a greater influence on my students' social competence and self-regulation than I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A child's school achievement is caused by biologically determined characteristics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers can make the difference with difficult students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Children from rich families perform better at school than children from poor families.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When a child performs badly at school, this is because of inadequate effort.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident I can provide a classroom environment that supports my students' development of learning-related skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School achievement is a matter of intelligence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teachers are effective in helping students learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents' own education is responsible for their child's success or failure at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student hard work makes the good grades at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	I fully agree	I somewhat agree	Undecided	I somewhat disagree	I fully disagree
There is little I can do to ensure that all my students develop learning-related skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A weak student at first grade will be a weak student at twelfth grade.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A child's achievement depends on the qualities of his/her teacher.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family social status affects child school performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Any child can do well at school if he or she tries hard enough.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the knowledge and skills to support students who need help developing social competence and self-regulation skills.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX F

Semi-Structured Interview Protocol

1. At the beginning of kindergarten, what skills, behaviors, and or attributes are important for kindergarten students' academic success?
2. Of the skills, behaviors, and attributes you have listed, rank the top 5 from most important to least important.
3. How do you see these skills affecting the student's future academic performance?
4. Describe the role learning-related skills play in your students' achievement.
5. In your opinion, what is the teacher's role in the development of student learning-related skills?
6. Describe how learning-related skills are addressed in your classroom.