

PERCEPTIONS OF ADMINISTRATORS AND TEACHERS REGARDING  
KINDERGARTEN GIFTEDNESS

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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## **ABSTRACT**

Patricia S. Thirey. PERCEPTIONS OF ADMINISTRATORS AND TEACHERS REGARDING KINDERGARTEN GIFTEDNESS (under the direction of Dr. Mark A. Angle) School of Education, April 2011.

This study examined perceptions of administrators and kindergarten teachers regarding kindergarten giftedness. The study looked at whether administrators and teachers believe kindergarten students can be gifted; whether their schools and districts have policies in place to identify those students; and whether they are required to vary the curriculum for these students. All elementary-school administrators and kindergarten teachers in North Carolina were invited to participate in the study. The survey respondents consisted of 127 administrators and 260 kindergarten teachers. The data concluded that although 98% of respondents believe kindergarten students can be gifted, almost 70% of their schools and districts do not currently have a process in place to identify those students. The results also indicated that the majority of kindergarten teachers and administrators agreed that identification of giftedness in kindergarten is not detrimental to a student's future development. Further results showed no relationship between classroom practices of teachers required to alter the curriculum for students perceived as gifted and those who were not required to alter it. In addition, the research identified the practices of teachers who believe that kindergarten students can be gifted. The resulting implications and recommendations are also included.

## **DEDICATION**

Hebrews 10:36 says, “You need to persevere so that when you have done the will of God, you will receive what He has promised.” First and foremost, I would like to dedicate this research project to God who gave me the strength to persevere to the end.

In addition, I want to thank my husband, Benjamin, for his constant support and encouragement. Thank you for always pushing me to challenge myself. There is no one else with whom I would rather face life’s challenges and triumphs! I am looking forward to our next journey together!

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## **LIST OF ABBREVIATIONS**

Confidence Interval (C.I.)

Elementary and Secondary Education Act (ESEA)

Gifted and Talented Education Act (GTE)

Institutional Review Board (IRB)

Intelligence Quotient (IQ)

Javits Gifted and Talented Students Education Act (Javits)

Naglieri Nonverbal Ability Test (NNAT)

National Association for Gifted Children (NAGC)

National Defense and Education Act (NDEA)

No Child Left Behind Act (NCLB)

Stanford-Binet Intelligence Scale (SB-IV)

Statistical Package for the Social Sciences (SPSS)

Weschler Intelligence Scale for Children (WISC-III)

## **CHAPTER ONE: INTRODUCTION**

Every student deserves the opportunity to learn in a way that best suits him or her. Teachers need to challenge gifted students on their own level in order to reach their highest potential. Research shows that gifted students need a curriculum different from their peers in order to truly benefit from their education experience (Simpson et al., 2002). However, researchers are still trying to determine at what age they can evaluate giftedness and the best way to evaluate giftedness. In addition, the perceptions of the teachers and administrators may vary with regard to how teachers should handle this giftedness. These individuals' beliefs about giftedness play a large role in whether teachers challenge gifted children adequately and how they accomplish that challenging. This study will look at the perceptions of administrators and teachers regarding student giftedness at the kindergarten level. It will examine the differences in the two groups' beliefs and determine whether their reported practices align with their beliefs. Chapter One gives the background of the study, problem statement, significance of the study, overview of methodology, and the key definitions.

### **Background of the Study**

Different states and districts across the United States have varying regulations on the age at which giftedness can be determined and what to do with that determination when it is reached. Many school districts do not have policies in place to work with these students before they reach third grade. As a result, schools may not have programs in place to work with the gifted students entering the education system in a way that can prepare them for future years of education. Numerous educators have argued that

giftedness can be determined as early as preschool and kindergarten (Clarke, 2001; Gross, 1999; Koshy & Robinson, 2006; Pfeiffer & Petscher, 2008). As early as 1977, researchers determined that the attitudes children form about school in kindergarten and first grade remain with them throughout the rest of their schooling (Fink & Kosecoff, 1977). More research that is recent shows that early stimulation of these students is important in accommodating giftedness in the future. These students need their areas of giftedness stimulated in order to keep growing academically as they should (Shaughnessy, Stockard, Siegel, & Stanley, 1992).

In recent years, researchers have presented the argument that schools are consistently overlooking gifted students. The No Child Left Behind Act (NCLB) focuses primarily on the students who are behind academically while neglecting the high-achieving student (Pfeiffer, Petscher, & Jarosewich, 2007). Currently, no legislation exists that specifically protects gifted students from failing to get the attention they deserve (Pfeiffer & Jarosewich, 2007).

In addition, the beliefs of teachers and administrators vary in regard to how this giftedness should be handled. Some educators believe these students do not need challenging at such a young age (Colangelo & Fleuridas, 1986; Pfeiffer & Jarosewich, 2007). Others believe that these students will not achieve their highest potential if not challenged from a young age (Pfeiffer & Petscher, 2008; Sankar-DeLeeuw, 1999; Schroth, 2007). These educators' beliefs about giftedness play a large role in whether they challenge the potentially gifted students within their classrooms (Schroth). Their individual beliefs and background also determine the methods by which they challenge

the students within their classrooms (Guerra & Nelson, 2009; Payne, 1994; Wang, Elicker, McMullen, & Mao, 2008).

This study attempts to quantify how the attitudes of administrators and kindergarten teachers influence the delivery methods used in the classroom. The results of this study will help determine whether the educational beliefs and practices of early elementary-school teachers are meeting the needs of young, gifted children. This study focuses on teachers and administrators in the state of North Carolina.

### **Statement of the Problem**

Although North Carolina has laws mandating the availability of gifted programming to students in grades kindergarten through 12, a distinct lack of identification exists of students in the early elementary grade levels. Likewise, clarification is lacking about what programs are in place to help these gifted students. This study will address the following question: Do North Carolina's administrators' and teachers' beliefs regarding kindergarten giftedness vary from each other and do these beliefs have an effect on their teaching, specifically in the areas of identification and classroom practices?

### **Purpose of the Study**

The general purpose of this causal comparative study is to determine the perceptions of administrators and kindergarten teachers with regard to kindergarten giftedness. The study will first determine whether administrators and teachers believe it possible to identify students as gifted in kindergarten. Next, the study will look at whether the schools or districts have policies in place to determine whether kindergarteners are gifted. The study will then address whether the districts or schools

require the administrators or teachers to make accommodations for these students.

Finally, the study will look at what, if anything, these individuals do in order to vary the kindergarten curriculum for those students identified or perceived as gifted.

### **Significance of the Study**

Researchers can find little research that addresses the beliefs of administrators and kindergarten teachers concerning kindergarten giftedness. In turn, the services offered to kindergarten students may vary greatly depending on the perceptions teachers or school administrators have regarding kindergarten giftedness. The degree to which these teachers or administrators hold certain beliefs regarding giftedness can play a large part in what programs and curricula they implement with their students in the classroom. If these individuals' beliefs do not align, this could be detrimental to the success of programs that work with these students. In addition, misaligned beliefs could be damaging to the students academically both now and in the future.

### **Research Questions**

The study asks the following questions:

1. Does a statistically significant difference exist between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree)?
2. Does a statistically significant difference exist between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree)?
3. What portion of the population of administrators and teachers in North Carolina report that their schools or districts have processes in place to determine if kindergarten students are gifted?

4. What portion of the population of administrators and teachers in North Carolina report that kindergarten teachers are required to alter the curriculum for kindergarten students that educators have identified as gifted?
5. Among teachers, does a statistically significant difference exist in the following kindergarten classroom practices based on whether or not the teachers are required to modify their curriculum for gifted students:
  - a. Is there a statistically significant difference in the number of teachers who use curriculum compacting based on whether or not they are required to modify their curriculum for gifted students?
  - b. Is there a statistically significant difference in the number of teachers who differentiate in the classroom based on whether or not they are required to modify their curriculum for gifted students?
  - c. Is there a statistically significant difference in the number of teachers who use grouping in the classroom based on whether or not they are required to modify their curriculum for gifted students?
  - d. Is there a statistically significant difference in the number of teachers who use tiered assignments in the classroom based on whether or not they are required to modify their curriculum for gifted students?
  - e. Is there a statistically significant difference in the number of teachers who allow students to pick topics on assignments based on whether or not they are required to modify their curriculum for gifted students?
6. Among teachers who believe that kindergarten students can be gifted, does a statistically significant difference exist between teachers who employ



kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and those who do not?

### **Null Hypotheses**

H1<sub>0</sub>: A statistically significant difference does not exist between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree).

H2<sub>0</sub>: A statistically significant difference does not exist between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree).

H3<sub>0</sub>: A statistically significant difference does not exist in the following kindergarten classroom practices between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3a<sub>0</sub>: A statistically significant difference does not exist in the use of curriculum compacting between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3b<sub>0</sub>: A statistically significant difference does not exist in the use of differentiation between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3c<sub>0</sub>: A statistically significant difference does not exist in the use of grouping between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3d<sub>0</sub>: A statistically significant difference does not exist in the use of tiered assignments between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3e<sub>0</sub>: A statistically significant difference does not exist in the use of students picking topics between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H4<sub>0</sub>: Among teachers who believe that kindergarten students can be gifted, a statistically significant difference does not exist between teachers who employ kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and those who do not.

### **Overview of Methodology**

This study incorporates a causal comparative research design. Causal comparative research designs involve pre-existing groups and typically compare differences between the groups (Schenker & Rumrill, 2004). In this study, administrators and kindergarten teachers in the state of North Carolina received the opportunity to respond to a series of questions regarding their beliefs and practices oriented around kindergarten giftedness and programming by completing a short survey.

The study uses quantitative data to evaluate the questions and hypotheses outlined as a part of the research. Quantitative data allows for measurement and testing of theories in order to gain numerical results. Qualitative research attempts to understand the personal behaviors and participant observations in a manner that researchers cannot numerically measure (Ary, Jacobs, Razavieh, & Sorensen, 2006). While this study sought to determine the beliefs of administrators and teachers concerning kindergarten giftedness in a numerical manner, the researcher determined that an additional qualitative section would be beneficial. The qualitative data helped the researcher gain a deeper understanding of the beliefs and perceptions of the respondents.

During the data collection, the researcher received responses from 387 educators including 260 kindergarten teachers and 127 administrators. The researcher entered the responses to the questions into the Statistical Package for the Social Sciences (SPSS) and the researcher calculated frequencies and percentages for each group. The researcher then ran chi-square analyses and descriptive statistics to determine the differences (if any) between administrators' and teachers' beliefs. The researcher then used the resulting data to determine what the beliefs of those administrators and teachers are and whether a difference exists between the teachers' beliefs and their individual practices. The responses to the comment section of the survey were reviewed in order to gain a better understanding of the beliefs of the respondents.

### **Definitions of Key Terms**

The following are the definitions of terms pertaining to this study:

*Ability grouping* – Ability grouping refers to the grouping of students with other students of the same ability level.

*Acceleration* – Children who are gifted, or children who educators perceive to be gifted, may be given the opportunity to skip academic grades or attend a higher grade level class for certain subject matter.

*Administrator* – The principal, assistant principal, associate principal, or vice principal within a given school who is responsible for supervising and evaluating the teachers within the school.

*Curriculum compacting* – Refers to the process by which a teacher cuts material out of the curriculum for which a student has already shown mastery. Students take a

pretest and the teacher uses the results to determine which material the students still need to master, and which material they can cut from that student's program.

*Curriculum extending* – Curriculum extending allows teachers to vary the pace and levels of instruction depending on each student's needs.

*Differentiation* – Refers to the adapting of the curriculum to fit the needs of every learner. Typically takes into account every student's learning level, ability, and style of learning and develops lessons that allow every student to learn on their level.

*Early entrance* – Students who are gifted or perceived to be gifted are given the opportunity to enter school up to one year earlier than the school's normal entry age. These students may start kindergarten early or go straight into first grade.

*Gifted* – Gifted students are students who demonstrate an above-average degree of intelligence and ability in one or more areas. They typically show a higher than usual level of motivation and catch on quickly to new material. These students show a need for special instruction or programming that is geared towards challenging them academically.

*Gifted Education Specialist or Coordinator* – The Gifted Specialist is the teacher who is responsible for providing gifted services to gifted students. This may be done through pull-out programming or through collaboration with the classroom teacher.

*Gifted Evaluation* – Gifted evaluation refers to the process of testing a child to determine eligibility for gifted programs. This evaluation may include teacher and parent observations, and academic testing by a gifted education coordinator.

*Identification* – Identification is the process used to determine whether a student is eligible for gifted programming services.

*Intelligence Quotient (IQ)* – An intelligence test score that is obtained by dividing a student’s mental age (derived from a population norm) by chronological age and multiplying by 100. A score of 100 would indicate a performance at exactly the normal level for that age group and a score above 100 would indicate above average performance for that age group.

*Kindergartener* – For the purpose of this study, a kindergartener will refer to a student who is enrolled in a kindergarten program and who is at least five years old by September 1 of the school year in question.

*Learning Style* – The style in which a student learns best and helps them to retain new information.

*Nomination* – The process of submitting a child as potentially gifted. Nominations can typically be made by parents and/or teachers and are usually submitted with work samples to the school’s gifted coordinator.

*Pull-out services* – Gifted services that are offered outside a student’s regular classroom. A trained specialist for gifted students usually provides these services in an alternate classroom.

*Referral* – The process of submitting a child as potentially gifted (also referred to as a nomination).

*Screening Process* – The screening process refers to the process of testing a child to determine eligibility for gifted programs.

*Teacher* – Teacher refers to the classroom teacher who provides the direct instruction for a given group of students.

*Tiered assignments* – Tiered assignments include a variety of activities dealing with the same topic on different ability levels. Gifted students may receive a more challenging assignment dealing with the same topic as the rest of the class.

*With-in class services* – Gifted services provided by a student's regular classroom teacher within the regular school day.

## **CHAPTER TWO: REVIEW OF THE LITERATURE**

This chapter includes a review of the literature and outlines the need for a study about the perceptions of administrators and teachers regarding kindergarten giftedness. A review of the literature is critical for determining the significance of this study. Chapter Two begins with an overview of the theoretical framework for giftedness. The chapter then discusses the history and definition of giftedness, national and state policies related to giftedness, and the current and potential affect of the economy on gifted education. The chapter then addresses how educators identify gifted students and when they should identify them. The final sections of the chapter discuss the importance of determining the perceptions of teachers regarding giftedness and how these perceptions can affect classroom practices.

### **Theoretical Framework**

Piaget's Stages of Cognitive Development share the idea that children naturally progress through stages as they grow up. According to Piaget, some children are ready to progress through the stages earlier than others. Research shows that Piaget's stages can highlight some differences in gifted children that make them stand out from their peers. Although Piaget did not seek to make any child stand out, educators can use his stages to determine whether a child has progressed beyond the point of his or her peers (Cohen & Kim, 1999). If a child has progressed passed the point of his or her peers, teachers and administrators have to determine what, if anything, should be done with that child.

Howard Gardner's Multiple Intelligences theory has also been used as a justification for gifted student identification and differentiation. Gardner believed that teachers should use many different methods to determine a child's giftedness. His theory suggests that educators should take multiple intelligences into consideration when determining whether a child is gifted (Fasko, 2001) and in determining the best way to work with that child.

Howard Gardner's theory of multiple intelligences first surfaced in his book *Frames of Mind* in 1983. His theory of multiple intelligences asserts that every learner has a different type of intelligence for which they respond best. In the development of his theory, Gardner suggests that since each person learns in a unique way, they should have the opportunity to receive individualized education that exploits the manner in which they best incorporate new information. Every student, in other words, should be taught through his or her learning intelligence in order to achieve the best effect. In addition, they should have the opportunity to develop their ability to learn through other learning styles (Gardner, 1983). This implies that students should have material presented to them through a variety of methods. By seeing the same information presented through multiple intelligence learning exercises, students will be better able to grasp future information that is presented through intelligences other than their own. That is, students can "adapt" themselves to new intelligences that they might otherwise have not developed.

Gardner's original theory included seven different intelligences: linguistic, logical-mathematical, spatial, bodily kinesthetic, musical, interpersonal, and intrapersonal. In the 1990s, he added naturalists; the eighth intelligence that he felt



deserved to be included on the list (Checkley, 1997). Linguistic intelligence refers to students who are smart with words; these students are often good writers and learn primarily through reading and other visual exercises. Logical-mathematical refers to those who are good with numbers. These students display an inherent ability for numbers and other left-brain oriented tasks. They are very logical. Spatial intelligence deals with students who are good with visual representations and manipulations. They are very good at working on things in a physical manner and often display a high degree of mechanical knowledge. They are usually more right-brain dominant in contrast to the logical-mathematical students. Bodily-kinesthetic is the term that is used to describe students who need to use movement and their bodies in order to solve and make things; these students are usually quite good at sports and other activities requiring a high degree of hand-eye coordination and fine motor skills. Musical intelligence refers to students who are good with music; these students have an ability to understand underlying relationships between abstract concepts and, like their spatial intelligence brethren, are more right-brain dominant. Interpersonal intelligent students are good with people. These students understand the dynamics of human interaction from a young age and are usually good at forming friends and working as peacemakers when conflicts arise. Intrapersonal intelligence is the reference used for people who are typically introverted and have the capacity to understand themselves. They would rather work things through on their own. Gardner's most recent addition was Naturalist intelligence, which refers to people who are smart in regards to nature (Manner, 2001). These students can recognize and classify plants, animals, rocks and minerals with ease, and have the ability to understand and see detail that others miss (Checkley, 1997).

Another theorist who lends guidance to the realm of gifted education is Benjamin Bloom. Bloom's taxonomy, developed in the 1950s, includes a classification of the learning objectives for students in three different domains. These three domains include affective, psychomotor, and cognitive. Most educators focus on the six steps outlined in his cognitive domain and less on his entire taxonomy. The six steps are knowledge (or remembering), comprehension (or understanding), application, analysis, synthesis, and evaluation (Page, 2010). In order for the learner to move from one step to the next, they must be able to move from the lowest order of thinking to the highest. A student must have knowledge of a subject before they can understand it, and they must understand it before they can apply it, and so on. The highest level of attainable knowledge would be the level where one could create something novel with what they have learned (Krathwohl, 2002). Gifted students should be able to move more quickly through these levels of thinking than a regular classroom student normally would.

A more recent theorist in the realm of gifted education is Carol Ann Tomlinson. Tomlinson believes that differentiating instruction is an approach that fights for accommodating and supporting student differences in the classroom. She argues that approaches to teaching are not standardized. There is nothing standard about our education and classes. Every student is unique and requires different techniques; therefore, every lesson and every teacher must also vary. Tomlinson's theory consists of four elements of learning: content, process, products, and learning environment. She tells educators that through these four elements you can determine a student's readiness and interest and meet them at that level to truly challenge them (Tomlinson, 2000).

Tomlinson (2000) takes a different approach to giftedness and refers to differentiation as a philosophy or way of thinking and not an instructional strategy. Her concern is that in a time where standards-based instruction is encouraged, educators will forego differentiation in favor of teaching the curriculum. Curriculum, she says, is what teachers teach, while differentiation tells them how to teach it. While it is important that curriculum is followed, educators must not lose sight of the most important goal: ensuring that their students learn the material.

Tomlinson's definition of differentiation suggests to educators that they provide various degrees of scaffolding through multiple groups. While this may seem a daunting task, most educators will find that they are able to integrate a variety of learning styles through varied activities; the limit is on the imagination and ingenuity of the teacher. By enlightening students to areas of education that correspond with their varied interests, they will achieve higher levels of success (Tomlinson, 2000). In addition, students will be more responsive to class, given that the teacher is addressing their primary intelligence in their methods of teaching.

### **History of Gifted Education**

In the late 1860s, William Torrey Harris was the first to study gifted education in the United States (National Association for Gifted Children [NAGC], 2008). Dr. Harris believed in promoting students at short intervals and accelerating gifted students even faster. He thought this plan would keep students challenged in the classroom and would prevent them from becoming lazy and bored. Despite Harris's work in gifted education, it was decades later before educators established formal gifted programs in the United States.

One researcher who brought some recognition to giftedness was Lewis Terman. Terman is considered to be the founder of the gifted-child movement (Stanley, 1985). While on the faculty at Stanford University in 1916, he revised and published the *Stanford Revision of the Binet-Simon Scale*. This scale later became known as the *Stanford-Binet Test of Intelligence*. In his publication, *The Genetic Studies of Genius*, Terman describes the testing he did with 1,428 gifted 12-year-old students. Terman spent most of his time studying the nature and characteristics of giftedness and what connection the students' genetic backgrounds had in common (Feldhusen, 2001). The fifth revision of Terman's test is still being used to test intelligence.

Another educator recognized for having a positive effect on gifted education is Leta Stetter Hollingworth. Around the same time that Terman was studying the genetics of gifted students, Hollingworth was working with New York City youth to determine more about giftedness. Hollingworth determined a number of setbacks to gifted education in her research. She discovered the education system was not always meeting gifted students' educational needs. In addition, she found that many gifted students lacked strong peer relationships. These students were strong intellectually, but lacked emotional maturity to go along with it. She demonstrated that these students have a need for counseling and guidance. Her research with these gifted students led her to be one of the founders of gifted and educational psychology (Myers & Pace, 1986).

Hollingworth disagreed with Terman about one major point. Terman believed that giftedness was primarily hereditary. Hollingworth, however, believed education and opportunity played a role in developing a gifted student. She observed that a difference exists between what a student is capable of doing and what he or she actually does. She

sought the proper way to educate these highly able students in the classroom (Silverman, 1992). Hollingworth argued that not all children were equal intellectually and the education system should not treat them as though they were (Klein, 2000).

From the 1930s to the 1950s, various researchers continued the studies of Terman and Hollingworth. Educators Witty, Strang, and Jenkins studied the personalities of gifted students and wrote about their needs. Strang performed research with the parents of gifted students to see whether she could discover reasons for the maladjustment of these students (Myers & Pace, 1986).

In the late 1950s, the Sputnik spacecraft missions sparked the United States' interest in gifted education once again. After the launch of the first spacecraft, the nation spent a good deal of time and resources researching curricula and teacher development (Cavanagh, 2007). Several researchers conducted studies to determine how effective the nation's education system was and what they could be recommend to improve it (Hersh, 2009). Teachers are still utilizing some practices, such as hands-on learning experiences, in classrooms today (Cavanagh). The result of Sputnik in America was the nation finally realized that the education system was neglecting gifted children. Americans could not deny that other countries had education systems superior to that of the United States (Bracey, 2007).

Throughout the last century, there have been periods of intense concern for the education of students. As a result of Sputnik, the government passed the National Defense and Education Act (NDEA) in 1958. The act noted the importance of developing the mental resources and skills of our country's students. It should have helped provide financial assistance to the education system so the nation's defensive

needs would be met (Flynn, 1995). The conclusions of the study resulted in millions of dollars being given to support the improvement of our nation's math and science programs and was followed by the establishment of the National Aeronautics and Space Administration (Harris & Miller, 2005).

Post-Sputnik and the dawning of the space age, large amounts of time and resources were spent researching and instituting gifted programs. Throughout the last several decades, schools and districts have cut resources for gifted education for varying reasons, from budget cuts to lack of state-mandated program requirements (Passow, 1979; NAGC, 2008). Congress established the Elementary and Secondary Education Act (ESEA) of 1965 to encourage schools to work on improvement (Cohen, Moffitt, & Goldin, 2007). In 1971, Congress revisited the act and made requests for research on programs needed to meet the needs of gifted and talented students. This led to studies by Commissioner of Education Sidney Marland, who in 1972 issued a report to Congress affirming the state of gifted programming in the United States was declining. His report contributed to the founding of the Gifted and Talented Education Act (GTE) as a part of Public Law 95-561. Section 20 of Marland's act recommended improvements for gifted education. Marland's formal definition stated gifted and talented students were those who show high performance in intelligence, creativity, etc. Marland's report also listed gifted students as a part of special education, allowing them the right to receive funding intended for special education (Clark & Zimmerman, 1984).

In 1988, Congress passed the Javits Gifted and Talented Students Education Act (Javits). Named after the New York Senator who brought it into fruition, the act intended to help better identify underrepresented gifted students. By awarding grants and funding,

the act would ensure that research and programs continued. However, many of the programs stopped flourishing after they stopped receiving federal money from the act (Delisle, 2006).

The next major milestone in gifted education came with the reauthorization of the ESEA in 2001. The new act, No Child Left Behind (NCLB), included the Javits Act and an accountability program for the states to ensure they are meeting the needs of all students. The challenge to meet the needs of all students caused an emphasis on ensuring lower-performing students achieved their highest levels of success (Gentry, 2006). However, schools are fighting to meet the needs of the lowest students and in turn are not able to adequately provide for the needs of those high-performing students (Carnevale, 2007; Gentry, 2006; Mendoza, 2006). Many educators and researchers believe this act has put a halt on gifted-education improvement because of its emphasis on every child achieving. Many of those educators made recommendations to improve NCLB's affect on gifted children in today's education system (Johnsen, 2007; Gallagher, 2004; Kaplan, 2004).

### **Definitions of Giftedness**

The term *gifted* can mean varying things to different groups or organizations. It is critical that every organization or gifted program acknowledge his or her definition of what giftedness is. The foundation of every gifted program rests upon this definition. The field of education still struggles with finding one over-arching definition for giftedness. Early educators such as Lewis Terman and Leta Stetter Hollingworth based early definitions of giftedness on the idea that innately gifted students achieved a certain Intelligence Quotient (IQ) as an indication of a person's cognitive ability. Although

Terman believed IQ solely depicted giftedness, Hollingworth believed they should broaden the definition to include students with leadership and creative strengths (Jolly, 2005).

The definition of *gifted* has continued to evolve throughout the last century as research has shown giftedness may need to take into account more than just IQ. According to researcher Patricia Haensly, the Marland Report (1972) included one of the earliest and most beneficial definitions of *gifted*, as follows:

Gifted and talented students are those identified by professionally qualified persons who, by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. (Haensly, 1999, p. 35)

The National Association for Gifted Children (NAGC) defines a gifted person as someone “who shows, or has the potential for showing, an exceptional level of performance in one or more areas of expression” (NAGC website <http://www.nagc.org/>).

According to the Javits Act (1988) and NCLB (2002), gifted children are “students who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities” (NAGC website <http://www.nagc.org/>).

The Columbus Group, a collection of parents and theorists, came together in 1991 and constructed the following definition:



Giftedness is asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching, and counseling in order for them to develop optimally. (Morelock, 1996, p. 8)

The Columbus Group, like many other educators, agrees the definition of giftedness should mention creative skills and motivation, as it feels these are necessary parts of giftedness (Runco, 1997). Other well-known educators have developed their own definitions of giftedness. Howard Gardner (1983) stated that students could show their giftedness in any one of seven domains. Educators including Renzulli and Reis state, “Gifted behavior consists of behaviors that reflect an interaction among three basic clusters of human traits—above-average ability, high levels of task commitments, and high levels of creativity” (Renzulli, 2002, p. 69). According to Reis and Renzulli (2004), these gifted students require a more advanced program in areas such as school curricula and teacher behaviors.

### **National and State Educational Policies Related to Giftedness**

Though federal reports frequently mention the need for gifted services, no policy exists for gifted students at the federal level. Instead, states and local governments determine their own policies, if any at all, to govern their gifted programming (Brown, Avery, VanTassel-Baska, Worley, & Stambaugh, 2006). Of the 50 states, 32 require their schools to offer gifted and talented programming for their students (Viadero, 2009). All states cite some legislation that covers their gifted and talented learners, although

legislation does not mandate programs in all 50 states (Brown et al.). In addition, almost all states have provisions regarding standards and/or funding the programs will receive (Zirkel, 2005). Fourteen states also report they have program evaluations on an annual basis, and 18 report they monitor gifted education compliance (Landrum, Katsiyannis, & DeWaard, 1998).

Although the state is ultimately responsible for the education of its students, this role sometimes falls to the individual school districts. With a lack of mandated practices, identification and programming can vary widely between districts within the same state (Brown, Avery, VanTassel-Baska, Worley, & Stambaugh, 2006). Furthermore, with less than half the states providing funding for their gifted programs, the financial burden of providing these gifted programs rests on individual districts (Viadero, 2009). States that do provide funding for their gifted education programs sometimes award it through grants or resources such as teachers (Baker & McIntire, 2003). However, with the nation's current economic situation and the pressure of NCLB to help lower-performing students, many states have cut back on their funding options for gifted programming (Viadero, 2009).

### **North Carolina's Educational Policies Related to Giftedness**

Until 1996, gifted education was a component of children with special needs in North Carolina's General Statutes. In 1996, this statement of purpose and definition of giftedness replaced the section of Chapter 115C, Article 9B:

The General Assembly believes that public schools should challenge all students to aim for academic excellence and that academically or intellectually gifted students perform or show the potential to perform at substantially high levels of

accomplishment when compared with others of their age, experience, or environment. Academically or intellectually gifted students exhibit high performance capability in intellectual areas, specific academic fields, or in both intellectual areas and specific academic fields. Academically or intellectually gifted students require differentiated educational services beyond those ordinarily provided by the regular education program. Outstanding abilities are present in students from all cultural groups, across all economic strata, and in all areas of human endeavor.

North Carolina clearly outlines its policy and identification procedures. The state policy takes into consideration both a student's potential and performance when identifying him or her for gifted programming. Though the policy is effective for grades kindergarten through 12, it is limited to specific academic areas. North Carolina also mandates screening, identification, and placement of children identified as gifted. Although the state mandates that schools provide services, local districts are able to determine the type of programming and specific approaches used to differentiate from the regular school program. Teachers and gifted coordinators are then equally responsible for the implementation of a plan that provides educational services for these gifted students. Educators in North Carolina are also encouraged to pursue the gifted endorsement on their certification in order to be better equipped to work with these students.

In the 1990s, the General Assembly passed legislation allowing high-achieving students the opportunity to take classes at the state's community colleges. In addition, they allowed for early entrance into kindergarten for highly capable 4-year-olds.

Although schools support these programs, not every district is aware of and implementing them within their schools (Brown, Avery, VanTassel-Baska, Worley, & Stambaugh, 2006).

### **Current and Potential Influences of the Economy on Gifted Education**

The United States is facing the longest and most severe financial crisis since the Great Depression. Moreover, the current economic situation in the United States is affecting education systems throughout the nation. School districts are cutting funds for programs not viewed as critical to reaching the goals of NCLB, and schools are seeing an increasing number of students in each classroom. Schools are facing low workplace morale, a loss of teaching positions, and a decline in resources (Schneider, Konukman, & Stier, 2010). In addition, schools are facing higher costs for lunch, fuel, and field trips. Some schools are even switching to four-day school weeks to cut overhead costs. Schools are having to make changes to their programming and how they operate in order to stay competitive in a tough economy (Levine, 2010).

Gifted programming is not free from concerns with these changes in the economy. In 2009, the president proposed cutting funds to the Javits program in order to meet educational goals in other areas. According to researcher Joseph Renzulli, once the government starts cutting funds for specific programs, the states start lowering their own support of those programs (Samuels, 2008). In a nation where a large number of states do not mandate gifted programming, gifted programs are sure to suffer the consequences. With the inclusive classroom came the additional challenges for teachers having to meet the needs of multiple learners at the same time. With the increased student-to-teacher ratio in classrooms during the last several years, educators have to make a conscious

effort not to let gifted programming slip away. It can be easy for administrators to disband these extra programs in order to recover costs for other high-budget items (Adams, 2009).

### **Identification of Giftedness**

In the century and a half that has passed since gifted education was first recognized, researchers have conducted numerous studies with regard to how to best assess gifted and talented students. Public and private schools use a variety of methods to assess the giftedness of their students. Educators take standardized testing, teacher evaluations, formative assessment, and parent recommendations into consideration when deciding whether a student is gifted. Typically, the first resource in identifying the gifted student is the parents, teacher, and counselors (Baldwin, 2005). Parents, teachers, or counselors who possess enough knowledge of giftedness and who see the characteristics of giftedness in a student can refer or nominate the student for testing (McBee, 2006).

In terms of standardized testing, a debate still exists as to what test is most accurate for determining giftedness. Researchers have completed numerous studies to determine whether the Wechsler Intelligence Scale for Children (WISC-III) or the Stanford-Binet Intelligence Scale (SB-IV) has greater accuracy in determining child giftedness. Students must score at or above the 98th percentile in order to be considered in the gifted range with these two tests. On both of these tests, the students must score at least two standard deviations above the mean. On the SB-IV test, students must score a 132, and on the WISC-III, students must score a 130. However, studies show that the two tests may produce different results when testing children's IQs. Therefore, school

systems need to use either one test or the other in order to produce consistent and accurate results (Simpson et al., 2002; Minton & Pratt, 2006).

Although educators frequently use IQ tests to determine a student's eligibility for gifted programs, researchers are unsure whether these tests adequately capture the abilities of all gifted students. One drawback to IQ tests is they do not recognize a student's actual performance either in school or out of the classroom (Jarosewich, Pfeiffer, & Morris, 2002). This is obvious when dealing with minority groups and diverse populations who may not score as high on IQ tests, but may have other areas of giftedness (Baldwin, 2005; McBee, 2006; Milner & Ford, 2007). Educators believe that the Naglieri Nonverbal Ability Test (NNAT) is a culturally neutral test of ability that identifies equally minority students. Educators use the NNAT to identify students of varying ethnicity and gender. However, educators have found that it under-identifies students of lower socioeconomic statuses (Carman & Taylor, 2010).

Another alternative method for identifying students is the Baldwin Identification Matrix, which combines both standardized and nonstandardized assessment methods. When educators use the matrix properly, it provides educators with an opportunity to identify nonacademic areas of giftedness (Baldwin, 2005). Educators have tested to determine whether the Woodcock-Johnson III Test of Cognitive Abilities with Gifted Students (Rizza, McIntosh, & McCunn, 2001) or the Clinical Assessment of Behaviors (Bracken & Brown, 2008) is accurate in assessing students with giftedness. Other educators recommend the use of portfolios as a part of the identification process. With young children, and diverse populations, a sample of their work may be a better indicator of their academic and nonacademic growth. Educators recommend that a student's

portfolio include records from observing the child in multiple developmental domains (Wright & Borland, 1993).

Another drawback is that schools do not train teachers to make proper judgments about a student's ability (Hadaway & Marek-Schoener, 1992). Because a teacher's nomination is often the first step in identification, it is important for teachers to understand what giftedness looks like (Miller, 2009). Teachers who are unsure of the signs of giftedness may fail to refer potentially gifted students for testing without enough clarification as to what they should be looking for in these students (McBee, 2006; Weber, 1999). It is for these reasons most researchers agree that combinations of methods are beneficial in determining a student's giftedness.

North Carolina has tried to combat the issues confronting identification through several methods. First, they train their educators regarding what to look for in gifted students. Schools provide teachers with the opportunity to earn an add-on licensure or credit toward a master's degree by completing gifted coursework. The state emphasizes differentiated education and encourages teachers to differentiate within the classroom. North Carolina has placed a strong emphasis on its identification procedures by developing a comprehensive profile of every student referred for testing. The state continues to test students on general intellect and in specific academic areas. Schools may serve students with other areas of giftedness, but money from the state may not be used (Brown, Avery, VanTassel-Baska, Worley, & Stambaugh, 2006).

### **Age of Giftedness**

Despite the numerous methods for verifying giftedness, researchers are still struggling to determine at what age teachers can evaluate students for giftedness.

Research shows that standardized tests may not provide an accurate depiction of IQ and ability in students under the age of 8 years (Clarke, 2001). Few tests exist that can accurately depict the giftedness of these young students; so many schools avoid assessing learners at a young age (Pfeiffer, Petscher, & Jarosewich, 2007). In states where this is the primary means for testing students for gifted programming, educators are left trying to determine whether gifted programming should even be offered to these younger students.

Throughout the United States in the late 1990s, many researchers and educators recommended that schools not test students for giftedness until third grade, the premise being that until this age children have not mastered basic skills and cannot be adequately assessed (Sankar-DeLeeuw, 1999). In recent years, educators have presented the argument that schools consistently overlook these students. NCLB focuses primarily on the students who are behind academically and less on the students who can pass the end-of-year testing (Pfeiffer, Petscher, & Jarosewich, 2007). No legislation is in place that specifically protects gifted students from failing to get the attention they deserve. Many public schools are simply not equipped to handle the needs of the various talented and gifted students within their walls (Pfeiffer & Jarosewich, 2007).

Researchers have presented several studies that look at parents', teachers', and gifted specialists' views on early elementary giftedness (Sankar-DeLeeuw, 1999; Schroth, 2007). Researchers have looked at what age they can identify a child's achievement level. Some researchers believe giftedness can be determined as early as the preschool level (Clarke, 2001; Gross, 1999; Koshy & Robinson, 2006; Pfeiffer & Petscher, 2008). They recommend that portfolio assessments (Wright & Borland, 1993),



rating scales, objective testing, and observations be used to determine the eligibility of students for gifted programming (Clarke, 2001). In addition, educators argue that if students are eligible for remedial services at this age, then gifted students should be eligible for specialized instruction, as well (Weber, 1999).

However, there are still researchers who believe that early identification of giftedness in children can be detrimental to their childhoods. These researchers believe that by identifying these students at a young age, educators and psychologists are not giving them the opportunity to naturally progress as a child. They base this belief on the idea that students are at different levels in terms of academic readiness, abilities, and maturity at these young ages and that their future abilities cannot readily be determined at such a young age (Colangelo & Fleuridas, 1986). Again, some researchers share the belief that there is no sound screening instrument to determine giftedness accurately at such a young age (Pfeiffer & Jarosewich, 2007).

The other side to this argument is the belief that gifted children receive a disservice if they do not have the opportunity to work at their own levels, even at this young age. Silverman (1995) reminded educators that children have the right to learn something new in school every day. Parents of gifted students tend to believe that schools should challenge gifted students at a young age. They believe that in order to work up to their full potential, schools need to identify these children and provide them with differentiated, higher-level learning opportunities. A study conducted by researcher Sankar-DeLeeuw revealed that 91% of parents responded that schools could and should identify giftedness at an early age. Seventy-eight percent of the teachers researched in the study felt the same way (Sankar-DeLeeuw, 1999).

With the changes in legislation and the addition of many state-funded preschool programs during the last decade, giftedness identification in kindergarten students is an area that demands further research. In addition, educators need more research to compare the perceptions of these individuals to their counterparts in different areas of the country. States should consider the views of teachers and administrators when determining the policies and procedures for their school districts. The best way to accomplish this is through a comparison of their perceptions with the current policies in place at their school districts.

### **Characteristics of Gifted Students**

Gifted students are different from their grade-level peers in numerous ways. They come from different backgrounds and display a wide array of personal characteristics (Robinson, 2002). According to researchers Robinson and Clinkenbeard (1998), these characteristic differences are evident in three distinct areas: cognitively, social-emotionally, and motivationally.

**Cognitive characteristics.** These children are markedly different from their classmates in that they show higher academic performance and have relatively higher IQs (Kim, 2008). Gifted students typically learn new material in less time and remember material for longer periods of time (Winebrenner, 2000). These students gather and process knowledge better, faster, and at younger ages than their classmates process. These gifted students prefer challenging environments and are flexible in their solution planning (Hettinger & Carr, 2003). In addition, they have the ability to use a variety of strategies to process information in ways their classmates may not understand (Robinson & Clinkenbeard, 1998). These gifted students think at more complex levels than their

peers and become passionate about specific topics of interest to them (Winebrenner). A study by Kwang-Han Song and Marion Porath in British Columbia showed gifted students frequently exhibit unusual creativity, curiosity, intensity, retentiveness, and comprehension (2005).

**Social-emotional characteristics.** Gifted students are not just different from their peers cognitively. Gifted students also have high concepts of self and tend to show perfectionist tendencies (Reis & Renzulli, 2004; Rimm, 2002). In addition, they are very aware socially and are typically mature in their relationships with others (Robinson & Clinkenbeard, 1998). However, this maturity can sometimes cause difficulties in their relationships with their peers. Gifted students' acceptance can vary widely depending on their age, school environments, and their degree of giftedness (Rimm). Despite their different styles of friendship, they tend to be just as popular as their peers (Robinson & Clinkenbeard). Yet, these students are often willing to put aside social acceptability to further their own intellect. They show leadership characteristics and are considered to be very competent by their peers (Dixon, Cross, & Adams, 2001). Though gifted students may seem well adjusted, they are not always without concern socially and emotionally. These students may tend to be underachievers because of a need to be like their peers. They may also feel peer pressure to conform to the class standard (Reis & Renzulli; Rimm).

**Motivational characteristics.** Gifted students typically show a strong internal motivation to succeed (Robinson & Clinkenbeard, 1998). Gifted students' motivation may come from internal or external demands (Song & Porath, 2005). Once they become interested in something, they may become independently motivated to learn as much as

they can about that topic without any encouragement from their teacher (Winebrenner, 2000). However, gifted students may also be unmotivated to succeed due to internal or external demands. They may fail to turn in assignments or engage in the learning process when in the classroom. These students may be at risk for social or emotional problems if educators and family members are unable to determine the reasons for their underachievement (Reis & McCoach, 2002).

### **Characteristics of Gifted Students in Early Childhood**

A number of characteristics are evident in young children who teachers go on to identify as gifted (Moon & Brighton, 2008). These young children often exhibit advanced language skills (Hodge & Kemp, 2000; Sankar-DeLeeuw, 1999). They start talking at a younger age than their peers start and begin forming complete sentences before it is a common practice. In addition, these children have strong memories and are able to relay information accurately (Gross, 1999; Hodge & Kemp; Koshy & Robinson, 2006). They not only show an early development of speech, but also often crawl, walk, and run earlier than their same-age peers. Young children who teachers later identify as gifted frequently begin reading at an earlier age than their peers do (Gross).

Young gifted children are also strong creative thinkers and are good at problem solving (Hodge & Kemp, 2000; Rotigel, 2003). In addition, children who go on to later be identified as gifted have longer than usual attention spans, are goal oriented, and are more responsive to testing (Damiani, 1997). These children often seek out more knowledge and try to learn everything they can about a topic that interests them (Rotigel, 2003). They are also able to make social comparisons before their age-level peers. They are aware of the differences between themselves and those around them and verbalize

what those differences are (Gross, 1999). These students may have fears similar to those of older children, be able to appreciate humor, and may develop complex motor patterns earlier than their peers. Frequently these gifted individuals develop a frustration with themselves and their peers for not catching on to things quickly enough (Koshy & Robinson, 2006).

### **Gifted Program Designs**

Several different theories of giftedness exist upon which most educators develop their gifted programs. The model used and its effectiveness is dependent on the school system and the teacher's methods of implementation (Reis & Renzulli, 2004).

Researchers Delcourt, Cornell, and Goldberg initiated a study of various gifted programs to determine the effectiveness over a two-year period. They examined both gifted and non-gifted students and determined that students in a gifted program performed better after two years than high-achieving students not included in a program for gifted students. In addition, they also determined that the type of program had a strong impact its effectiveness (2007).

Researchers agree that schools should continue monitoring various programs in order to determine their effectiveness (Delcourt, Cornell, & Goldberg, 2007; Rogers, 2002). However, researchers can find little research comparing different types of gifted programs to determine which are the most effective. Instead, schools tend to use the programs that were set in place by their school or district many years prior.

There are varieties of programs that are in place at schools around the country to meet the needs of gifted students. Some educators may prefer pull-out programs where a student's needs are met outside the classroom (Reis & Renzulli). Early entrance and

accelerated instruction are two other ways educators may choose to meet the needs of gifted students (Rogers, 2002). Other educators may prefer to meet the needs of their gifted learners through differentiating in-class lessons, compacting the curriculum, and/or extending the curriculum to allow for different-level learners (Reis, Burns, & Renzulli, 1992; Tomlinson, 2001).

**Early entrance to school.** Many studies exist dealing with the effects of early entrance to school on the performance of gifted students. The studies indicate these students perform just as well as or better than their peers (Gross, 1999). Early entry is an inexpensive opportunity to provide for the success of a gifted child at a young age (Koshy & Robinson, 2006). Instead of attending another year of unnecessary preschool, schools give these high-performing students the opportunity to start school a year early. They come into school with a peer group slightly older, but one that they can continue with throughout the education process (Gross). Often these gifted students are attracted to a slightly older group of peers anyway due to their own maturity (Rogers, 2002).

However, early entrance may not provide the extra challenges these students need academically, and additional programming may still be necessary for them (Gross, 1999). In addition, these students may have difficulty adjusting to being with a new set of older peers and not be as prepared for the classroom as they should be. They could suffer from anxiety and nervousness in this new environment (Rogers, 2002). For this reason, schools should always screen these students for both social and emotional maturity in addition to academic ability before admitting these gifted children to school early (Gagne & Gagnier, 2004).

**Accelerated learning.** Another method for challenging gifted students is through accelerated learning. If students show sufficient mastery of their current grade level, they can advance one or two additional levels so teachers can provide them with more challenging coursework (Neihart, 2007). Schools can accelerate students by grade level or by individual subjects depending on their ability and maturity (Swiatek & Lupkoski-Shoplik, 2003). Most of the setbacks to acceleration are because schools do not properly prepare the gifted student for the new coursework, peer group, or from a student not having a good support system. Acceleration requires the support of the teachers, parents, and peer group in order to be truly successful (Chapman, 2009). Despite concerns about the social adjustment of students who schools accelerate, long-term research has shown these students became well-adjusted adults who appreciated the challenging that they received at a younger age (Cloud, Badowski, Rubiner, & Scully, 2004). Schools should screen children who they are considering for accelerated learning for social and emotional maturity just like those students who they admit to school early. Acceleration can be stressful for the student and the family members and schools need to be sure to give these gifted students the highest chance for success (Gagne & Gagnier, 2004; Rogers 2002).

**Pull-out programs.** With pull-out methods, students leave the classroom at scheduled times to receive enrichment activities. They are with their regular class for most classroom instruction, but leave the classroom for a portion of the school day or week to meet with a gifted-education coordinator. These programs may be scheduled anywhere from a few hours a week to several hours each school day (Delcourt, Cornell, & Goldberg, 2007). With this approach, teachers are not directly responsible for

challenging their gifted students; instead the enrichment is provided by a gifted-education coordinator or other education professional (Landrum, 2001).

Research shows that pull-out programs are the most commonly used programming for gifted students (Swiatek & Lupkowski-Shoplik, 2003; Winner, 1997). A 1997 study showed that gifted students who were in pull-out programs performed better than their gifted peers in mixed classrooms by 4 to 5 months after just one year of programming (Kulik & Kulik). In another study, researchers followed 14 different school districts in 10 different states and determined that students receiving pull-out services performed much higher than their peers who were not in programs or who were within-class programs (Delcourt, Cornell, & Goldberg, 2007). Despite this research, there are still researchers who argue that pull-out programs should be a thing of the past due to the limitations in their delivery methods (Latz, Speirs, Neumeister, Adams, & Pierce, 2009). These researchers argue that the programs may come at a time when students are missing activities in their regular classrooms, and this grouping of students can lead to segregation from their peers (Landrum, 2001).

**Classroom differentiation.** According to Carol Ann Tomlinson:

In differentiated classrooms, teachers begin where students are, not the front of a curriculum guide. They accept and build upon the premise that learners differ in important ways. Thus, they also accept and act on the premise that teachers must be ready to engage students in instruction through different learning modalities, by appealing to different interests, and by using varied rates of instruction along with varied degrees of complexity. In differentiated classrooms, teachers ensure



that a student competes against himself as he grows and develops more than he competes against other students. (1999, p. 2)

Differentiating learning experiences for multi-level learners within one classroom is no simple task (Hertberg-Davis, 2009). It requires skill on the part of the teachers and support from the other educators within the same school system (VanTassel-Baska & Stambaugh, 2005). When done properly, differentiated lessons can extend and enhance the regular classroom curriculum, rather than be completely separated from it as most pull-out programs are (Landrum, 2001).

However, differentiation requires more than just assigning gifted students' additional work. Teachers have to be able to develop ways for each student to learn quickly and deeply on their own level (Tomlinson, 1999). Differentiation requires teachers to possess knowledge of standards that are below and above their own class goals and to know how to convert those standards into well-developed lessons (VanTassel-Baska & Stambaugh).

Differentiated programs that accommodate gifted students in the classroom can include, but are not limited to, curriculum compacting, curriculum extending, alternative learning experiences, and different pacing. Curriculum compacting requires teachers to preassess each student and determine what they already know and what they still need to learn. The teacher then builds lesson plans that focus on what each student does not know, rather than spending additional time on things that the students have already mastered (Tomlinson, 1999). Curriculum extending allows teachers to vary the pace and levels of instruction depending on each student's needs.

Another approach, alternative learning experiences, gives learners who need a more hands-on learning experience the opportunity to truly get engaged in the learning process (Reis & Renzulli, 2004). The same approach may not work with every student; it requires knowing each student as an individual and then determining how to meet his or her intellectual needs (Winebrenner, 2000). Differentiation is a wonderful opportunity for teachers to reach all learners within their classroom on their level. However, differentiation is not an easy task and requires a lot more work on the part of the teacher so teachers may not use it to the extent that they could (VanTassel-Baska & Stambaugh, 2005; Winebrenner; Reis & Renzulli).

**Ability grouping.** Another approach to gifted programming is ability grouping within the classroom. Should teachers choose to group students by learning levels, then they can help students who often tend to get lost in the larger group settings. Teachers place gifted students who need more challenging in a group with other students who also need challenging. Then they give the students the opportunity to do activities that will enrich their learning process. Teachers can use alternate ways of teaching based on the level that a student is on and they can adjust the rate at which they present new material to students who grasp the concepts quickly, while adjusting or reviewing concepts for those who might be slower in grasping concepts (Tomlinson, 2005). This is probably the greatest benefit of group instruction. Learning happens best when a teacher challenges a student, and the easiest way to ensure that a teacher challenges students academically is for them to teach them on their own level (Tomlinson, 2001). Ideally, this would involve one-on-one instruction, but since that is impractical, the next best alternative is education through a group structure. The downside to this grouping option is that teachers still end

up spending the majority of their time focusing on students who are struggling academically rather than those who need an extra challenge.

**Other gifted programming.** In addition to these opportunities for gifted students, some gifted students have the opportunity to attend special schools intended to provide enrichment activities. Due to the high cost of running these special schools, some of them only meet on weekends or during the summer. However, these programs do not always connect to the academic program that a student has at their regular school and therefore do not provide enrichment based on the current coursework (Swiatek & Lupkowski-Shoplik, 2003).

**Gifted programs in the primary grades.** Educators face the challenge of how to recognize and nurture giftedness in young primary learners (Coates, Shimmin, & Thompson, 2009). Currently, the most used technique for children in this age group is early entry or acceleration in their school program. Researchers can find little research regarding programs that have been developed specifically for gifted young children. According to researchers, in order for a gifted program to be truly effective in working with these gifted young children, schools should tailor the program to individual student's needs. It needs to be challenging and devised to be completed at their own pace (Koshy & Robinson, 2006; Rotigel, 2003). Researchers Morelock and Morrison (1999) designed a "developmentally appropriate" curriculum for young gifted children that considers each child's advancement. The program has five levels students can progress through at their own paces. Coates, Shimmin, & Thompson developed a program where teachers assessed a student's interests by observation and then offered those students new and challenging materials within those interests. Another appropriate solution would be

providing these gifted children with access to other activities that are on their developmental level. Programs could be ability grouped, pull-out programs, or the opportunities for these students could be found within the regular classroom.

Researchers agree that regardless of the method used to differentiate or challenge for these students, that it is important for them to understand why their learning experiences may be different from their peers (Rotigel).

### **North Carolina's Gifted Programs**

The state of North Carolina does not mandate the type of programs its schools must offer gifted students. Each district, and sometimes each school, is given the opportunity to make that determination for its school system (Brown, Avery, VanTassel-Baska, Worley, & Stambaugh, 2006). Although the state provides services for students in grades kindergarten and first, according to the National Association for Gifted Children, less than 1% of the state's gifted population falls within those two grade levels. In addition, kindergarten teachers are to deliver all gifted programming solely in the classroom. In grades 1 through 3, the programming may be offered either in the regular classroom, through ability grouping of the students, or in a resource room through pull-out programming. However, teachers are not required to report on the programming that they offer within the classroom so these students may not always be receiving the same opportunities for gifted services. Although gifted students occasionally have the opportunity to accelerate through grades, they must show sufficient mastery of any skipped grade-level standards prior to the acceleration (National Association for Gifted Children, 2009).

## **Importance of Teacher Beliefs**

A wealth of research indicates that teachers' personal beliefs drive their professional practice (Guerra & Nelson, 2009; Payne, 1994; Wang, Elicker, McMullen, & Mao, 2008). The beliefs of these educators play a critical role in the curriculum, implementation, identification, and structure of the programs they put into practice in their classrooms (Payne, 1994). Teachers' beliefs and practices have a direct relationship with the teaching and learning process in their classrooms (Griffiths, 2007). Teachers will not put into practice programs or instructional planning they do not understand, they do not agree with, or they do not see as important (Wang, Elicker, McMullen, & Mao). This means a program may be destined for failure before it is even implemented (Lombaerts, DeBacker, Engles, van Braak, & Athanasou, 2009).

**Where beliefs come from.** The beliefs and perceptions of administrators and teachers are shaped by a variety of different factors. The schooling that an educator receives prior to becoming a teacher helps to shape many of their beliefs about education and good classroom practices (Miller, 2009). Preservice teachers frequently have varying beliefs about classroom practices depending on whether they were addressing the teaching or the learning. They gain much of their beliefs from what and how they learn in the classroom themselves. Experienced teachers may ground their beliefs in years of experience and background in working with students. They know what works and what does not because they feel that they have tried it all in the past (Buehl & Fives, 2009). New teachers may begin teaching with many preconceptions that quickly change once they are in the classroom (Beyer & Davis, 2008). Regardless of how they developed their beliefs, all teachers have them, and their beliefs play a huge role in understanding a

teacher's actions and practices (Lombaerts, DeBacker, Engels, van Braak, & Athanasou, 2009).

**Why beliefs matter.** The beliefs and perceptions of administrators and teachers can determine the success of their school's programming. Their beliefs guide their everyday decisions and the actions that they take in the classroom (Fullan, 2003; Lombaerts, DeBacker, Engels, van Braak, & Athanasou, 2009; McMullen et al., 2006; Ringstaff & Kelley, 2002). Numerous studies have researched the effects teacher beliefs have on the implementation of technology in the classroom (Chen, 2008; Palak & Walls, 2009); the implementation of curriculum (Wang, Elicker, McMullen, & Mao, 2008; Buehl & Fives, 2009); and their beliefs about giving student feedback (Lee, 2009). Researchers have even studied the effect teacher beliefs have on minority students' success (Payne, 1994). Researchers agree that teachers' beliefs about teaching, their educational goals, and what they feel is important determine what they focus on in their classrooms (Palak & Walls). In addition, their beliefs affect the reporting that they do of their own classroom practices (Buehl & Fives; Stipek & Byler, 1995). These studies show teacher beliefs and perceptions play a critical role in what they put into practice in their classrooms.

**How beliefs can change.** With an increased understanding of teacher beliefs and the effect they have on school programming, educators can take steps toward changing those beliefs. Teachers may have incomplete or incorrect ideas and not realize how this is affecting their teaching (Chen, 2008). Sometimes just making teachers aware of the perceptions they have and how those perceptions change their teaching can make a difference (Hart, 2002; Lombaerts, DeBacker, Engels, van Braak, & Athanasou, 2009).

However, sometimes it takes concentrated effort on the part of an administrator or school system to make a difference. If an administrator wants to try new programming in a school, the first step should be to take the teachers' perceptions into consideration (Hart 2002). Teachers base their perceptions on a new program on two things: their professional education and training or their personal classroom teaching or experiences (McMullen, 1998; Wang, Elicker, McMullen, & Mao, 2008). Administrators can offer professional development programs that focus specifically on student-centered practices and how to integrate them into the current curriculum. Schools should gear their teacher development toward what would work with that particular school and setup rather than what would work for the general public (Palak & Walls, 2009). In addition, administrators should consider teacher beliefs when planning professional development programs in order for them to be truly effective (Chen, 2008). One of the downsides to most current professional development programming is that it is not personalized. It does not address the underlying beliefs and practices of teachers, and once educators return to their classrooms, they have not necessarily changed their beliefs or their practices. Forcing teachers to change their behaviors but not helping them to change their beliefs will only result in a short-term change in teaching practices (Guerra & Nelson, 2009).

Formal training in the theoretical understanding of a new program can assist teachers in an understanding of the necessity for change (Chen, 2008). Often, the lack of knowledge about a concept results in its lack of use by teachers (Beuhl & Fives, 2009; Palak & Walls, 2009). By increasing the teachers' knowledge about the practice and their own knowledge about their beliefs, these teachers may find that their beliefs have changed considerably, and in turn, so have their practices (Guerra & Nelson, 2009).

**Teacher beliefs about gifted programs.** Administrators, gifted specialists, and teachers may have very different ideas about what giftedness is, who is gifted, and how an individual school should run their gifted programs. Some educators may feel that they do not need to take any additional action with these gifted students. The beliefs that teachers have about giftedness can come from a variety of different avenues. They may gain their beliefs from their prior schooling (Bangel, Moon, & Capobianco, 2010) or from training they have received since entering the classroom. Some teachers may not have any training or coursework on giftedness and be underprepared for working with those students in the classroom (Miller, 2009). A study by McCoach and Siegle examined teachers' attitudes towards the gifted and gifted programming. Their research found that training in gifted education did not affect teachers' attitudes towards the gifted, but that it did increase their understanding of these students' needs (2007).

**The effect of beliefs on early childhood gifted programs.** In turn, these teachers' and administrators' beliefs may vary regarding the age that they feel students can be formally identified as gifted and when that giftedness should be nurtured. Regardless, the beliefs of these educators regarding early childhood giftedness can influence their practices within their classrooms (Wang, Elicker, McMullen, & Mao, 2008). Two studies conducted in the early 1990s showed there was a significant relationship between teachers' beliefs and practices in early childhood education (Charlesworth, Hart, Burts, & Hernandez, 1991; Charlesworth et al., 1993).

Some major concerns exist in the implementation of gifted programming in the younger grades. One of those concerns is under-identification of gifted students. If teachers do not believe schools can properly identify young students as gifted, they will



not recommend those children for gifted programming (Elhoweris, 2008; Moon & Brighton, 2008). According to a study conducted by researcher Sankar-DeLeeuw (1999) only half of primary teachers tested agreed that children could be identified as gifted in the early elementary years. Only 30% of teachers agreed that those students needed a different curriculum in the primary years. These teachers share a concern that students might be misidentified or that they would be socially disadvantaged (Gross, 1999).

In order to determine what changes need to be made to gifted programming, educators need to understand what common beliefs teachers possess regarding giftedness in the early elementary years. Without this knowledge, new programs cannot be effective in teaching these young gifted children. Schools need more research that shows what training teachers have, what their beliefs are, and how these beliefs affect their teaching.

### **Conclusion**

Every student deserves the opportunity to learn in a way that best suits him or her. Gifted students need challenging on their own levels in order to reach their highest potential. Although researchers may still be trying to determine at what age this giftedness can be evaluated, young gifted children still need to have the opportunity to learn on their own levels. This is critical since children form their attitudes about school as early as kindergarten, and those attitudes stay with them throughout the rest of their years in school. These students deserve challenging as early as kindergarten and first grade so that they can reach their later potential as adults.

The perceptions of teachers and administrators regarding how to handle giftedness in these students (and whether educators can even identify them at this age) contribute to how much challenging these students receive in the classroom. With the NCLB focus on

struggling learners, these gifted students are going to suffer if they do not receive some type of programming designed to challenge them. In order to determine what schools need to do, if anything, to better equip these gifted students for the future, educators need more research to determine what teachers believe and how that affects their classroom practices.

Although North Carolina has laws mandating the availability of gifted programming to students in grades kindergarten through 12, a distinct lack of identification exists of students in the early elementary grade levels. In addition, there is no clear information available to educators regarding what programs are in place to help these gifted students. This study will try to determine what the beliefs of North Carolina's administrators and teachers are regarding kindergarten giftedness, and how their beliefs vary from each other. The study will then address whether these beliefs have an effect on their teaching, specifically in the areas of identification and classroom practices.

## **CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY**

The purpose of this chapter is to describe the methodology and research design employed in this study. This chapter includes the following sections: (1) Introduction; (2) Basic Research Design; (3) Participants; (4) Instrumentation; (5) Survey Questionnaire; (6) Procedures/Data Collection; (7) Data-analysis Procedures; (8) Chi-square Analysis; and (9) Conclusion.

### **Introduction**

The purpose of this causal comparative study is to determine administrator and teacher beliefs regarding kindergarten giftedness. The study used electronic surveys to determine what the beliefs and practices of these groups are with regard to kindergarten giftedness and whether there was any inconsistency between or within these two groups. The survey items included teacher and administrator perceptions regarding giftedness and questions about policies and procedures in place within the participants' schools and districts with regard to gifted kindergarteners. The researcher collected each participant's basic demographic information including his or her education level.

### **Basic Research Design**

This study looked at the relationship between administrators and kindergarten teachers in regards to kindergarten giftedness. The researcher intended to further the previous research studies by Stephen Schroth (2007) of the University of Virginia and Naomi Sankar-DeLeeuw (1999) of the University of Alberta. It incorporated a causal comparative research design comparing the differences between the two groups of

educators (Schenker & Rumrill, 2004). Like the two previous researchers, this study utilized a survey instrument to gather data about administrator and teachers perceptions of giftedness. Based on the review of the literature, the researcher determined that a quantitative approach with qualitative support would be appropriate for the data plan. The research addresses the research questions in the study quantitatively, while the qualitative supplement adds a human dimension to the study. The qualitative section incorporates a basic interpretive study with an emergent design. The researcher looked for the design of the qualitative portion of the study to emerge as the study unfolded (Ary, Jacobs, Razavieh, & Sorensen, 2006).

A group of educators assisted the researcher in developing the survey. The researcher then tested the survey for both reliability and validity before contacting educators to participate in the study. All administrators and kindergarten teachers in North Carolina had the opportunity to participate. The study did not require random sampling as all members of each population had the opportunity to participate in the study (Ary, Jacobs, Razavieh, & Sorensen, 2006). Members of both groups received an email inviting them to participate in the online survey. The researcher allowed respondents three weeks to respond to the survey before downloading the results and running statistical tests.

### **Participants**

The target population for this study included two groups of educators: elementary school administrators and kindergarten teachers. Participation in the study was voluntary. The researcher used purposive sampling for the study. Purposive sampling involves using the entire population of a limited group (Ary, Jacobs, Razavieh, &

Sorensen, 2006). In this study, the sampling plan included all kindergarten teachers and administrators from public schools in the state of North Carolina. The researcher obtained contact information for North Carolina's public school administrators and kindergarten teachers from the Department of Public Instruction and public data from the websites of individual school systems. The contact information for principals and vice principals at schools housing kindergarten programs was also included on the list. The researcher contacted a total of 1,906 administrators and 3,169 kindergarten teachers by email for participation in the study. One hundred twenty-seven of the administrators responded to the survey for an approximate return rate of 15%. Two hundred sixty kindergarten teachers responded for a return rate of 12.2%.

### **Setting**

The setting for the study was elementary schools within the state of North Carolina. The researcher accomplished all communication with participants using email and online data collection services through administrators' and teachers' professional email addresses.

### **Instrumentation**

The researcher worked with committee chair Dr. Mark Angle to develop a survey that could adequately determine the perceptions of the educators in this study. Dr. Angle has years of experience in gifted education to include graduate coursework, summer gifted instructor, middle school gifted instructor, and time spent serving as gifted coordinator for school division in Virginia. Prior to development of the survey, the researcher reviewed current and past research on administrator and teacher beliefs and

beliefs about giftedness. The researcher based the survey questions upon this review of the literature.

The researcher developed two slightly different versions of the instrument with the questions for administrators and teachers varying slightly. Both surveys consisted of three demographic questions, eight close-ended questions, and one optional short-answer question. The researcher intentionally kept the survey short in order to encourage participation and responsiveness. Long surveys may produce more information, but research shows longer surveys have a lower response rate, and those who do respond may choose not to answer all the questions (Coughlan, Cronin, & Ryan, 2009; Umbach, 2005). The first eight survey questions asked the respondent to answer yes or no (or agree or disagree) to a series of statements. The final question gave the respondent an opportunity to add his or her own feedback. Because the researcher kept the survey intentionally short, the researcher was able to include simple definitions of all terminology on the survey within each question. This ensured all respondents understood and had a common understanding of the meaning of the terminology within the survey.

**Validity.** The researcher contacted three education professionals to review the survey and provide feedback regarding wording, format, and flow of the survey. The educators provided comments regarding the appropriateness, importance, and phrasing of the questions asked in the short survey (Ary, Jacobs, Razavieh, & Sorensen, 2006; Fraenkel & Wallen, 2006).

The researcher then contacted three elementary schools to pretest the survey outside of the North Carolina testing area. The researcher asked the three administrators and five kindergarten teachers to review the survey, instructions, layout and length.

These educators then sat down with the researcher and shared their thoughts on the survey, ease of the layout, and the difficulty and understanding of the questions.

Respondents paraphrased questions and responses for the researcher to ensure they completely understood what the survey was asking (Ary, Jacobs, Razavieh, & Sorensen, 2006; Fraenkel & Wallen, 2006). The researcher then encouraged the respondents to ask questions and share concerns with survey items. The researcher then checked the survey for inconsistencies and determined which parts of the survey needed rewording in order for participants to understand the survey questions completely (Umbach, 2005). In addition, the educators recommended including a section for respondents to share their own comments regarding kindergarten giftedness. The researcher determined that this might provide valuable information and added it to the amended survey instrument.

**Reliability testing.** The researcher assessed for reliability by checking for consistency in results with a sample group of administrators and teachers. The researcher repeated the survey with the same sample group of administrators and teachers after a period of one month passed. The respondents did not object to repeating the same survey instrument and the majority of the responses were the same between the first and second administration of the instrument. One of the most widely used tests for determining internal reliability is Cronbach's alpha. Cronbach's alpha compares each survey item with the possible answers and each person's individual responses. The higher the score on Cronbach's alpha, the more reliable the scale is. (Ary, Jacobs, Razavieh, & Sorensen, 2006). Researchers consider a score of 0.7 or greater reliable. During the first administration of the survey, the Cronbach's alpha was found to be 0.82. The second

time the survey was administered the alpha level was found to be 0.81. This is an indication of strong internal consistency in the survey.

The researcher finalized the survey instrument after completing all validity and reliability testing. The final survey instruments are named The Kindergarten Giftedness Survey for Administrators and The Kindergarten Giftedness Survey for Teachers (see Appendices A and B).

### **Survey Questionnaire**

The survey questionnaire began by soliciting demographic information from the participants. There were three multiple-choice questions included in this section of the survey. The survey asked administrators and teachers how many years they have been working in the field of education, their highest level of education, and whether they were currently teaching at a public, private, or religious school.

In addition to basic demographic information, the survey to administrators and kindergarten teachers included nine items. The items on the survey of administrators are listed in order as follows,

1. Kindergarten students can be gifted. (Agree/Disagree)
2. Identifying gifted students in kindergarten can be detrimental to their future development. (Agree/Disagree)
3. Does your district have a process in place to formally identify giftedness in kindergarten? (Yes/No)
4. Does your school have a process in place to formally identify giftedness in kindergarten? (Yes/No)



5. Do you require kindergarten teachers to alter the curriculum for those students *formally identified* as gifted, if applicable? (Yes/No)
6. Do you require kindergarten teachers to alter the curriculum for those students *perceived* as gifted? (Yes/No)
7. Are any of the following opportunities available for kindergarten students within your school?
  - a. Early entrance (students are allowed to enter school earlier than age levels permit) (Yes/No)
  - b. Acceleration by grade skipping (children can start out in first grade) (Yes/No)
  - c. Pull-out grouping (students work with other gifted students outside the classroom) (Yes/No)
8. Have you seen any of the following practices employed within kindergarten classrooms at your school?
  - a. Curriculum compacting (cutting out material that a student has shown mastery of from the curriculum) (Yes/No)
  - b. Differentiating (the curriculum is adapted to all students' differing abilities) (Yes/No)
  - c. Grouping (students are grouped with other students of the same ability level, not with students needing remediation) (Yes/No)
  - d. Tiered assignments (gifted students are given more challenging assignments dealing with the same topic as the rest of the class) (Yes/No)

- e. Students pick topics (students are allowed to make choices in their learning by picking their own topics to study) (Yes/No)
9. Do you have any comments you would like to share with the researcher in regard to kindergarten giftedness?

Questions 5, 6, and 8 were written slightly different so as to ask teachers whether they specifically do these actions (as opposed to the above survey, which asks administrators whether those actions are required of their staff). In the teacher survey, questions 5, 6, and 8 were reworded as follows:

- 5. Are you required to alter the curriculum for those students *formally identified* as gifted, if applicable? (Yes/No)
- 6. Are you required to alter the curriculum for those students *perceived* as gifted? (Yes/No)
- 8. Even if you are not required to alter the curriculum within your classroom, are any of the following methods used by you within your classroom:
  - a. Curriculum compacting (cutting out material that a student has shown mastery of from the curriculum) (Yes/No)
  - b. Differentiating (the curriculum is adapted to all students' differing abilities) (Yes/No)
  - c. Grouping (students are grouped with other students of the same ability level, not with students needing remediation) (Yes/No)
  - d. Tiered assignments (gifted students are given more challenging assignments dealing with the same topic as the rest of the class) (Yes/No)

- e. Students pick topics (students are allowed to make choices in their learning by picking their own topics to study) (Yes/No)

### **Procedures/Data Collection**

The researcher obtained permission from the Liberty University Institutional Review Board (IRB) and received permission to conduct the study prior to data collection (Appendix C). Random sampling of the population was not necessary, as all administrators and kindergarten teachers in the state of North Carolina received the opportunity to participate in the survey. The researcher conducted the study using an electronic survey to all administrators and kindergarten teachers in the state of North Carolina. The researcher obtained the contact information for these administrators and kindergarten teachers from the Department of Public Instruction and public data from the websites of individual school systems. A brief cover letter explaining the reason for data collection accompanied an email requesting participation in the survey. (The cover letter for administrators is included in Appendix D and the cover letter for kindergarten teachers is included in Appendix E.) Participants then had the opportunity to follow the link provided to the short, digital survey. Because the survey was entirely anonymous, no informed consent was necessary from the participants. Participants had three weeks to complete the survey, and then the primary researcher downloaded and stored the data from the survey site.

Although the researcher had the choice of using phone and mail surveys to collect data, an electronic survey seemed to be the most appropriate means for distributing a short survey to such a large sample size. Research shows that collecting data electronically is usually superior to these other means in a variety of ways. Online data collection offers

shorter response times, lower cost, ease of data collection and entry, and reduced involvement of the researcher (Ary, Jacobs, Razavieh, & Sorensen, 2006; Umbach, 2005; Wright & Schwager, 2008). Online surveying also removes the need for a separate informed consent (Solomon, 2001).

### **Data Analysis**

The researcher entered data into the Statistical Package for the Social Sciences (SPSS) and then conducted descriptive statistics on the demographic data and on each survey question. The researcher then calculated frequency and percentages on nominal (categorical/dichotomous) data and means/standard deviations on continuous (interval/ratio) data (Howell, 2010). The researcher used the chi-square analysis to evaluate Research Questions 1, 2, 5, and 6. Descriptive statistics were used to evaluate Research Questions 3 and 4. The qualitative portion of the study was analyzed by calculating the patterns and frequencies of comments by respondents.

**Chi-square analysis.** In order to test the relationship between the study's two populations (administrators and kindergarten teachers), the researcher used the chi-square test. This test is used to assess distributions of categorical or finitely valued variables (Ary, Jacobs, Razavieh, & Sorensen, 2006); thus was the most appropriate choice. One of the prerequisites for utilizing chi-square analysis is that the sampling data from the population is somewhat normally distributed. Additionally, all expected frequencies are 1 or greater and no more than 20% of the expected frequencies are less than 5 (Weiss, 2002). For each variable, the chi-square coefficient ( $\chi^2$ ) and critical-value coefficient was compared. The critical-value coefficient was then calculated by examining the degrees of freedom and the significance level of the study, which has been identified as an alpha

level of 0.05. The degrees of freedom necessary when calculating the critical value coefficient is given by the expression: degrees of freedom = (number of rows – 1) \* (number of columns – 1). The *p*-value was computed for the chi-square test. For values less than the significance level, the null hypothesis was rejected. For values larger than the significance level, the null hypothesis failed to be rejected. The *p*-value indicates the probability of obtaining a test value at least as extreme as the one resulting from the chi-square test if the hypothesis is assumed to be true (Triola, 2001). This procedure was repeated and results discussed for Hypotheses 1, 2, 5, & 6 in the following sections.

**Research question one.** Does a statistically significant difference exist between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree)?

H1<sub>o</sub>: A statistically significant difference does not exist between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree) .

H1<sub>a</sub>: A statistically significant difference exists between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree).

To examine research question 1, the researcher conducted a 2 x 2 chi-square analysis to assess whether a statistically significant difference exists between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree). Data was obtained from The Kindergarten Giftedness Survey, administrator and teacher versions. Responses came from item 1, “Kindergarten students can be gifted,” which offers two response options (agree vs. disagree). The researcher then compared the two groups on their responses, creating a 2 x 2 analysis. The rationale for research question one is included in Table 1.

Table 1

*Administrators' and Teachers' Perceptions of Giftedness Justification in Literature*

Item Number	Survey Statement	Justification in Literature
Item #1	Kindergarten students can be gifted.	Sankar-Deleeuw, 1999 Pfeiffer & Petscher, 2008 Clarke, 2001 Weber, 1999

**Research question two.** Does a statistically significant difference exist between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree)?

H<sub>2o</sub>: A statistically significant difference does not exist between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree).

H<sub>2a</sub>: A statistically significant difference exists between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree).

To examine research question two, the researcher conducted a 2 x 2 chi-square analysis to assess whether a statistically significant difference existed between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree). The researcher obtained data from the Giftedness Survey, administrator and teacher versions.

Responses came from item 2, “Identifying giftedness in kindergarten students can be detrimental to their future development,” which offers two response options (agree vs. disagree). The researcher then compared the two groups’ responses, creating a 2 x 2 analysis. The research used to establish research question two is included in Table 2.

Table 2

*Administrators’ and Teachers’ Perceptions of the Futures of Gifted Kindergarteners  
Justification in Literature*

Item Number	Survey Statement	Justification in Literature
Item #2	Identifying giftedness in kindergarten students can be detrimental to their future development.	Colangelo & Fleuridas, 1986 Pfeiffer & Jarosweich, 2007

**Research question three.** What portion of the population of administrators and teachers in North Carolina report that their schools or districts have processes in place to determine if kindergarten students are gifted?

To examine research question three, descriptive statistics were calculated. The researcher used descriptive statistics to assess the responses of administrators and kindergarten teachers concerning the processes in place in their schools and districts to identify kindergarten giftedness. Responses came from item 3, “Does your district have a process in place to formally identify giftedness in kindergarten?” and item 4, “Does your school have a process in place to formally identify giftedness in kindergarten?” Both

questions offer two response options (yes vs. no). The researcher then shared the results of both groups' responses.

**Research question four.** What portion of the population of administrators and teachers in North Carolina report that kindergarten teachers are required to alter the curriculum for kindergarten students that educators have identified as gifted?

To examine research question four, descriptive statistics were calculated to assess the responses of administrators and teachers concerning the requirement (yes vs. no) that kindergarten teachers alter the curriculum for gifted students. Responses came from item 5 of the Giftedness Survey, "Do you require kindergarten teachers (or, are you required to . . .) alter the curriculum for those students *formally identified* as gifted, if applicable?" and item 6, "Do you require kindergarten teachers (or, are you required to . . .) alter the curriculum for those students *perceived* as gifted?" Both questions offered two response options (yes vs. no). The researcher then shared the results of both groups' responses.

**Research question five.** Among teachers, does a statistically significant difference exist in the following kindergarten classroom practices based on whether or not the teachers are required to modify their curriculum for gifted students:

H3<sub>0</sub>: A statistically significant difference does not exist in the following kindergarten classroom practices between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3<sub>1</sub>: A statistically significant difference does exist in the following kindergarten classroom practices between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.



- a. Is there a statistically significant difference in the number of teachers who use curriculum compacting based on whether or not they are required to modify their curriculum for gifted students?

H3a<sub>0</sub>: A statistically significant difference does not exist in the use of curriculum compacting between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3a<sub>1</sub>: A statistically significant difference does exist in the use of curriculum compacting between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

- b. Is there a statistically significant difference in the number of teachers who differentiate in the classroom based on whether or not they are required to modify their curriculum for gifted students?

H3b<sub>0</sub>: A statistically significant difference does not exist in the use of differentiation between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3b<sub>1</sub>: A statistically significant difference does exist in the use of differentiation between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

- c. Is there a statistically significant difference in the number of teachers who use grouping in the classroom based on whether or not they are required to modify their curriculum for gifted students?

H3c<sub>0</sub>: A statistically significant difference does not exist in the use of grouping between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3c<sub>1</sub>: A statistically significant difference does exist in the use of grouping between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

- d. Is there a statistically significant difference in the number of teachers who use tiered assignments in the classroom based on whether or not they are required to modify their curriculum for gifted students?

H3d<sub>0</sub>: A statistically significant difference does not exist in the use of tiered assignments between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3d<sub>1</sub>: A statistically significant difference does exist in the use of tiered assignments between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

- e. Is there a statistically significant difference in the number of teachers who allow students to pick topics on assignments based on whether or not they are required to modify their curriculum for gifted students?

H3e<sub>0</sub>: A statistically significant difference does not exist in the use of students picking topics between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3e<sub>1</sub>: A statistically significant difference does exist in the use of students picking topics between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

To examine research question five, the researcher conducted five 2 x 2 chi-square analyses to assess whether a statistically significant difference existed in kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required. Responses came from two survey items, including item 8, “Even if you are not required to alter the curriculum within your classroom, are any of the following methods used by you within your classroom?” and item 6, “Are you required to alter the curriculum for those students *perceived* as gifted?” The researcher compared the responses from the two groups (teachers required and teachers not required) to item 8 (yes vs. no), creating five 2 x 2 chi-square analyses.

**Research question six.** Amongst teachers who believe that kindergarten students can be gifted, does a statistically significant difference exist between teachers who employ kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and those who do not?

H4<sub>o</sub>: Amongst teachers who believe that kindergarten students can be gifted, a statistically significant difference does not exist between teachers who employ kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and those who do not.

H4<sub>a</sub>: Amongst teachers who believe that kindergarten students can be gifted, a statistically significant difference does exist between teachers who employ kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and those who do not.

To examine research question six, the researcher conducted five 1 x 2 chi-square to assess whether a statistically significant difference existed in kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) amongst teachers who agreed that kindergarten students can be gifted. The research excluded teachers who disagreed (n = 3) from the analysis because there were too few to compare statistically. Responses came from survey item 1, “Kindergarten students can be gifted” (agree only) and survey item 8, “Even if you are not required to alter the curriculum within your classroom, do you use any of the following methods within your classroom?” The group (teachers who believe kindergarten students can be gifted) was compared on their responses to each component of item 8 (yes vs. no), creating five 1 x 2 chi-square analyses.

## **Conclusion**

This chapter has explained the methods used to survey administrator and teacher perceptions concerning kindergarten giftedness. The researcher tested the survey for reliability and validity prior to use in the study. The researcher then analyzed the data according to the six research questions and ran statistical tests to determine the correlations between groups. The demographics of those surveyed will be reported through descriptive data in Chapter Four.

The final question of the survey is a qualitative, open-response question for the respondent to offer comments regarding kindergarten giftedness. The researcher shares these comments in the results section of this study. The comments provide additional qualitative information regarding their experiences with gifted students and early identification.

## CHAPTER FOUR: RESULTS

### Introduction

As laid out in Chapter One of this study, the general purpose of this causal comparative study is to determine the perceptions of administrators and kindergarten teachers with regard to kindergarten giftedness. The study addresses the differences between administrators and teachers concerning their beliefs about kindergarten giftedness and classroom practices. The results of this study are presented in the order of the research questions. The survey results are provided first and then the results of each chi-square analysis. The research questions were:

1. Does a statistically significant difference exist between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree)?
2. Does a statistically significant difference exist between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree)?
3. What portion of the population of administrators and teachers in North Carolina report that their schools or districts have processes in place to determine if kindergarten students are gifted?
4. What portion of the population of administrators and teachers in North Carolina report that kindergarten teachers are required to alter the curriculum for kindergarten students that educators have identified as gifted?

5. Among teachers, does a statistically significant difference exist in the following kindergarten classroom practices based on whether or not the teachers are required to modify their curriculum for gifted students:
- a. Is there a statistically significant difference in the number of teachers who use curriculum compacting based on whether or not they are required to modify their curriculum for gifted students?
  - b. Is there a statistically significant difference in the number of teachers who differentiate in the classroom based on whether or not they are required to modify their curriculum for gifted students?
  - c. Is there a statistically significant difference in the number of teachers who use grouping in the classroom based on whether or not they are required to modify their curriculum for gifted students?
  - d. Is there a statistically significant difference in the number of teachers who use tiered assignments in the classroom based on whether or not they are required to modify their curriculum for gifted students?
  - e. Is there a statistically significant difference in the number of teachers who allow students to pick topics on assignments based on whether or not they are required to modify their curriculum for gifted students?

6. Among teachers who believe that kindergarten students can be gifted, does a statistically significant difference exist between teachers who employ kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and those who do not?

### **Characteristics of the Sample**

Three hundred eighty-seven participants completed the Giftedness Survey; 260 (67.2%) kindergarten teachers and 127 (32.8%) administrators completed the survey. Frequencies and percentages for each group (kindergarten teachers and administrators) for the number of years of classroom experience, the highest level of academic achievement, and the type of school are presented in Table 3.

For the kindergarten teachers, all 260 worked in a public-school setting. A majority (165, 63.5%) reported their highest level of education as a bachelor's degree. The years of classroom experience varied. For the administrators, all but one administrator (126, 99.2%) worked in a public school setting. A majority (71, 55.9%) reported their highest level of education as a master's degree. The years of classroom experience for administrators varied as well.



Table 3

*Characteristics of Teachers and Administrators*

Characteristic	Teachers		Administrators	
	<i>n</i>	%	<i>n</i>	%
Years of classroom experience				
0-5 years	54	20.8	15	11.8
6-10 years	75	28.8	39	30.7
11-15 years	39	15.0	25	19.7
15+ years	92	35.4	48	37.8
Highest level of academic education				
Bachelor's degree	165	63.5	0	0.0
Master's degree	88	33.8	71	55.9
Education specialist	4	1.5	35	27.6
Doctorate degree	2	0.8	20	15.7
School setting				
Public	260	100.0	126	99.2
Private	0	0.0	1	0.8
Religious	0	0.0	0	0.0

**Research Results**

The Giftedness Survey included nine items, some with multiple categories. Respondents were given two response options, *agree vs. disagree* (for items 1 and 2) and *yes vs. no* (for items 3 through 8). Item 9 provided participants the opportunity to share their comments with regard to kindergarten giftedness by writing in a response.

**Research question one.** Does a statistically significant difference exist between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree)?

Survey item 1 queried teachers and administrators in their agreement (agree vs. disagree) to the statement, “Kindergarten students can be gifted.” The majority of respondents in both groups selected *agree*, including 257 (98.8%) teachers and 120 (94.5%) administrators, suggesting most participants agreed kindergarten students can be gifted. Table 4 presents the frequencies and percentages of teachers’ and administrators’ responses to survey item 1.

Table 4

*Survey Item 1: Kindergarten Students Can Be Gifted*

Kindergarten students can be gifted	Teachers		Administrators	
	<i>n</i>	%	<i>n</i>	%
Agree	257	98.8	120	94.5
Disagree	3	1.2	7	5.5

To examine research question one, the researcher conducted a chi-square test to assess whether a relationship existed between groups (teachers and administrators) and the responses to item 1 of the Gifted Survey, “Kindergarten students can be gifted,” (agree vs. disagree). The results of the chi-square test were statistically significant with a *p* value of 0.011. The small *p* value indicates a significant difference exists between the two populations. However, due to the fact that there are only 3 teachers who disagree with the statement, the requirement of  $n \geq 5$  per cell in the chi-square test is violated.

This violation has a minor effect on the results due to the overwhelming majority of respondents from each population who answered in the affirmative that kindergarten students can be gifted. In each population, the most important observation is the overwhelming majority of both teachers and administrators agree with the statement.

Table 5 presents the results of the chi-square test.

Table 5

*Chi-square Analysis on “Kindergarten Students Can Be Gifted” by Group (Teachers and Administrators)*

Kindergarten students can be gifted					
Group	Agree	Disagree	$\chi^2$ (1)	Cramer's V	p
Teachers	257	3	6.44	0.1290	0.011
Administrators	120	7			

**Research question two.** Does a statistically significant difference exist between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree)?

Survey item 2 queried teachers and administrators in their agreement (agree vs. disagree) with the statement, “Identifying giftedness in kindergarten students can be detrimental to their future development.” The majority of respondents in both groups selected disagree, including 196 (75.4%) teachers and 103 (81.1%) administrators. Most

disagreed with the statement that identifying giftedness in kindergarten students can be detrimental to their future development. Table 6 presents the frequencies and percentages of teachers' and administrators' responses to survey item 2.

Table 6

*Survey Item 2: Identifying Giftedness in Kindergarten Students Can Be Detrimental to Their Future Development*

Identifying giftedness can be detrimental	Teachers		Administrators	
	<i>n</i>	%	<i>n</i>	%
Agree	64	24.6	24	18.9
Disagree	196	75.4	103	81.1

To examine research question 2, the researcher conducted a chi-square test to assess whether there was a relationship between groups (teachers and administrators) and the answers to item 2 of the Gifted Survey, “Identifying giftedness in kindergarten students can be detrimental to their future development.” The results of the chi-square test were not statistically significant. The test resulted in a *p* value of 0.208, which is larger than the significance value of  $\alpha = 0.05$ . Therefore, we do not reject the null hypothesis that a significant difference does not exist between populations with regard to the belief of gifted identification. Looking at the summary statistics, however, the researcher believes that an important observation is that >80% of each population disagrees with the statement “Identifying giftedness in kindergarten students can be detrimental to their future development.” Table 7 presents results of the chi-square test.

Table 7

*Chi-square Analysis on “Identifying giftedness in kindergarten students can be detrimental to their future development” by Group (Teachers and Administrators)*

Group	Identifying giftedness can be detrimental		$\chi^2$ (1)	Cramer's V	p
	Agree	Disagree			
Teachers	64	196	1.59	0.064	0.208
Administrators	24	103			

**Research question three.** What portion of the population of administrators and teachers in North Carolina report that their schools or districts have processes in place to determine if kindergarten students are gifted?

Survey items 3 and 4 queried teachers and administrators about the processes in place at the school and district level used to formally identify giftedness in kindergarten. A large number of respondents in both groups selected no for both survey items, indicating their schools or districts did not have a formal process in place to identify giftedness in kindergarten. This included 179 (68.8%) teachers and 83 (65.4%) administrators who responded no to the process being in place at the district level and 178 (68.5%) teachers and 90 (70.9%) administrators who responded no to the process being in place at the school level. Though most denied the existence of a formal process, between 28 and 30% of teachers and administrators said their school or district had a

formal process in place to identify giftedness in kindergarten. Table 8 presents the frequencies and percentages of teachers' and administrators' responses to survey items 3 and 4.

Table 8

*Survey Items 3 and 4: Formal Process in Place at District and School Level to Identify Giftedness in Kindergarten*

Formal Process	Teachers			Administrators		
	<i>n</i>	%	95% C.I.	<i>n</i>	%	95% C.I.
District						
Yes	81	31.2	±5.64	44	34.6	±8.31%
No	179	68.8		83	65.4	
School						
Yes	82	31.5	±5.66	37	29.1	±7.93%
No	178	68.5		90	70.9	

The researcher also asked respondents to report on specific opportunities available for kindergarten students within their individual schools (survey item 7). The researcher included three opportunities, including early entrance (students allowed to enter school earlier than age levels permit), acceleration by grade skipping (children can start out in first grade) and pull-out grouping (students work with other gifted students outside the classroom). Pull-out grouping received the largest frequency of *yes* responses for both groups. For example, a greater frequency of teachers (166, 63.8%) and administrators (77, 60.6%) reported pull-out grouping *was* an opportunity available in their schools as compared to those who reported it *was not* an opportunity. A slightly greater frequency of teachers (143, 55.0%) and administrators (68, 53.5%) reported acceleration by grade

skipping *was not* an opportunity available within their school as compared to those who reported grade skipping *was* an opportunity, which was endorsed by more than 40% of respondents in both groups. The researcher observed a more varied response with regard to the opportunity of early entrance (students allowed to enter school earlier than age levels permit). In this case, a greater frequency of teachers (159, 61.2%) reported early entrance *was not* an opportunity available within their schools, and a greater frequency of administrators (77, 60.6%) reported that it *was*. Though more than 60% of teachers and administrators stated there was no formal process in place to identify giftedness at the district or school level, a large number of teachers and administrators responded there were still multiple opportunities available for these students. The frequencies and percentages for teachers' and administrators' responses to survey item 7 are presented in Table 9.

Table 9

*Survey Item 7: Opportunities Available for Kindergarten Students*

Opportunities	Teachers		Administrators	
	<i>n</i>	%	<i>n</i>	%
Early entrance				
Yes	101	38.8	80	63.0
No	159	61.2	47	37.0
Acceleration by grade skipping				
Yes	117	45.0	59	46.5
No	143	55.0	68	53.5
Pull-out grouping				
Yes	166	63.8	77	60.6
No	94	36.2	50	39.4

**Research question four.** What portion of the population of administrators and teachers in North Carolina report that kindergarten teachers are required to alter the curriculum for kindergarten students that educators have identified as gifted?

Survey items 5 and 6 queried teachers and administrators about the requirement to alter the curriculum for those students *formally identified* as gifted or for students *perceived* as gifted. Survey item 5 included an “if applicable” statement within the question; as a result 27 teachers and 19 administrators left the question unanswered. The “missing” responses are included in Table 5, which reflects the number of participants who failed to select either response option for that item. A large number of respondents in both groups selected *yes* for both survey items, indicating teachers were required to alter their curriculum for students who were *formally identified* as gifted and for students who were *perceived* as gifted. Administrators had a higher percentage of *yes* responses than teachers in both categories, but this difference was more prominent with regard to the requirement when students were *perceived* as gifted, where 95 (74.8%) administrators acknowledged such requirement as compared to 154 (59.2%) teachers. Table 10 presents the frequencies and percentages for teachers’ and administrators’ responses to survey items 5 and 6.



Table 10

*Survey Items 5 and 6: Requirement to Alter the Curriculum for Students Formally Identified as Gifted or Perceived as Gifted*

Requirement to alter the curriculum	Teachers			Administrators		
	<i>n</i>	%	95% C.I.	<i>n</i>	%	95% C.I.
<i>Students formally identified as gifted</i>						
Yes	131	56.2	±6.59%	63	58.3	±9.34%
No	102	43.8		45	41.7	
Missing (no response)	27			19		
<i>Students perceived as gifted</i>						
Yes	154	59.2	±5.98%	95	74.8	±7.58%
No	106	40.8		32	25.2	

**Research question five.** Among teachers, does a statistically significant difference exist in the following kindergarten classroom practices based on whether or not the teachers are required to modify their curriculum for gifted students:

- a. Is there a statistically significant difference in the number of teachers who use curriculum compacting based on whether or not they are required to modify their curriculum for gifted students?

- b. Is there a statistically significant difference in the number of teachers who differentiate in the classroom based on whether or not they are required to modify their curriculum for gifted students?
- c. Is there a statistically significant difference in the number of teachers who use grouping in the classroom based on whether or not they are required to modify their curriculum for gifted students?
- d. Is there a statistically significant difference in the number of teachers who use tiered assignments in the classroom based on whether or not they are required to modify their curriculum for gifted students?
- e. Is there a statistically significant difference in the number of teachers who allow students to pick topics on assignments based on whether or not they are required to modify their curriculum for gifted students?

Survey item 8 asked teachers to report on practices employed within their kindergarten classrooms. The items were worded slightly differently on the teacher version of the survey as compared to the administrator version. The teachers were asked, “Even if not required to alter the curriculum within your classroom, do you use any of the following methods in your classroom?” Five practices were provided in both versions of the survey, including curriculum compacting (cutting out materials from the curriculum of which a student has shown mastery); differentiating (the curriculum is adapted to all students’ differing abilities); grouping (students are grouped with other students of the same ability level, not with students needing remediation); tiered assignments (gifted students are given more challenging assignments dealing with the same topic as the rest

of the class); and students pick topics (students are allowed to make choices in their learning by picking their own topics to study).

Teachers responded to four of the five practices with a larger frequency of *yes* responses as compared to *no*. The exception was in allowing students to pick topics, which received a more varied response. Differentiating received the highest percentage of *yes* responses among all the practices; 259 (99.6%) teachers reported differentiating *was* a practice or method employed in the kindergarten classroom. Grouping received the second highest percentage of *yes* responses; 253 (97.3%) teachers reported grouping *was* a practice or method employed in the kindergarten classroom. Tiered assignments and curriculum compacting followed, with 227 (87.3%) teachers reporting tiered assignments and 180 (69.2%) teachers reporting curriculum compacting *were* practices or methods employed in the kindergarten classroom. Students pick topics received a varied response. A greater frequency of teachers (147, 56.5%) reported they *did not* use this practice in the kindergarten classroom. Table 11 presents the frequencies and percentages for teachers' responses to survey item 8.

Table 11

*Survey Item 8: Practices or Methods Employed by Teachers in Kindergarten Classrooms*

Practice or method	Teachers	
	<i>n</i>	%
Curriculum compacting		
Yes	180	69.2
No	80	30.8
Differentiating		
Yes	259	99.6
No	1	0.4
Grouping		
Yes	253	97.3
No	7	2.7
Tiered assignments		
Yes	227	87.3
No	33	12.7
Students pick topics		
Yes	113	43.5
No	147	56.5

To examine research question 5, the researcher conducted five chi-square tests to assess whether a statistically significant difference exists in kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required to alter their curriculum.

**Research question 5a.** The results for the chi-square test between curriculum compacting and teachers required to alter their curriculum for those students *perceived* as

gifted were not significant with  $p = 0.141$ . This suggests there was no relationship between curriculum compacting and teachers required to alter their curriculum for students *perceived as* gifted.

**Research question 5b.** The results for the chi-square test between differentiating and teachers required to alter their curriculum for those students *perceived as* gifted were not significant with  $p = 0.227$ . This suggests there was no relationship between differentiating and teachers required to alter their curriculum. The requirement of  $n \geq 5$  for each cell of a 2 x 2 chi-square was not met since there was only one teacher out of the entire population that did not report differentiating. Regardless of whether or not teachers are required to alter the curriculum, differentiation is evident in the classroom.

**Research question 5c.** The results for the chi square between grouping and teachers required to alter their curriculum for those students *perceived as* gifted were not significant with  $p = 0.506$ . This suggests there was no relationship between grouping and teachers required to alter their curriculum. The requirement of  $n \geq 5$  for each cell of a 2 x 2 chi-square was violated since only two teachers out of the entire population reported that they were not required to use grouping and they did not use grouping.

**Research question 5d.** The results for the chi-square test between tiered assignments and teachers required to alter their curriculum for those students *perceived as* gifted was not significant with  $p = 0.085$ . This suggests there was no relationship between tiered assignments and teachers required to alter their curriculum.

**Research question 5e.** The results for the chi-square test between students picking their topics and teachers required to alter their curriculum for those students *perceived as* gifted was significant with a  $p$ -value of 0.001. This suggests there was a

relationship between students picking their topics and teachers required to alter their curriculum. If the teachers are required to alter their curriculum for those students *perceived* as gifted, then they are more likely to allow the students to pick their own topics to study. Similarly, when teachers are not required to alter their curriculum they are more likely to not allow students to pick their own topics to study.

Table 12 presents the results of the five chi-square analyses.

Table 12

*Chi-square Analysis for Teachers' Responses to the Requirement of Altering Curriculum for Students Perceived as Gifted with Their Responses to Practices Employed in Classroom*

Practice	Teachers required to alter their curriculum for those students <i>perceived</i> as gifted		$\chi^2$ (1)	Cramer's V	p
	Yes	No			
Curriculum Compacting					
Yes	112	68	2.17	0.0083	0.141
No	42	38			
Differentiating					
Yes	154	105	1.46	0.0749	0.227
No	0	1			
Grouping					
Yes	149	104	0.44	0.0411	0.506
No	5	2			
Tiered assignments					
Yes	139	88	2.97	0.1068	0.085
No	15	18			
Students picking their topics					
Yes	82	31	14.72	0.2379	0.001
No	72	75			

**Research question six.** Among teachers who believe that kindergarten students can be gifted, does a statistically significant difference exist between teachers who employ kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and those who do not?

It was also of interest to understand whether teachers who agree kindergarten students can be gifted tend to use certain kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics). The research excluded teachers who disagreed ( $n = 3$ ) from the analysis because there were too few to compare statistically. The researcher then conducted five 1 x 2 chi-square analyses for teachers only using survey item 1 (agree only) and survey items 8a through 8e (yes vs. no).

The results of the chi-square analyses were statistically significant in the examination of four of the five kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments). For each of these practices, there were a statistically greater number of teachers who employed these practices (yes) than those who did not. The chi-square analysis for students selected topics was not statistically significant, suggesting there was not a statistically significant difference between the number of teachers who employed the practice of allowing students to make their own choices in learning by picking their own topics (yes) and those who did not. Table 13 presents the results of the five chi-square analyses.



Table 13

*Chi-square Analysis for Practices Employed in Classroom by Teachers who Agree*

*Kindergarten Students Can Be Gifted (n =257)*

Practice	Response		$\chi^2$ (1)	Cramer's V	p
	Yes	No			
Curriculum compacting	178	79	38.14	0.3852	0.001
Differentiating	256	1	253.02	0.9922	0.001
Grouping	251	6	233.56	0.9533	0.001
Tiered assignments	225	32	144.94	0.7509	0.001
Students picking their topics	113	114	3.74	0.1206	0.053

### **Comments from respondents**

In addition to the hypotheses addressed in the survey, respondents received the opportunity to share comments with the researcher in the final section of the survey. Thirty-five administrators and sixty-seven teachers took to the time to share additional comments on question nine of their surveys. Both administrators and teachers commented that they believe it is important for teachers to alter the curriculum for these students *perceived* as gifted in order to keep them progressing. One administrator

responded, “We do a disservice to our students if we try to teach them all the same information using the same strategies.” Another administrator stated, “I believe all children should be taught on their level. If they need remediation or challenging, their needs should be met.” One teacher stated, “I think that keeping kids challenged is crucial to lifelong love of school.” Another shared, “We need to focus on these children more to keep them moving forward.”

Eight out of 35 administrators shared the opportunities that were available within their schools to challenge those students perceived as gifted. One school system shared that advanced students are given the opportunity to participate in a pull-out program once a month, another shared that their school is participating in a study with Purdue University that involves cluster grouping through the entire school. Another district mentioned that their schools’ gifted coordinators spend time regularly in the kindergarten classrooms. Ten of the 35 administrators voiced the belief that the differentiation for these students is the responsibility of the classroom teacher. One stated, “students receive this opportunity in conjunction with the classroom teacher, no other opportunities are necessary.” Another shared, “It is my belief that kindergarten teachers should have the knowledge to teach and challenge children in their own classrooms in a manner that honors development in all domains.”

However, six of 67 teachers shared it is a struggle to continue challenging these gifted kindergarten students. One noted, “I am constantly adapting work and finding more challenging projects/activities for them to work on.” Another shared, “I feel like I would need a LOT more training to work with a student who is truly gifted.” Yet another

stated, “It is difficult to provide challenging assignments to kindergarteners and still be developmentally appropriate.”

There were 8 comments from the 37 administrators that addressed the difficulty in identifying gifted students at the kindergarten level and/or the lack of a need for it. Several stated that these students would level out by grade two, and that there is a danger to the student’s emotional well-being if these students are identified too early. Five teachers commented on the difficulty that they have in distinguishing giftedness from overexposure to academics at a young age.

Additional statements from teachers reflected their individual schools’ need for a formal process to identify students and for support in working with these students in the classroom. A few teachers voiced concerns about the need for support to work with these students within the classroom instead of pull-out programs. They shared concerns about students not adapting socially to school if they were only served in pull-out programs. Most comments tended to agree that kindergarten students should be identified as gifted and that differentiation can be done in the classroom if teachers are given the proper support. Complete comments from administrators and teachers are shared in Appendices F and G.

## **Conclusion**

The researcher shared the results of the survey’s demographic information as well as beliefs regarding kindergarten giftedness with regard to the research study’s hypotheses. Administrators and kindergarten teachers agreed that kindergarten students can be gifted and that those students’ needs should be met through classroom practices regardless of the school or district’s policies. The results also indicated teachers are

currently putting those practices into place without a policy requiring it of them. Many respondents further shared their perceptions through their comments on the final question of the survey. The final chapter of this dissertation includes a detailed summary, a discussion of the results, and its implications for practice.

## **CHAPTER FIVE: DISCUSSION**

The purpose of this study was to determine the perceptions of administrators and kindergarten teachers with regard to kindergarten giftedness. The study looked at whether administrators and teachers believe kindergarten students can be gifted and whether their schools and districts have policies in place to determine whether these students are gifted. Finally, the study looked at what these individuals do in order to vary the kindergarten curriculum for those students. This chapter shares a summary of the findings, discussion of those findings, implications, limitations, recommendations for future research, and a conclusion of the research.

### **Statement of the Problem**

Although North Carolina has laws mandating the availability of gifted programming to students in grades kindergarten through 12, a distinct lack of identification exists of students in the early elementary grade levels. Likewise, clarification is lacking about what programs are in place to help these gifted students. This study addressed the following question: Do North Carolina's administrators' and teachers' beliefs regarding kindergarten giftedness vary from each other and do these beliefs have an effect on their teaching, specifically in the areas of identification and classroom practices?

### **Significance of the Study**

Researchers can find little research that addresses the beliefs of administrators and kindergarten teachers concerning kindergarten giftedness. In turn, the services offered to

kindergarten students may vary greatly depending on the perceptions teachers or school administrators have regarding kindergarten giftedness. The degree to which these teachers or administrators hold certain beliefs regarding giftedness can play a large part in what programs and curricula they implement with their students in the classroom. If these individuals' beliefs do not align, this could be detrimental to the success of programs that work with these students. In addition, misaligned beliefs could be damaging to the students academically both now and in the future. This study addressed the beliefs that North Carolina administrators and teachers have regarding kindergarten giftedness and their own classroom practices.

**Review of the null hypotheses.** Null hypotheses were as follows:

H1<sub>0</sub>: A statistically significant difference does not exist between administrators and teachers in the perceptions of kindergarten giftedness (agree vs. disagree).

H2<sub>0</sub>: A statistically significant difference does not exist between administrators and teachers in the beliefs that identification of giftedness in kindergarten students can be detrimental to their future development (agree vs. disagree).

H3<sub>0</sub>: A statistically significant difference does not exist in the following kindergarten classroom practices between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3a<sub>0</sub>: A statistically significant difference does not exist in the use of curriculum compacting between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3b<sub>0</sub>: A statistically significant difference does not exist in the use of differentiation between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3c<sub>0</sub>: A statistically significant difference does not exist in the use of grouping between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3d<sub>0</sub>: A statistically significant difference does not exist in the use of tiered assignments between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H3e<sub>0</sub>: A statistically significant difference does not exist in the use of students picking topics between teachers required to alter their curriculum for those students *perceived* as gifted and teachers not required.

H4<sub>0</sub>: Among teachers who believe that kindergarten students can be gifted, a statistically significant difference does not exist between teachers who employ kindergarten classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and those who do not.

The researcher tested the null hypotheses utilizing chi-square analyses in SPSS and through the use of descriptive statistics.

### **Summary of the Findings**

This study examined the perceptions of administrators and kindergarten teachers with regard to kindergarten giftedness. The study tried to determine whether administrators and teachers believe kindergarten students can be identified as gifted; whether schools and districts in NC have policies in place to determine whether

kindergarteners are gifted; and whether the teachers are required to alter the curriculum for these students. Finally, the study addressed what these individuals do in order to vary the kindergarten curriculum for those students identified or perceived as gifted. Research findings from this study supported rejecting two of the six overarching null hypotheses during the data-analysis portion of this research. These findings will be summarized prior to a discussion of the study's findings and implications.

**Research question one.** The researcher conducted a chi-square test to assess whether there was a significant relationship between teachers and administrators and their responses to whether kindergarten students can be gifted. The researcher then rejected the null hypothesis because of a statistically significant difference in the relationship between teachers and administrators. The difference arises from the proportions of each population that agrees with the statement. In each population, the most important observation is that the overwhelming majority of both teachers and administrators agree with the statement.

**Research question two.** No significant difference existed between administrators and teachers with regard to early identification of giftedness being detrimental to a kindergarten student's future development. Although the majority of both groups agreed this identification is not detrimental, 88 of the 387 surveyed felt this identification could inhibit a student's future development.

**Research question three.** The majority of administrators and teachers stated there was no process in place to identify kindergarten students as gifted at either the district or the school level. The researcher also asked respondents to report on specific opportunities available for kindergarten students within their individual schools. A



greater frequency of teachers (166, 63.8%) and administrators (77, 60.6%) reported pull-out grouping *was* an opportunity available in their schools as compared to those who reported it *was not* an opportunity. A slightly greater frequency of teachers (143, 55.0%) and administrators (68, 53.5%) reported acceleration by grade skipping *was not* an opportunity available within their school as compared to those who reported grade skipping *was* an opportunity. A greater frequency of teachers (159, 61.2%) reported that early entrance *was not* an opportunity within their schools, while a larger portion of administrators (77, 60.6%) reported that it *was*. Though more than 60% of teachers and administrators stated there was no formal process in place to identify giftedness at the district or school level, a large number of teachers and administrators responded there were still multiple opportunities available for these students.

**Research question four.** Approximately 56% of teachers stated they were required to alter the curriculum for students identified as gifted, and 58% of administrators agreed with that statement. Interesting results were also found in the data concerning teachers altering the curriculum for students who are perceived as gifted. Although only 60% of teachers stated they were required to alter the curriculum for students perceived as gifted, 75% of administrators stated teachers were required to alter it for those same students.

**Research question five.** The fifth set of hypotheses found there was no significant relationship between the classroom practices of teachers required to alter the curriculum for students who are perceived as gifted and those teachers who were not. These five research hypotheses did find that 69.2% of teachers use curriculum compacting, 99.6% use differentiating, 97.3% use grouping, and 87.3% use tiered

assignments. The results showed a small relationship between students picking their topics and teachers required to alter their curriculum. If the teachers are required to alter their curriculum for those students *perceived* as gifted, then they are more likely to allow the students to pick their own topics to study. Similarly, when teachers are not required to alter their curriculum, they are less likely to allow students to pick their own topics to study.

**Research question six.** The sixth hypothesis found that there was a statistically significant relationship between teachers who employed certain classroom practices (curriculum compacting, differentiating, grouping, tiered assignments, and students pick topics) and teachers who did not among teachers who believed students were gifted. Teachers who did not believe kindergarten students could be gifted were excluded from the analysis because there were too few to compare statistically (n=3). For each of four of the five practices (curriculum compacting, differentiating, grouping, tiered assignments) there were a statistically greater number of teachers who employed these practices (yes) than those who did not. The chi-square analysis for students selected topics was not statistically significant, suggesting there was not a statistically significant difference between the number of teachers who employed the practice of allowing students to make their own choices in learning by picking their own topics (yes) and those who did not.

### **Discussion of Findings**

**Research questions one and two.** The researcher designed this study to look at the relationship between administrators' and teachers' beliefs in regard to kindergarten giftedness and whether those beliefs affect their classroom practices. The study revealed

what the researcher anticipated with regard to teacher and administrator beliefs regarding kindergarten students. The study revealed a large number of teachers and administrators believe it is possible to determine whether kindergarten students are gifted. This finding provides evidence to support the findings of Clarke (2001), Gross (1999), Sankar-DeLeeuw (1999), and Schroth (2007) that giftedness can be determined as early as kindergarten.

Although relevant research reports these groups may believe early identification of these students is detrimental to their future development, less than 25% of those surveyed agreed with that statement (Pfeiffer & Jarosweich, 2007). Although a larger percentage of teachers than administrators agreed with the statement, the difference in proportions of the underlying populations was not significant when subjected to the chi-square test. This evidence did not support the previous findings of Colangelo and Fleuridas (1986) who stated that identifying students at too young of an age can be detrimental to their future development. The researcher believes that the slight difference in beliefs between administrators and teachers on this topic is because teachers have seen gifted students in their classrooms first hand, while administrators spend less time in the classroom. The 1986 study appeared in multiple subsequent studies, so the researcher felt it was important to include. However, the researcher could find no studies that corroborated this 1986 study.

**Research questions three and four.** The study also revealed what the researcher had asserted in previous chapters, that there is no formal process in place at either district or school levels to determine whether kindergarten students are gifted. In addition, just more than half the teachers surveyed stated they are required to alter the

curriculum for those students who educators have *formally identified* as gifted, and only slightly more than half of those teachers indicated they are required to alter the curriculum for students who educators *perceive* as gifted. One of the other crucial differences between populations occurs with the requirements to alter the curriculum for those students *perceived* as gifted. Almost 75% of administrators responded that they require teachers to alter the curriculum for those students who teachers *perceive* as gifted, but less than 60% of teachers responded that they were required to alter the curriculum for those students. This indicates administrators may have an expectation of teachers of which the teachers are unaware. The populations share similar beliefs about the requirement to alter curriculum for students *formally identified* as gifted but differ in their beliefs about the requirement to alter it for those *perceived* as gifted. This supports the previous findings of researchers who stated that it would be beneficial for both teachers and administrators to be aware of what the other group believes concerning the giftedness of their students (Hart, 2002; Lombaerts, DeBacker, Engels, van Braak, & Athanasou, 2009).

It is also noteworthy that significantly more administrators than teachers believe that early entrance is an opportunity for kindergarten students. This could be because early entrance does not have to directly involve the classroom teacher. The researcher observed a greater difference in populations for acceleration by grade skipping or pull-out grouping as opportunities available for gifted students. Again, previous research shows the importance of administrators and teachers being aware of the opportunities and practices available in their schools (Bangel, Moon, & Capobianco, 2010; Miller, 2009).

**Research question five.** The fifth group of hypotheses found there was no significant relationship between the classroom practices of teachers required to alter the curriculum for students perceived as gifted and those teachers who were not. These findings show that the requirements of their schools or districts may not directly affect teachers' practices. Instead, education and training may have a direct affect on their classroom practices as researchers Wang, Elicker, McMullen and Mao (2008) believed. However, a significant number of teachers use curriculum compacting, differentiating, grouping, and tiering of assignments as researchers Tomlinson (2001) and Winebrenner (2000) recommend.

**Research question six.** The results of the first four analyses support the findings of previous researchers who believe that teachers' beliefs regarding giftedness have an effect on their classroom practices. The results of the analysis on students pick own topics did not support these same researchers' findings (Charlesworth, Hart, Burts, & Hernandez, 1991; Charlesworth et al., 1993; Wang, Elicker, McMullen & Mao, 2008).

**Comments from the participants.** In addition to the hypotheses addressed in the survey, respondents received the opportunity to share comments with the researcher in the final section of the survey. Both administrators and teachers commented that they believe it is important for teachers to alter the curriculum for these students *perceived* as gifted in order to keep them progressing. Other teachers and administrators shared the opportunities that were available for both identified and unidentified gifted kindergarten students at their schools. This directly supports researchers findings that both identified and potentially gifted students need to be challenged (Charlesworth, Hart, Burts, & Hernandez, 1991; Tomlinson, 2001; Winebrenner, 2000).

Multiple teachers shared the challenge that they face in challenging these gifted kindergarten students. They mentioned the need that they have for more training in order to properly differentiate for these students. Researcher Hertberg-Davis (2009) addressed this concern about differentiating learning experiences in the classroom and agreed that it is no easy task. Researchers VanTassel-Baska and Stambaugh (2005) agree that differentiation requires skill on the part of the teacher and support from the other educators in the school system.

There were also multiple comments from administrators and teachers regarding the difficulty that they have in distinguishing giftedness at this age from overexposure to academics. Coates, Shimmin, and Thompson (2009) agreed that it is difficult for educators to recognize giftedness in the young primary grades. Additional research agrees with the educators' assessment that it is not an easy task to identify students accurately at this young of an age (Clarke, 2001; Pfeiffer, Petscher, & Jarosewich, 2007).

However, there were also multiple comments from educators who believed that it was possible to identify students at this age, and that it should be addressed more readily in their school districts. Researcher Sankar-DeLeeuw (1999) believes that there are valid instruments that can and should be used to identify these students when they first enter school.

## **Implications**

The findings of this study revealed several implications for practice.

**Implication one.** The study revealed that almost 95% of administrators and more than 98% of teachers believe kindergarten students can be gifted. However, the research found that less than 30% of the districts and schools represented by these administrators

and teachers have policies in place to identify giftedness in kindergarten students. Consequently, these findings indicate the importance of North Carolina's districts and schools developing procedures for identifying giftedness in these students. Brown, Avery, VanTassel-Baska, Worley, & Stambaugh (2006) recommend mandated practices for identification and programming in order to have a statewide standard for accommodating giftedness.

**Implication two.** In addition, teachers indicated in their comments that they did not feel they were equipped to work with these gifted learners in the classroom. Researchers Beuhl & Fives (2009) found that the lack of knowledge about a concept causes its lack of use by teachers. Schools should consider adding additional professional-development opportunities for those teachers who administrators expect to meet the needs of these students in the regular classroom, specifically with regard to curriculum modification. Researchers recommend that increasing teachers' knowledge about practices and beliefs, can better equip them to change their beliefs and practices (Guerra & Nelson, 2009; Palak & Walls, 2009). By better equipping the teachers, schools may not need the added burden of a pull-out program to reach these higher achieving students.

**Implication three.** The third implication for practice is that of ever changing policy. The current financial crisis facing the United States plays a huge role in the education system of this nation. School districts are cutting funds for programs not viewed as critical to reaching the goals of NCLB, and schools are seeing an increasing number of students in each classroom. Schools are facing low workplace morale, a loss of teaching positions, and a decline in resources (Schneider, Konukman, & Stier, 2010).

In a nation where a large number of states do not mandate gifted programming, gifted programs are bound to suffer the consequences. In order for schools to continue offering programming for their gifted students, they need funding. Without policies in place to mandate funding for these programs, educators may choose to disband them in favor of other mandated programs (Adams, 2009).

**Implication four.** The final implication for practice that stood out from the data was the need for administrators and teachers to understand each other's classroom beliefs and expectations. Administrators reported more opportunities currently available for these young gifted learners than teachers. Almost twice as many administrators stated early entrance to school was an option for these gifted students, yet many teachers seemed to be unaware of this opportunity. Research has shown that knowledge affects classroom practices (Bangel, Moon, & Capobianco, 2010; Miller, 2009). This implies that teachers need to be better informed about the opportunities available for working with gifted students in their schools. Teachers cannot recommend students for programs unless they know about them.

At the same time, administrators mentioned the requirements that teachers had for working with unidentified students. Teachers seemed to be unaware of these administrators' expectations for working with unidentified students. This implies that administrators may not be making their expectations clear to their staff. It would be beneficial for both teachers and administrators in these school systems to be aware of what each other believes concerning the giftedness of their students (Hart, 2002; Lombaerts, DeBacker, Engels, van Braak, & Athanasou, 2009).



## **Limitations**

**Sample.** Although the sample size was large enough to yield valid results, the researcher had to be careful about interpreting the data because of the anonymity of the results (Ary, Jacobs, Razavieh, & Sorensen, 2006). With 115 school districts anonymously invited to participate, the researcher had no way of knowing whether teachers and administrators completing the survey were from the same or different districts. The researcher made some generalizations that assumed all administrators and/or all teachers in North Carolina would have responded in the same manner. Another drawback is that the sample might be biased toward those who have strong feelings toward giftedness and feel a greater desire to respond than those who might not feel as strongly.

An additional limitation to the sample was the fact that the largest percentage of the respondents (both teachers and administrators) had more than 15 years of experience. This may have led to biased results that the researcher may not be able to generalize. The researcher is unsure whether less experienced teachers and administrators have the same feelings and opinions about giftedness in young children. There has been a greater focus on differentiated education in recent years, and younger educators might have stronger opinions about giftedness that would have resulted in different outcomes to the study.

**Instruments.** The use of an anonymous survey is not without its limitations (Fraenkel & Wallen, 2006). Although the respondent is encouraged to respond honestly, the researcher has no way to gauge whether respondents are telling the truth about their classroom practices or whether they are answering the way they feel the researcher would like them to answer. In addition, teachers and administrators responding to this survey

may have different ideas regarding definitions from the study (for example, what it means to differentiate in their own classrooms). The researcher is unable to determine whether teachers responding positively to these survey items truly understand what the researcher's definitions are or if they are responding from what they infer these definitions to mean.

**Design.** Another limitation of the survey design could be the presentation of the survey to the participants. Respondents may consider online surveys as impersonal or spam and choose not to open the link. In addition, kindergarten teachers may have limited access to the Internet while at school, or the survey site could be blocked from usage on school computers (Umbach, 2005; Wright & Schwager, 2008).

### **Recommendations for Future Research**

The current study provides educators with some new information about administrators' and teachers' beliefs regarding kindergarten giftedness. It indicates administrators and kindergarten teachers share certain beliefs regarding kindergarten giftedness and the need for gifted identification. In turn, it reveals multiple differences in beliefs of administrators and teachers regarding classroom practices and opportunities within the school system. However, the study does not look at whether those educators' responses actually align with their practices in the classroom. Teachers may know what practices are best in the classroom, without actually putting them into practice. Researchers should complete further research to determine whether the perceptions or beliefs of teachers and administrators actually align with their classroom practices. This can be done by observing these teachers in the classroom and seeing how their practices align with what they state as their beliefs.

As was stated in the literature review in Chapter Two of this study, more research is needed regarding the best way to identify giftedness in students of early elementary ages. Information needs to be gathered about what testing can be done with those students that will bring the same results as waiting to test these students in upper elementary. A longitudinal study could be completed following a group of students identified in kindergarten and seeing whether the same students would still be identified in the typical assessment process through their fifth grade completion. Using a variety of devices to test the same students in kindergarten and third grade could reveal whether educators could really identify giftedness accurately in kindergarten.

Another area needing further research is the perceptions of parents and gifted coordinators with regard to kindergarten giftedness. There can sometimes be a disconnect between the beliefs of parents and those of classroom teachers. The beliefs of parents may vary dramatically from those of educators. However, parents and gifted coordinators may be able to add more insight into what a child's behaviors and strengths are and whether those are characteristics of giftedness. Research can also look at whether gifted coordinators believe a student can be identified at too young an age.

A final recommendation for future research would be to find a way to link teachers and administrators within a particular district in order to more accurately compare the responses of the two groups. It is difficult to generalize between teachers and administrators without knowing whether they represent the same schools and/or districts. Future research could compare teachers and administrators within one or two districts who share policies to determine what beliefs and practices they share. This

would give researchers a better idea of whether the teachers are aware of the expectations of their administrators.

## **Conclusion**

The purpose of this study was to determine the perceptions of administrators and kindergarten teachers with regard to kindergarten giftedness. The study determined administrators and teachers believe kindergarten students can be gifted, but many school systems lack the policies and procedures to identify and meet the needs of these gifted students. Gifted kindergarteners deserve to be taught on their own level and to be challenged like gifted students in higher grade levels. The study revealed some interesting results regarding kindergarten giftedness, but further research is needed to determine what should be done to better equip teachers and administrators to work with these high-performing students.

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## APPENDICES

### Appendix A: Survey of Administrators Beliefs

#### The Kindergarten Giftedness Survey for Elementary Administrators

For the purpose of this study, giftedness refers to students who are more capable than their peers (Sankar-DeLeeuw, 1999) and require a more advanced program in areas such as school curriculum and teacher behaviors (Reis & Renzulli, 2004). According to the National Association for Gifted Children, gifted children are “students who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities” (NAGC website <http://www.nagc.org/>).

*Directions: Please consider carefully and choose ONE response for each of the following statements.*

Demographic Information				
Number of years classroom experience	0-5 years	6-10 years	11-15 years	15+ years
Highest level of academic education	Bachelor of Science (BS)	Master of Education (MEd)	Education Specialist (EdS)	Doctor of Education (EdD or PhD)
Type of school	Public	Private	Religious	

Giftedness Survey		
1. Kindergarten students can be gifted.	Agree	Disagree
2. Identifying giftedness in kindergarten students can be detrimental to their future development.	Agree	Disagree
3. Does your district have a process in place to formally identify giftedness in kindergarten?	Yes	No
4. Does your school have a process in place to formally identify giftedness in kindergarten?	Yes	No
5. Do you require kindergarten teachers to alter the curriculum for those students <i>formally identified</i> as gifted, if applicable?	Yes	No
6. Do you require kindergarten teachers to alter the curriculum for those students <i>perceived</i> as gifted?	Yes	No
7. Are any of the following opportunities available for kindergarten students within your school?		
i. Early entrance (students are allowed to enter school earlier than age levels permit)	Yes	No
ii. Acceleration by grade skipping (children can start out in first grade)	Yes	No
iii. Pull-out grouping (student work with other gifted students outside the classroom)	Yes	No
8. Have you seen any of the following practices		

<p>employed within kindergarten classrooms at your school?</p>		
<p>a. Curriculum compacting (cutting out material that a student has shown mastery of from the curriculum)</p>	<p>Yes</p>	<p>No</p>
<p>b. Differentiating (the curriculum is adapted to all students' differing abilities)</p>	<p>Yes</p>	<p>No</p>
<p>c. Grouping (students are grouped with other students of the same ability level, not with students needing remediation)</p>	<p>Yes</p>	<p>No</p>
<p>d. Tiered assignments (gifted students are given more challenging assignments dealing with the same topic as the rest of the class)</p>	<p>Yes</p>	<p>No</p>
<p>e. Students pick topics (students are allowed make choices in their learning by picking their own topics to study)</p>	<p>Yes</p>	<p>No</p>
<p>9. Do you have any comments you would like to share with the researcher in regard to kindergarten giftedness?</p>		

## Appendix B: Survey of Kindergarten Teachers' Beliefs

### The Kindergarten Giftedness Survey for Teachers

For the purpose of this study, giftedness refers to students who are more capable than their peers (Sankar-DeLeeuw, 1999) and require a more advanced program in areas such as school curriculum and teacher behaviors (Reis & Renzulli, 2004). According to the National Association for Gifted Children, gifted children are “students who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities” (NAGC website <http://www.nagc.org/>).

*Directions: Please consider carefully and choose ONE response for each of the following statements.*

Demographic Information				
Number of years classroom experience	0-5 years	6-10 years	11-15 years	15+ years
Highest level of academic education	Bachelor of Science (BS)	Master of Education (MEd)	Education Specialist (EdS)	Doctor of Education (EdD or PhD)
Type of School	Public	Private	Religious	

Giftedness Survey		
1. Kindergarten students can be gifted.	Agree	Disagree

2. Identifying giftedness in kindergarten students can be detrimental to their future development.	Agree	Disagree
3. Does your district have a process in place to formally identify giftedness in kindergarten?	Yes	No
4. Does your school have a process in place to formally identify giftedness in kindergarten?	Yes	No
5. Are you required to alter the curriculum for those students <i>formally identified</i> as gifted, if applicable?	Yes	No
6. Are you required to alter the curriculum for those students <i>perceived</i> as gifted?	Yes	No
7. Are any of the following opportunities available for kindergarten students within your school?		
i. Early entrance (students are allowed to enter school earlier than age levels permit)	Yes	No
ii. Acceleration by grade skipping (children can start out in first grade)	Yes	No
iii. Pull-out grouping (student work with other gifted students outside the classroom)	Yes	No
8. Even if you are not required to alter the curriculum within your classroom, do you use any of the following methods within your classroom?		

<p>a. Curriculum compacting (cutting out material that a student has shown mastery of from the curriculum)</p> <p>b. Differentiating (the curriculum is adapted to all students' differing abilities)</p> <p>c. Grouping (students are grouped with other students of the same ability level, not with students needing remediation)</p> <p>d. Tiered assignments (gifted students are given more challenging assignments dealing with the same topic as the rest of the class)</p> <p>e. Students pick topics (students are allowed make choices in their learning by picking their own topics to study)</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<p>9. Do you have any comments you would like to share with the researcher in regard to kindergarten giftedness?</p>		



## **Appendix C: Institutional Review Board Approval**

From: IRB@liberty.edu

To: tricia\_thirey@hotmail.com; maangle2@liberty.edu; fgarzon@liberty.edu

CC: IRB@liberty.edu

Date: Wed, 18 Aug 2010 10:01:29 -0400

Subject: IRB Approval 853.051210: Perceptions of Administrators and Teachers  
Regarding Kindergarten Giftedness

Dear Patricia,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. Attached you'll find the forms for those cases.

Thank you for your cooperation with the IRB and we wish you well with your research project. We will be glad to send you a written memo from the Liberty IRB, as needed, upon request.

Sincerely,

Fernando Garzon, Psy.D.

IRB Chair, Liberty University

Center for Counseling and Family Studies Liberty University

1971 University Boulevard

Lynchburg, VA 24502-2269

(434) 592-4054            (434) 592-4054

Fax: (434) 522-0477

## **Appendix D: Cover Letter for Administrator Survey**

October 11, 2010

Dear Principal:

My name is Patricia Thirey, and I am a doctoral candidate at Liberty University, completing a degree in educational leadership. You are invited to be in a research study of administrators and teachers within the state of North Carolina. You were selected as a possible participant because of your role as an administrator in NC.

The purpose of my survey is to determine the beliefs and attitudes of principals and kindergarten teachers regarding gifted education in kindergarten. I ask that as a North Carolina administrator, you take 5 to 10 minutes to complete the survey. Please note that there are no correct answers to any given question. Instead, I am interested only in what administrators think of these issues.

Your responses to this survey are completely anonymous and confidential. Your participation in this survey is completely voluntary. You do not need to answer any question you do not want to. There are no risks involved in the completion of this survey, nor are there any direct benefits. If you have any questions regarding this research or survey, you may contact me via email at [pswalsh@liberty.edu](mailto:pswalsh@liberty.edu) or by telephone at (845) 558-1044, or you may reach my faculty advisor. I would be happy to answer any questions or share the results of my study if you are interested.

Thank you for taking the time to read this letter. I would appreciate it if you would take the time to complete the linked survey at:

<http://www.surveymonkey.com/s/XY7NDHP>

Kindest regards,

Patricia S. Thirey

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, Dr. Fernando Garzon, Chair, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email at [fgarzon@liberty.edu](mailto:fgarzon@liberty.edu).

## **Appendix E: Cover Letter for Kindergarten Teacher Survey**

October 18, 2010

Dear Teacher:

My name is Patricia Thirey, and I am a doctoral candidate at Liberty University, completing a degree in educational leadership. Because of your position as an early elementary teacher in North Carolina, I am requesting your participation in my research study.

The purpose of my survey is to determine the beliefs and attitudes of administrators and teachers regarding gifted education in kindergarten. I ask that as a North Carolina teacher, you take 5 to 10 minutes to complete the survey. Please note that there are no correct answers to any given question. Instead, I am interested only in what teachers think of these issues.

Your responses to this survey are completely anonymous and confidential. Your participation in this survey is completely voluntary. You do not need to answer any question you do not want to. There are no risks involved in the completion of this survey, nor are there any direct benefits. If you have any questions regarding this research or survey, you may contact me via email at [pswalsh@liberty.edu](mailto:pswalsh@liberty.edu) or by telephone at (845) 558-1044, or you may reach my faculty advisor, Dr. Mark Angle, at [mangle2@liberty.edu](mailto:mangle2@liberty.edu). I would be happy to answer any questions or share the results of my study if you are interested.

Thank you for taking the time to read this letter. I would appreciate it if you would take the time to complete the linked survey at:

<http://www.surveymonkey.com/s/TTS2NVX>

Kindest regards,

Patricia S. Thirey

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, Dr. Fernando Garzon, Chair, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email at [fgarzon@liberty.edu](mailto:fgarzon@liberty.edu).

## **Appendix F: Survey Comments from Administrators**

Administrators shared the following comments on their surveys:

1. I believe all children should be taught on their level. If they need remediation or challenging assignments, they're needs should be met.
2. We have an enhancement time with the AIG teacher in kindergarten classes
3. While we do not formally identify Kindergarten students, we do nurture students who display gifted characteristics based on PETS lessons.
4. Giftedness in kindergarten can be tricky bc some students perceived as gifted that early merely had more exposure to kindergarten concepts from their parents and other caregivers.
5. I think giftedness is a subjective term and most often refers to the ability to be highly successful in an academic environment. Formally identifying students as "gifted" in Kindergarten is detrimental to those children who may very well adopt gifted characteristics once they have the same opportunities and experiences as children who may have been more privileged than others to experience it sooner and/or are gifted in non-academic ways. I have had AIG (Academically and Intellectually Gifted) certification for 12 of my 16 years of licensure, 8 of those years being spent as a building level administrator. I have observed the appropriate use as well as the abuse of identifying giftedness in young children. Thank you for studying this much needed topic, especially in the arena of equity and access.
6. Formally students are tested beginning in 3rd grade. K-2 students are identified informally and work in our Discovery Program for potentially gifted students.

7. Very few students are identified!!
8. Kindergarten students, like all students, have a wide range of abilities. But they are all still little children. There are ways to address their academic needs while keeping their emotional and developmental levels in mind. There's really no need to "identify" them, as long as there is a culture in which students are taught at their academic level, no matter what grade.
9. I think that some students enter kindergarten with the knowledge that they are expected to learn. When they are given this material again, they become bored and disengaged. "Big school" then becomes a let down for them.
10. There is a distinct difference between giftedness and well coached students. Gifted students think, read and solve problems, not just know letters, letter sounds and Dolch sight words in kindergarten.
11. We believe in the importance of deepening understanding rather than the piling on of fact after fact. Socialization and age appropriateness are also factors important to the development of the child as a whole.
12. This is a VERY tricky area due to exposure/experience levels at different socioeconomic levels!
13. the focus population of our K - 8 public charter school is highly intellectually gifted children, so my responses may be those of an outlier.
14. Our system employs a teacher to work with students that teachers feel are advanced beyond their grade level. These sessions are held twice per month.
15. Regarding the last question in #8, students would have this opportunity in conjunction with the teacher.



16. Kindergarten students at age five demonstrate a wide continuum of developmental levels. I think it is a disservice to begin tracking them and labeling them at such an early age. Classroom teachers can differentiate to meet the needs of all students without the labeling.
17. Students who already know basics should be taught beyond these basics. We do a disservice to our students if we try to teach them all the same information using the same strategies. So many students could excel beyond the required curriculum, given the time and personnel needed to assist them.
18. There is so much more to kindergarten than academics. Even the students who are more academically capable are not so advanced in the social skills that are a large part of kindergarten. While I do believe that every student should be met and challenged at their level, I do not believe that formally identifying kindergarten students as gifted is a priority. More often than not, it is the desire of the parent to have this designation, but testing does not confirm their personal beliefs about their children. Just because they have worked with their children to help them learn to read does not mean that they are gifted. Children need time to be children. There is plenty of time for them to be identified as gifted in the upper grades.
19. We begin "identification" in grade 3, however, we differentiate based on data for ALL students.
20. This is the only year that we have not identified kindergarten students as gifted. The new curriculum director feels that the program is not needed in kindergarten.
21. Differentiation allows us to help students of all ability levels

22. At our school we have between 4-6 students who gain early admission each year. Generally I feel this is an appropriate practice. However, I recently have experienced parents who want early admission and then later want their child retained due to social gaps. This is a problem for the school system as we educate students for 14 years instead of 13 (k-12).
23. I do not feel there is a need to identify giftedness in kindergarten, but rather that teaching and learning must be differentiated to meet the needs of all children in the classroom.
24. Our teachers do a great job of challenging students regardless of levels or not.
25. We do not formally identify giftedness in kindergarten in our charter school but we are deeply committed to providing instruction that is exciting, intellectually stimulating and interesting for our students. We have students come to kindergarten at many varied levels in the different subject areas and we strive to make sure they are challenged. We do not believe this is best done by continuously taking these students away from their peers.
26. both of my own children were identified early (in K or First) and it was a very positive experience- we try to make many opportunities for our gifted K students
27. Our school is involved in a research project out of Purdue University called Total School Cluster Grouping.
28. NC State Board of Education Policy lays out a detailed set of guidelines for early admission to Kindergarten
29. I feel it is even more difficult to identify students as gifted if they are second language learners.

30. My experience is that most students identified as early as kindergarten or before, most times level out at about second grade. It is difficult to separate true "giftedness" from the broader life experiences of more fortunate children whose travels, etc. in early years makes them appear more intelligent as compared to less fortunate families' experiences.
31. My school: groups, has multi-age classrooms, uses MI centers, ask the students what they would like to learn as a community next, and uses a project based approach; we do not find it necessary to label students.
32. It is my belief that kindergarten teachers should have the knowledget to teach and challenge children within their classrooms in a manner that honors development in all domains. I don't think that identifying giftedness at this age has an purpose if the k teacher is competent in knowing how to meet individual needs.
33. Without getting into the cultural debates about giftedness, there is a danger in attempting to formally identify a child as gifted at too early an age. IQ testing is less reliable for younger children and as a psychologist told me as a parent, our son's extremely high IQ at the age of 6 would level out with time to something closer to that of his parents. It did. In addition, it is easy to mislabel a child's early academic skills as giftedness, when it is actually the result of increased exposure on the part of the parents.
34. Question 5 says "formally identified". We don't formally identify students in K; however, it is an expectation that teachers alter the curriculum for all learners in order to meet them and teach them from where they are.

35. We meet the student's needs by differentiating instruction and all of the items checked under 8. I do not believe for the vast majority of our kindergarten students it is wise to identify students as gifted in Kindergarten.

## Appendix G: Survey Comments from Teachers

Teachers shared the following comments on their surveys:

1. Sometimes it is difficult to discern true giftedness in kindergarteners as children enter kindergarten with a huge range of knowledge, experiences, and prior instruction and learning. It is important to differentiate for all kindergarteners, not just gifted or higher students. I have had kindergarteners who are truly gifted children, so they absolutely exist.
2. I begin where the child's level is and go from there..ready to read, we read and write!
3. I have taught Kindergarten for 17 years and I am the parent of 4 children, so I feel I have had alot of experience with children. I feel children function and learn on different levels. They also bring different experiences to the classroom. I think children can be identified as gifted at an early age, but I think it should be done with CAUTION!!! I truly believe that children need to be children!! They only have one childhood!! So, we need to allow them opportunities to play, pretend and use their imagination. If we push children to excel in academics too early, it can cause anxiety, frustration and the pressure to succeed can overwhelm them. They can be afraid of trying new things because they feel that they may fail. As a teacher and mother, I feel children need guidance and structure as well as flexibility. They need someone to require them to complete chores, projects/homework and activities. The children should be expected to do their best and put effort into their work. Teachers and parents should not expect

perfection. I truly try to teach my students and my own children to be enthusiastic about learning. I also teach them to be critical thinkers, problem-solvers and achievers, whatever level they are on. I believe everyone can be successful!!!

4. Even though student do not pick topics of study if they are show an interest concerning a certain topic we individualize for them on that topic.
5. At my school, children are not identified as gifted or receive services until they reach second grade. Children can be above grade level and we are required to meet their needs. It is more difficult to provide challenging assignments to kindergarteners and still be developmental appropriate.
6. I believe that Wake County should identify gifted children as early as kindergarten and support their learning.
7. Giftedness in Kindergarten is a fine line. I came from a school system in Tennessee where all my Kindergarten students came in reading encyclopedia and had the comprehension as well. Most of the teachers saw the children as gifted first and a 5 yr old second. I saw it the other way around. Even tho this students were 'certified as academically gifted, to me, they were still a 5 yr old with exceptional development. We as educators sometimes see the label before we see the child. I hope the educational area is changing
8. We have an Academically Gifted program but students aren't identified until late 2nd grade. So, our AG teacher only consults with K teachers if they seek help/resources for an advanced K student.

9. I feel like any kindergarten student should be advanced forward by observing their ability and creating lesson plans that will advance their knowledge from that level.
10. I am not a strong advocate that students be "formally" identified in kindergarten, however, I do strongly feel that their abilities should be recognized and lessons adjusted/differentiated accordingly.
11. There are policies that go along with Acceleration and early entrance to Kindergarten. Our Kindergarten Team works together to meet all the needs of every Kindergarten student- it takes the whole team.
12. I think giftedness is just another label. I teach all my children to their abilities. Some are remediated, some are provided enrichment opportunities
13. I teach prek for an elementary school and my understanding is that children are not tested for the AIG program until 3rd grade.
14. Our school has so many students that are significantly delayed that I believe some students we deem to be gifted are actually the ones that are simply meeting grade level expectations.
15. I do believe it is imperative to differentiate for all students, especially those showing signs of giftedness, whether they are identified as such or not.
16. In the past, we have had students in Kindergarten come in reading on 2nd grade and 3rd grade level. Usually what we do for these kids is to borrow books from upper grades, use upper grade miscues and put them in a grade appropriate flex group for instruction 30 minutes per day. We use computers in the classroom with

level appropriate software, but our school system does not even identify gifted children until 4th grade,

17. Early entrance is only offered if parents have private testing to document giftedness. Acceleration to early grades requires documentation and testing, but this rarely happens.
18. I feel that with the differentiation of instruction, we, as educators, have the responsibility to tailor our instruction to the needs of the individual student, gifted, or otherwise. I also think it may be easy to misinterpret giftedness in Kindergarten. The exposure a child has to education, and the environment the child has been in, all affect their level of knowledge in Kindergarten.
19. I want to clarify the areas marked yes are only in the area of reading.
20. it is difficult to find the time to deviate from the state curriculum very often.  
  
There are more and more requirements pushed down on kindergarten that should not be there. Children need the opportunity to develop the needed social and emotional skills that are essential for school success. But sadly, we are not given the time to develop them.
21. I am not sure if our school or district has procedures in place for identifying kindergarteners. If they do they DO NOT ever use this avenue. It is very difficult to have a student tested in Kindergarten. Speaking from a teacher and another of a gifted student (identified in K in Florida) it has been beneficial for my child.
22. I do believe that it is difficult to tell the difference between gifted children and children who have simply had much more exposure to education.



23. As a teacher, I am to "identify" those that I believe to be gifted. We do have a AG teacher who pulls these students several times a month.
24. We are required to follow the NCSCOS so even if a student is gifted, they still receive the same curriculum, and we group the high achievers in Reading, Writing and Math using strategy groups.
25. In our school system students do not generally get tested to be identified as gifted until the 3rd grade. Should a parent request that their child be tested, K-2, then the school would provide testing. Throughout the years I have been teaching kindergarten, I have often felt that I have had several gifted students in my classes and have provided as much differentiation and grouping as possible to meet the students needs.
26. Children are not identified formally until 3rd grade.
27. I was able to get a student to skip first grade and go to second grade by using the first grade teachers to evaluate him for readiness at the end of last year and the principal did allow him to move over first grade.
28. Students identified as gifted in K are pulled to work with our AIG teacher in Jr. Great Books sessions. We are encouraged to differentiate instruction, but not required to teach a certain AIG program in the classroom. I know that some children arrive in K ahead of their peers due to prior experiences, but it is difficult to identify them as gifted in K. I do not believe that kids need to be solely taught academics... their social/emotional development should also be recognized & encouraged for them to be productive 21st century learners & workers. Pushing

the children academically may not allow for the social/emotional aspect to be developed.

29. Although it is not required for kindergarten students to be tested in my district or school it is each teachers responsibility to challenge and create developmentally appropriate lessons to meet each students need.

30. As a member of the Bright Ideas Program, I have been taught to approach all children as gifted and give them the higher level thinking skills, higher level questioning, and utilize various approaches to reach all students.

31. I think it is very hard, if not impossible, to identify a truly gifted student in K. It is hard to tease out what is just early development or a child that has been given more academic experience as opposed to a child that is truly gifted. Sometimes children who appear to be functioning above K expectation in K will appear average by about 3rd grade. The opposite can occur as well. A wide range of development and performance is very normal in kindergarten. It is important to take the children where they are and try to meet their needs as whole children and not just academic learners. Differentiation of assignments and skills should be a rule, not an exception because K children are so developmentally diverse.

32. I believe all children should be taught at their level of developmental challenge. Not too easy, not too hard. Kindergarten classrooms today are filled with the gifted students of tomorrow. Unfortunately teachers opinion about early identification often lead to frustrated and bored students and a whole list of behavior problems.

33. Overactive or autistic children are not identified when they are gifted. They are not given gifted learning opportunities that fit their unique needs. Why is that?
34. I actually have a student this year that is the most academically gifted student I have had in my 14 years of experience. Socially, he is on a kindergarten level. I am constantly adapting his work and finding more challenging projects/activities for him to work on. Good luck with your thesis!
35. We are required to Nurture kindergarten students(prepare challenging work on students level and interest) in classrooms. Principals decide if students skip grades. I've only seen it (grade skipping) at my school three times.
36. In our area (Chapel Hill, NC) the gifted label in kindergarten is nothing more than a status symbol for parents. Students get no pull-out services, and because of RTI (Response to Intervention) all lessons are differentiated for all skill levels at each objective. The gifted label is rather out-dated; it was applicable when most teachers (or even any teachers) taught in a whole group style, but at least in my school the traditional methods have been replaced with cooperative learning, tiered tasks, and fully differentiated instruction. I only recommend the gifted label to parents who have the possibility of moving, as having a DEP in place will ensure that the student receives differentiated education regardless of where they move.
37. Being academically gifted & identified can sometimes be a curse for many kids. It is a challenge to balance just more "paper work" with true deep learning on their level. Also don't forget these kids still need to develop (maybe even more so) socially & interact with peers!

38. In Cabarrus County, students that are identified by the teacher are given an assessment to join the gifted program. Most students either wait until the end of the year, or until first grade to be tested for the program. The assessment is very difficult, and many bright students do not pass, due to lack of exposure to the material on the test. If a student doesn't qualify for the program, I think they have to wait either 1 or 2 calendar years before he or she can be re-tested for the program. (I'm sure you could check with our AIG teacher , our office or the county office to find out the exact timeline to be retested.) Sometimes we are nervous to refer a child to be tested, because we don't want that child to lose time that they could have in the program the following year.
39. I think giftedness needs to be demonstrated and observed in several settings and cannot be determined based on parent observation alone (many parents tell me that their child is "gifted" although that is not usually the case). While I have never had identified "gifted" students in K, I have had several students who are well above their peers and have differentiated my instruction to meet their specific needs.
40. There is no reliable test for measuring "giftedness" in kindergarten. We adjust instruction to help each child reach his or her individual potential.
41. I know that acknowledgement of this category is truly needful. My own child was a gifted student in kindergarten. Fortunately, she was attending a Department of Defence Dependent School at the time that fully provided for those gifted students.

42. Gifted students start receiving service in 3rd - not not I agree that they do not show it earlier. However, it is difficult to say that were required to alter the curriculum, that occurs during pullout usually. Each teacher uses differentiation of curriculum as they see fit with their student's needs; especially at the kindergarten level.
43. Some children are more ready to enter kindergarten and are not necessarily gifted. In my experience, I have only had a few truly gifted children in kindergarten. In my school, we do alot with vertical teaming and children can go up to the grade they need to for their level of knowledge whether it is reading, math, or science. Sometimes they can be gifted in one area but not another. So our system works. In my classroom everything is differentiated. Children are also given choices for study. This helps deal with the types of learners they are as well as the level of thinking ability that they may have. Our program of discovery takes the children who are the highest in a class and exposes them to higher level thinking skills. It is a pull out program.
44. I do believe a child can be "gifted" when they are in KIndergarten. It is the social aspect of it that even the brightest of children have difficulty with.
45. I feel like I would need a LOT more training to work with a student who is truly gifted. I am comfortable working with student who are working above grade level. However, I think that is different from working with students who are truly gifted.
46. I am a kindergarten teacher. I have had a gifted student in my room for the past 3 years. I have had to differentiate the curriculum for these students. It required

extra work on my part but I felt it necessary for the students. This year my county is providing help for me, finally! I do feel that these students and their needs should be met as well as those who are on the lower end.

47. I recognize within my classroom that some students may be identified as gifted later. My district does not formally recognize "giftedness" until 3rd gr, services begin in 4th. I differentiate and pull appropriate materials for my students whether on a gifted level or remedial level. It is tough work but students deserve this!
48. Students are only allowed to enter school earlier than age permits with special testing and permission from the principal. This happens very rarely, but I marked yes because parents can opt to have their children tested. I have never known a student to start out in first grade and skip K, but I have known students who skipped a grade later.
49. I hope you have researched a Javits funded project in North Carolina entitled Project Bright IDEA. I was a part of that before our school became a Reading First school. Essentially it is a program to nurture giftedness in K-2 students. I think it would be helpful to you!
50. I think we tend to look at children who are "early readers" as gifted and miss others who are very creative and not "early readers".
51. AIG pullout, differentiating in classroom and homework, Kathy Kennedy grouping, Tiered assignments
52. Much like one of the questions above, I would suggest to any teacher working w/ students of varied abilities, always differentiate activities based on level of students. Students also learn from each other but I believe in leveling activities by

ability. Even if activities are the same, the follow up may require an extension that may enhance learning for the upper level child.

53. I think there is more of a focus on students who are struggling in school than those children who are academically gifted.
54. Kindergarten is not the year for pull-outs. Kinders are adjusting to the whole idea of being away from home and being in a group setting. I have always felt gifted students help to pull the whole class up. I always teach to the higher knowing the middle will benefit. There is enough learning going on in a Kinder class for any higher level student.
55. I'm not to sure if our district and school have a "formal" way of identifying giftedness but we do use the DIAL to find those kids.
56. At my school, we don't have a gifted program for kindergarten students, however, we meet with the AG teachers and discuss students who are perceived as being acadenically high. This students can participate in lessons outside of the classroom. These students are also "flagged" and put on a list that is referred to when it's time for them to be a part of the AG program that begins in thid grade.
57. I am interested in hearing about your research.
58. I don't like the term gifted... it implies that they are somehow different. They aren't they just have a strength where the other students don't. Why not add to their strengths the same way you do for the others?
59. Kindergarteners can be gifted. They usually shine out just as children in the older grades. We need to focus on these children more to keep them moving forward.

60. I think that keeping kids challenged is crucial to lifelong love of school. We never talk openly to the class about "giftedness" but focus on the multiple intelligences and the many ways one can be "smart." So that way there is no competition. I've found that skipping K can be socially detrimental to a child-often they can be put into a second grade reading group just fine but need to learn social skills at a Kindergarten level. Thanks for the opportunity to participate!
61. I am very upset that the same degree of protection and concern is not given for gifted children as is given to children with disabilities.
62. I feel that Kindergarten students can be very gifted but it is not imparative that they recieve extra attention at such a young age. It DOES have an impact on their ability to perform academically but socially they may not be ready to enter higher grade levels becasue of their success. I think the best way to handle them is by ability grouping, even across the grade level. We seem to have a lot of success with this type of instruction.
63. This area of exceptionality is horribly overlooked in the public school system.
64. In our county kindergarteners are labeled "gifted" if they read 2 grade levels ahead. Too many teachers want to label students as gifted when they do not meet this criteria and are simply very bright, not truly gifted. Very bright students need the same social experience as other kindergarteners, just more challenging material on the same subject, and plus possibly additional subjects. Many gifted children do not become labeled as such until first grade, when they've had more reading experience. Some upper middle and middle class kindergarteners are



labeled as "gifted" by teachers, when really they've just had more support/push by enthusiastic parents. These kids hit the wall around middle school and burn out.

65. In our county children can not be tested for giftedness until they are six. So classroom teachers modify the instruction to meet their needs.

66. I am a new teacher, however I was a TA for nine years in the school system. We do not have gifted children in kindergarten, we consider them high students and are required to differentiate instruction.

67. I believe that Kindergarten is such a wonderful opportunity for all students to show growth and access the curriculum at the level appropriate for them.