

AN ANALYSIS OF GIFTED AFRICAN AMERICAN MIDDLE SCHOOL GIRLS'
ACHIEVEMENT IN MATHEMATICS AND SCIENCE CLASSES

by

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ABSTRACT

The problem examined in this descriptive qualitative study was the lack of awareness of the factors that can lead to the underachievement of gifted black girls in mathematics and science classes. African American gifted girls are underachieving in mathematics and science classes. These girls have unique issues to overcome inside the classroom in order to succeed in mathematics and science classes. The purpose of the study was to explore that perception of the gifted education teachers about the underachievement of black female students in mathematics and science classes. The study also explored the potential relationship between teacher perception and African American gifted female achievement. Two focus groups were conducted and four themes were established from the discussions. The themes included subgroup of friends/life balance 2) pressure (family and peer), 3) student-teacher relationship, and 4) creating a positive environment of learning for the African American gifted girl. Recommendations for parents, educators and administrators include 1) provide parents with accurate information about gifted children, 2) educators and administrators should assume personal responsibility to encourage the girls in mathematics and science classes 3) create a comfortable and comforting environment for the gifted girl 4) provide the gifted girl with female role models and mentors and 5) provide professional development opportunities so that teachers can continue to give these girls the best that is available.

DEDICATION

I dedicate this dissertation to my grandmother, *Rebecca Wilder*, whose fondest wish was to become a teacher, my mother Annette Walker, and my father Clifford Larry Walker. Grandmommy, while you may not have had any formal training, you sure did manage to teach all of your grandchildren many valuable lessons that we each find ourselves living out daily. You inspired us to be more and to do more. I hope that in some small measure you are looking down on all of us and are proud. I miss you more than I thought possible. Mom and Dad, you all instilled in me mental and physical fortitude to preserve through anything. Daddy, you taught me that it was ok, a gift even, to be smart and that I should embrace it. You also taught me that a “C” was average and that I was not an average kid. Thanks for that!!! Mommy, you taught me first to love to read and that math was and is vitally important. I didn’t always understand your methods, but now I get it. You never cease to build me up! I love you!!

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CHAPTER 1: INTRODUCTION

“My first philosophy is that underachievement is learned and therefore underachievement can be unlearned. Children are not born as underachievers; they acquire the negative attitudes, they acquire the poor habits, they acquire the poor work ethics that contribute to underachievement and it can be learned and it can be unlearned. The longer a child underachieves, the longer it takes to unlearn underachievement”
(Ford, 2005, p.1).

Gifted students of all races, nationalities, and genders are integral to success in various fields, including engineering, medicine, science, and education (Henfield, 2006). Gifted students have special needs that require educational leaders to make accommodations in schools and classrooms. African American gifted students present special challenges for educational leaders. These students often have social and emotional issues that may hinder their academic achievement. Gifted female students, in turn, have particular challenges that must also be addressed in order to ensure high academic achievement. The gifted African American female faces two separate but equal challenges that present significant issues to overcome.

Middle school and gifted education have had a difficult relationship since middle school gained prominence in the 1990s. Many scholars have viewed middle school as problematic for the gifted student. Some believe that middle schools hinder gifted students' achievement, because of the general practice of heterogeneous grouping (Chance, 1998). Adolescence is another reason why academic achievement may be hindered for gifted students. Adolescence is a time of many changes for young girls. The mixture of adolescence and the new pressures of middle school present new challenges for gifted students.

This chapter includes a discussion of the background of the problem, the problem statement, the purpose of the study, and significance of the study. The chapter explained the research method and design, the nature of the study and the research questions. Chapter 1 also discussed the theoretical framework for the study, its scope, and limitations, and the assumptions made during the study.

Background of the Problem

The history of gifted education can be traced as far back as the 1870s. Gifted education continued to evolve in the United States to meet the needs of the country. In 1917, Lewis Terman, deemed the “father” of gifted intelligence, produced the first test for gifted students (National Association for Gifted Children [NAGC], 2008; (Hearne & Maurer, 2000). This test was modified three times over the next thirty years and was used to identify over 1500 gifted children (Hearne & Maurer). Gifted education did not see much change until the late 1950s when Sputnik was launched. At that time, the United States began to take a more serious interest in the talents and abilities of gifted individuals, primarily boys and young men. The Civil Rights Act (Equal Employment Opportunity Commission [EEOC], 2009) passed in 1964 emphasized equality for all people regardless of race. The Civil Rights Act had implications in the realm of gifted education as well (NAGC, 2008). In 1983, a report aptly named *A Nation at Risk* stated that American students were intellectually inferior to their international counterparts.

This report included a recommendation for developing and nurturing the gifted and talented (NAGC, 2008). In 1988, the Jacob Javits Gifted and Talented Student Education Act was passed (United States Department of Education, 2009a). The Javits Act deals with providing funding for gifted programs around the country. Most recently, the No Child Left

Behind Act of 2001 reauthorized the Javits Act and included grant funding for gifted programs (USDOE, 2009b).

The history of gifted education includes women who assisted in developing and furthering gifted education. In 1926, Leta Stetter Hollingworth published *Gifted Children: Their Nature and Nurture*, the first book on gifted students (NAGC, 2008). Ann Isaacs, founder of the National Association for Gifted Children in 1954 (NAGC), helped advance gifted education. Nevertheless, much of the attention in gifted education was directed towards males. Young women with gifts and talents exist. Leta Hollingworth spent time during her lengthy career chronicling gifted females. Yet these girls often live an invisible existence inside classrooms across the nation (Smutney, 1999). High-ability girls often face a range of social issues that are unique to their experience. Too often, young, talented preadolescent females have spent years learning the unspoken gender roles that lead to stereotyping and a belief that being intelligent is not an important trait for a female (Hebert, Long, & Neumeister, 2001). While girls with exceptional ability have gifts and talents that urge them forward, they also face an educational system and a society that is ill prepared to meet and nurture those abilities and talents.

Adolescence is a time of change. The needs of gifted females are often given less attention because bright girls are thought to be able to handle the complex issues surrounding adolescence (Peterson, 2003). Gifted girls are challenged with physical, emotional, social, and academic issues during middle school because of their gifts. Research suggests that during the middle or junior high years (ages 12- 14) talented female students learn to fear and to actively avoid being successful in math and science courses (Hebert et al., 2001). The social and emotional issues of the high-achieving adolescent female are too important to be ignored.

African American exceptional girls face the same issues as gifted girls of other ethnicities, and they may experience other social and emotional issues that can affect their achievement and performance inside the classroom (Ford & Thompson, 1999). Ford and Grantham (1998) reported that educators of gifted students know very little about the experiences of their African American students. Exploration of the experience of African American gifted females is missing from the existing scholarship on gifted students.

Statement of the Problem

Educators, parents, and other leaders within schools often feel frustrated and concerned when gifted students, females in particular, fail to perform up to the level of their own potential (Ford & Thomas, 1997). Research suggests that several factors exist that may lead to the underachievement of African American students in particular (Ford & Thomas, 1997; Ford & Grantham, 1998; Moore, Ford, & Milner, 2005; Ford, Grantham, & Whiting, 2008). Much of the research centers on the underachievement of the gifted black student in general or on gifted African American males (Moore et al., 2005).

Gifted African American female students often believe that their gifts lie in areas other than mathematics and science. Studies have been done and articles written about gender differences in mathematics and science, and how these differences are manifested in gifted students (Preckel, Goetz, Pekrun, & Kleine, 2008). The studies highlight factors that inhibit gifted students from achieving in the mathematics and science classroom. Research suggests that teachers' perceptions and attitudes can play a significant role in the development of students in the gifted classroom (McCoach & Siegle, 2007). The problem is that there is lack of awareness of the factors that can lead to the underachievement of gifted black girls in mathematics and science classes.

This study discovered and explored teachers' perspectives on the achievement of African American gifted females in mathematics and science classes. The following questions assisted in capturing themes and patterns as they pertained to gifted African American female achievement. How do teachers' perceptions and attitudes towards African American gifted girls affect their achievement in mathematics and science classes? How can teachers and other educational leaders help gifted African American girls in math and science classes to be more successful?

Purpose of the Study

The purpose of this qualitative study was to explore the perceptions of gifted education teachers about the underachievement of African American female students in mathematics and science classes. The study explored the potential relationship between teacher perception and African American gifted female student achievement. A qualitative study relies on the perceptions of the subjects and asks broad questions (Creswell, 2005). Qualitative studies seek to explore what Creswell (2005) calls "central phenomena" (p. 202). The central phenomenon of this qualitative study was the underachievement of gifted African American girls in mathematics and science. In order to understand the phenomenon, the researcher chose a particular population and geographic location for study. A qualitative methodology was appropriate for this study because the data will be collected through focus group discussions. Both the areas this study explored added to the current knowledge base about this subject.

This study will be based on focus groups. Ten to 15 gifted educators were selected to form the focus group(s). The focus group(s) discussed teacher perceptions of gifted black female student underachievement in mathematics and science classes. By understanding the perceptions of those who teach gifted black females, school leaders can begin to plan effective professional

development opportunities for gifted educators, and develop strategies to combat the problem of underachievement by gifted African American girls during adolescence.

Significance of the Problem

Several issues have been discussed in the research literature about black gifted students. Issues of underachievement and under-representation are important, as they relate directly to the achievement gap that exists between black and white students (Ford, Grantham, & Whiting, 2008). This achievement gap can further be examined through the experiential lens of the gifted African American female student. The young, gifted black female student brings the issues of race and gender together. The experience of the gifted black girl has yet to be explored in depth. For teachers in the gifted classroom, understanding the issues and factors affecting African American gifted girls is essential to developing effective instructional procedures, programs, and methods. Educational leaders could use data from this study to modify and rewrite curricula and textbooks and to create environments that would enhance the opportunities for high-achieving African American females to raise their performance in mathematics and science classes.

Middle school is an important period for girls (Daria, 2004). During the middle school years, girls have new experiences, including male teachers and a less-structured environment (Daria). Middle school is the time when young adolescent females begin to formulate thoughts and ideas about their possible future. During adolescence, choices concerning friends, mentors, beliefs, and grades all lead to critical decisions that can affect the future (Barton, Tan, & Rivet, 2008). Research suggests there is a significant decrease in achievement for girls in math and science courses during the middle school years (Daria; Pearson, 2008). The decrease in achievement by females may be a result of social and psychological factors (Daria; Grantham & Ford, 1997; Barton et al., 2008).

The results of this research study may help bring awareness of the unique issues that African American gifted middle-school girls face in mathematics and science classes to teachers of the gifted, educational leaders, curriculum developers, and professional development leaders. The results may assist educational leadership in the planning of professional development opportunities, changing and/or expanding the curriculum for gifted students, and providing more opportunities for gifted black female students to succeed in school. The examination of the potential factors that lead to underachievement may assist educators of gifted children and other educational leaders to construct programs geared towards African American gifted students. By discovering the factors that affect achievement, and teacher perceptions about gifted student achievement, teachers can become more effective inside the classroom by employing successful techniques that would help reverse the current trend away from achievement in math and science. By employing new curricula, teaching strategies, and programs for gifted black female adolescents, educational leaders can help revive interest in careers that involve mathematics and science among African American females (Moore, Ford, & Milner, 2005).

Significance for Educational Leadership

The goal of this study was to discover teacher perceptions that relate to the underachievement of gifted adolescent black girls in mathematics and science classes. The study contributes to knowledge about gifted education by providing information regarding teacher perceptions about gifted black female students. This qualitative study contributes to educational leadership by providing much-needed research about African American gifted girls and gifted student under-achievement. The current literature about African American gifted girls is limited (Pearson 2008). This study is a first attempt at bringing to light the plight of the African American gifted girl.

The gifted and talented population is looked to for guidance and leadership. In order to prepare the gifted population for leadership, educational leadership must be willing to improve current practices and revise old policies. Kemp (2006) contends that educational leaders need to be cognizant of the call for higher achievement and the need to fulfill the potential of the gifted student across the curriculum. This study can contribute to classroom and school practices pertaining to gifted programs in schools across the country.

The information collected from this study might contribute to educational leadership by bringing about change in the consciousness of teachers of the gifted. The study is designed so that gifted teachers can be a part of the solution by participating in the focus group. Knowledge of factors that can lead to the underachievement of black gifted girls can give teachers new insights. Armed with this new knowledge, gifted educational leaders may choose to make changes that benefit all gifted students, including African American gifted girls. School leadership, using the data collected from the study, may be able to provide professional development opportunities for educators that would assist in preventing failure, specifically in the subjects of mathematics and science. This study may provide educational leaders with an understanding of a specific portion of the gifted community by focusing on African American girls and by focusing on teacher perceptions of the factors that can lead this group to underachievement in mathematics and science.

Nature of the Study

A qualitative methodology allows for the perceptions of gifted education teachers to be heard, described, and interpreted (Caledron, Baker, & Wolf, 2000). Qualitative methodologies permit the examination of values, beliefs, and perceptions through alternative methods that can include interviews. A focus group will be used in this study to generate information and insight

into the issue. According to Whitney (2005), focus groups are an economically efficient method for collecting a large amount of data in a short amount of time. In the past, focus groups were used primarily in marketing and advertising (Caledron et al., 2000; Kress & Shoffer, 2007). Presently, focus groups are gaining popularity in the social sciences, education, and healthcare. Focus groups have the potential to be useful for exploring different perspectives on issues, gaining new ideas, and identifying key issues (Krueger & Casey, 2008).

The focus group methodology and design for the study permit a large amount of data to be collected in a short amount of time. According to Vaughn, Schumm, and Sinagub (1996), focus groups are best used for better understanding of an event, and to gain new knowledge by obtaining the participants' interpretations of it. Through the results of the focus group interviews, state and district school leadership may be able to gain new knowledge into issues and factors that affect performance for young, gifted black female students, and how teacher perceptions can help or hinder these students. This is significant, because it has the potential to aid in improving the perceptions and attitudes of educational leaders and of gifted students themselves.

Research Area

The purpose of this qualitative study was to explore gifted education teachers' perceptions of the factors that can lead to underachievement by black female students in mathematics and science classes. The overall question pertains to knowledge of the factors that can lead to underachievement in African American gifted female students in math and science classes. However, the study also endeavored to discover how this knowledge or lack thereof affects teacher attitudes, beliefs, classroom and instructional preparedness, and therefore student achievement.

The research suggests that African American gifted girls are an understudied group (Ford et al., 2008; Henfield & Witherspoon, 2006; Stormont, Stebbins, & Holliday, 2001).

Underachievement by ethnic minority gifted girls in mathematics and science is significant, as these factors can lead to girls pursuing careers outside of mathematics and science. Willard-Holt (2008) suggests that gifted women in general are choosing careers in law, education, medicine, and the social sciences, but not in computer science, information technology, mathematics, or engineering. This study seeks to understand how teacher perceptions and attitudes in math and science classes affect African American gifted female student achievement.

Theoretical Framework

The Jacob Javits Gifted and Talented Students Act is perhaps the most far-reaching legislation affecting gifted education today (Ford, 1995). The Javits Act mainly provides financial assistance to state and local school systems and other educational agencies that are expected to develop and maintain gifted programs (USDOE, 2009a). The Javits Act gives higher priority to the identification of gifted racial minority, economically disadvantaged, English as a second language, and disabled students (NAGC, 2008). The Javits Act was renewed as a part of the No Child Left Behind Act of 2001 (USDOE, 2009a). Even with the passage of this law, under-representation of minority and other nontraditional students in gifted programs remains. Research suggests that not only are African American students underrepresented in gifted programs, but that these students are also underperforming (Moore, Ford, & Milner, 2005). Gifted student achievement and performance may be hindered by many social and psychological factors (Grantham & Ford, 1998; Grantham & Ford, 2003). Yong (1992) believes that some of the factors include low socio-economic status, lack of adequate role models, and anxiety over success. The talented, young, black female student has similar issues. However, additional

issues such as gender bias and cultural stereotyping and a genuine fear of success may compound them (Yong).

The critical race and social learning theories helped to frame this study. These two theories assisted in explaining factors that impede achievement by gifted African American girls. The theories helped to provide a foundation for the discussion of potential solutions to the underachievement of African American females in math and science.

Critical race theory (CRT) originated in the late 1970s in the legal profession as a way to combat what was seen at the time as the downward spiral of Civil Rights laws in the United States. Derrick Bell, thought to be the father of CRT, and his colleagues began to meet together to construct means to combat the problem. Critical race theorists believe in three basic tenets. The first is that racism is the norm in American culture. The second is that a culture constructs its own reality, and the final tenet states that the dominate race will tolerate the advancement of the minority race as long as it benefits them in some way (Delgado & Stefancic, 2000). Today, CRT is used in academia as a way to explain how race can affect the education of African American students (Henfield, 2006). Pairing this theory with the phenomena of the underrepresentation and underachievement of young gifted black girls in gifted programs provides a unique opportunity to stimulate discussion and propose solutions. Critical race theory is currently being applied to other areas of difference, such as gender. The exceptional black girl is having problems attaining educational goals because of issues that are related to both race and gender (Henfield & Witherspoon, 2006). Critical race theory helps add to the discussion the often under-considered intersection of race and gender, and how each brings a different perspective in terms of achievement and the perception of achievement for gifted black girls.

Social learning theory (SLT), also called the social cognition theory, was developed by Stanford professor Albert Bandura in 1977. Social learning theory attempts to explain how people/students learn by observation (Kretchmar, 2008). This theory is often thought of as a cross between cognitive theories of learning and behaviorism (Kretchmar; Whitney, 2005). Behaviorism was the theory of choice between 1950 and 1960. Behaviorists believe that learning is the equivalent of a change in behavior. Behavior theorists do not recognize cognitive processes (Kretchmar). Cognitive learning theories gained prominence in the 1970s (Whitney). The cognition theorist believes that what happens inside the mind is an important part of the learning process. Bandura began the work by beginning with behaviorism and working through what was believed were the theory's fundamental problems. Bandura (1977) came to believe that people learned much faster than behaviorist theory posits. Bandura's belief was that learning could take place anywhere, at any time, while doing anything, simply by observation. Bandura (1977) posits that there are four components to observational learning, including attention, retention, motor reproduction, and motivation and/or reinforcement. Several key elements that help to define Bandura's social learning theory are outlined by Ormrod (2008). These elements are that: 1) people learn by observing the behaviors of others and through the consequences of those behaviors. 2) Consequences and reinforcement have a part in the learning process. 3) learning and behavior may not be seen until later. 4) Cognitive processes play a role in the learning process.

Bandura's theory of social learning created a deluge of debate among psychologists and educators. According to Kretchmar (2008), Bandura's theory has seen significant changes, including less emphasis on role- modeling and more emphasis on self-efficacy. The concept of self-efficacy plays a significant role in motivation. Self-efficacy, as defined by Bandura (1977),

is the belief in one's ability. Bandura (1977) believed that self-efficacy could determine how well a student would perform a task, how much effort the student would put into the task and how long the student would persevere with the task.

Motivation and self-efficacy can play a significant role in how well the student performs in school. For the African American gifted female student, positive self-efficacy can provide them with the motivation to achieve at a higher level. Having low self-efficacy can have the opposite effect. This lends credence to the notion that low self-efficacy may be one of the reasons for underachievement in mathematics and science classes.

Definitions

Giftedness- The NAGC (National Association of Gifted Children) (2008) states that there is no one universal theory or definition of giftedness. Instead, each state has been left to define giftedness. The NACG (2008) website defines giftedness as “someone who shows, or has the potential for showing, an exceptional level of performance in one or more areas of expression.” According to the United States Department of Education (2009) website, giftedness is defined as students:

Who give evidence of higher performance capability in such areas as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the schools in order to develop such capabilities fully.

According to the Georgia Board of Education (2009) Rule 160-4-2-.38 and the Georgia Association for Gifted Students (2009) website, giftedness is defined as

A student who demonstrates a high degree of intellectual and/or creative ability (ies), exhibits an exceptionally high degree of motivation, and/or excels in specific academic

fields, and who needs special instruction and/or special ancillary services to achieve at levels commensurate with his or her abilities.

Intelligence Quotient or IQ- According to the NAGC (2008), IQ is the numerical representation of intelligence. IQ is established by dividing the mental age by the chronological age multiplied by 100. The average IQ is 100. Those children scoring above 120 are considered gifted.

African American or Black- The terms are used interchangeably to describe minority students who are of African descent.

Middle School- The educational period typically ranging from 5th grade to 8th grade (National Middle School Association [NMSA], 2009).

Adolescence- The period between the ages of 11 and 15 (NMSA, 2009).

Socio-economic factors- Issues that can be used to describe or characterize an individual or group within a social structure.

Underachievement- The NAGC (2008) defines underachievement as a discrepancy between a child's performance in school and some index of the child's ability. Another definition given by Dowdall and Colangelo (1982) is that there are three areas of underachievement: 1) Discrepancy between potential achievement and actual achievement, 2) Discrepancy between predicted achievement and actual achievement and, 3) Failure to develop or use potential.

Assumptions

For the purposes of this study, it was assumed that all participants will respond honestly to the focus group discussion topics. It was assumed that all participants are teaching or have taught gifted students. It was assumed that there would be an unbiased moderator for the focus group interview. The middle school years are among the most difficult times of a young girl's life (Pearson, 2008). The onset of adolescence brings with it many crises including the crisis involving sexual identity. Therefore, there was no assumption as to the sexual identity or preferences of the African American gifted girl.

Limitations

This study uncovered teacher perceptions of factors that may affect the achievement of gifted African American females in math and science classrooms. The focus of the study was on the teachers' perceptions. The study was limited by time constraints. The literature was limited because this particular subject has not been studied in a consistent and concentrated manner.

Delimitations

This study confined itself to interviewing the teachers of gifted African American females in middle school. This study focused on mathematics and/or science-certified middle school teachers, with the gifted endorsement, participating in a dedicated gifted program in a school district located in North Georgia.

Summary

Research contended that gifted African American girls are underrepresented in gifted programs across the nation (Grantham & Ford, 2003; Wilson, 2007). The research suggested that this group is also underachieving in math and science classrooms (Yong, 1992). Research further suggested that the decline in mathematics and science begins during the middle school

years (Rakow, 2005). As a result, gifted females are turning away from careers that involve math and/or science. The study examined the factors that affect the achievement of gifted African American females in math and science classes. This study enlightened school leaders, gifted teachers, and school system administrators about the factors that lead to underachievement in mathematics and science classes, so that the trend away from math and science careers for females is reversed, through curriculum modifications and new teaching strategies.

The literature review gave a history of gifted education in the United States. The literature review provided an overview of the identification process, the factors that led to underachievement by African American females in gifted programs, and the unique plight of gifted African American girls in mathematics and science. Chapter 2 also provided an overview of the importance of teacher perceptions and the effects they can have on the gifted black female student performance inside the classroom.

CHAPTER 2: REVIEW OF THE LITERATURE

The focus of this qualitative research study was to discover teacher perceptions as they relate to factors that can lead to the underachievement of gifted African American middle school girls in mathematics and science classes. The results of this study could lead to improved curriculums, innovative teaching strategies, and improved attitudes towards gifted students. This study has the potential to provide information and insight into the alarming trend of gifted females turning away from careers in math and science. A historical overview of gifted education, its pioneers, and its impact on women and on minorities was conducted. This overview helped establish a rationale for understanding the special needs of gifted students in general, and for female gifted students and African American gifted students in particular, for each student brings particular challenges that must be addressed inside the classroom.

The literature abounded with articles and books on the psychological, emotional, and social problems and needs of gifted students (Holmes, 2002). The literature on the subject of gifted and gender issues is also abundant. However, Pearson (2008) and Frazier-Kouassi (n.d.) contend that the literature is lacking when the subject matter is African American gifted girls. Frazier-Kouassi (n.d.) asserts that research on black gifted girls is still in its infancy

Documentation

Preliminary searches for available resources pertaining to gifted education and African American female students used the University of Phoenix Library Internet search engines EBSCOhost (MasterFILE Premier, Academic Search Premier), Info Trac OneFile, ProQuest, ProQuest Digital Dissertations, SAGE full-text collections, online news and educational magazines and journals, and ERIC. Bibliographic and reference listings from outside sources (i.e. public library, local university library) were used. Title searches also employed related

specifically to gifted education and African American female students, including key word searches on history of gifted education; identification of gifted students; black and gifted; talented and African American students; minority; gifted students; under-representation in gifted programs; underachievement and gifted programs' underperformance and gifted minority students; middle school and gifted; gifted in the middle; middle school and minority students; middle school issues; middle school and the gifted minority student; teacher perceptions and the African American student; teacher perceptions and the female student. The search also included books published by gifted education leaders past and present, as these books provide information regarding possible reasons for the underachievement of young talented minority students.

Historical Overview

History of Gifted Education

Throughout its history, the education of intellectually bright students has been fraught with debate, discussion, and ultimately inaction. The documented education of intellectually gifted and talented students in America began in Boston with the opening of the Boston Latin Grammar School in 1635 (Gold, 1965). The school served as the primary school for talented students of both genders for over 200 years. As far back as the Latin Grammar School days, scholars debated the merits of the one school idea, which argues that all children should be educated in the same place, versus the separate school idea, which suggests that special students should be educated in a school that fits their needs (Gold, 1965).

What is not debated and is evident in the literature are the contributions made by exceptionally bright individuals. Some of the contributions to gifted education have come from gifted individuals who recognized the special talents of others. Lewis Terman and Leta S.

Hollingworth were pioneers in the field of gifted education who saw talent in their subjects and students and actively set out to study them.

Lewis Terman

A review of the literature suggested that Terman is the “Father” of gifted education. Terman, a psychologist at Stanford University, provided gifted education with many significant contributions. One of the most significant of Terman’s contributions is the Stanford-Binet Intelligence Quotient scale, or IQ test. Terman began his tenure at Stanford University in 1910. By this time, he had a documented interest in the individual differences in intelligence found in the general classroom (Jolly, 2008). His dissertation eventually set the stage for his later research into gifted children and gifted education.

His earlier work included a revision of the famous Alfred Binet test of intelligence. Terman and his graduate students published the revised Binet test, now called the “Stanford-Binet” test of intelligence in 1916 (Jolly, 2008; Leslie, n.d.; Vialle, 1994; Terman, 1925). He believed that this IQ test could be used to categorize people and lead to important insights into intelligence, genius, gifted children and mental stability (Jolly, 2008). Another of Terman’s contribution to the field of gifted education is his well-known, groundbreaking longitudinal study of over 1500 gifted students (Coleman, 1999; Jolly, 2008;). This study has had unequalled success, and brought much-needed attention to gifted education in its time (Vialle). It was among the first studies on gifted students, and remains unparalleled to date. Terman believed that by identifying gifted children, society could ensure the successful leadership in industry and many other professions (Coleman; Jolly; Vialle;).

In 1921, Terman began his study of children who exhibited gifted traits and whose IQ scores were 135 or above. The study’s main purpose was to dismiss the popular opinion that

exceptionally intelligent children were developmentally non-intelligent in other areas (Vialle, 1994). Terman and his colleagues studied personality, character, and interests, as well as the students' family and environment. He compared the gifted students to a control group of regular students. The study, aptly named *Genetic Studies of Genius: Mental and Physical Traits of a Thousand Gifted Students*, lasted over 70 years, and followed the subjects into adulthood. The results showed that the gifted students excelled in academic areas and were as emotionally and socially intelligent as "regular" students. Many of his subjects, called Termanites, are still living. The Lewis M. Terman Study at Stanford University, where Terman worked until his death in 1956, still tracks the subjects.

Terman's contributions to the field had and continue to have a profound impact on gifted education. His published works on gifted education and IQ tests yielded one of the first definitions of giftedness. Scholars suggest that Terman's IQ test was one of the first attempts to formalize giftedness in terms that schools could use to identify students with high intelligence.

Over the past twenty years, Terman's study has come under scrutiny for many reasons. The literature suggested that his study suffered from racial and gender bias. Terman (1925) himself was concerned about the ratio of males to females involved in the study. Terman theorized about the gender difference issue in terms of giftedness when he concluded, "exceptionally superior intelligence occurs with greater frequency among boys than girls" (Terman, 1925, p. 54). Beliefs commonly held at the time of the study dominated his written interpretation of the results even when the numbers did not bear them out. Jolly (2008) posits that Terman has left behind a paradoxical legacy because of his views on race and gender. Research also suggested that because Terman developed a personal relationship with a good number of the participants and their families that the results are tainted. Nevertheless, his

longitudinal study of the lives of gifted students, while coming under criticism for being biased, provided educational leaders and administrators with valuable insights into the world of giftedness.

Leta S. Hollingworth

Leta Hollingworth lived a remarkable life and overcame incredible odds to become one of the founders of the gifted education movement. She was a woman ahead of her times in terms of her achievements within and outside of gifted education. She was a psychologist, an educator, an advocate for children with special needs, and most significantly a feminist (Klein, 2000; Passow, 1990). The literature supports the idea that Hollingworth was a gifted woman in her own right. Displaying her talents, despite her unwelcoming environment and tough upbringing, she excelled in school and graduated high school by the age of 15 (Jolly, 2006; Silverman, 1992). She excelled in college, earning undergraduate, master, and doctoral degrees. She learned quite early that being a woman had its difficulties in terms of starting a career, and that its scope was more limited if the woman was married. She had difficulty getting employment after her marriage to Harry Hollingworth in 1908. Hollingworth, however, was one of her biggest champions, and helped to launch her scientific career (Klein, 2000). While pursuing her graduate studies, the focus of her work was on the psychology and sociology of women. She was very active in the women's suffrage movement of the time. As a feminist, Hollingworth, sought to understand and change the opinions of the time about women, and to help women succeed outside of the home. The literature supports the idea that Hollingworth was a rebel in research for the betterment of women everywhere. Silverman (1992) claims Hollingworth believed that "the true potential of woman could not be known until women were free to choose a career, maternity, or both" (p.7)

Hollingworth received her doctoral degree in 1916. At the time, she was one of eight women in the country to have achieved this goal. By her graduation, she had authored or co-authored nine articles and one book about the psychology of women (Klein, 2000; Silverman, 1992). She started teaching at the Teachers College of Columbia University. This would change the course of her life and the knowledge of gifted education. Her work with gifted children and her efforts to improve school conditions for these students is why she is considered one of the pioneers of gifted education.

Her first teaching assignments were in the field of special education and the psychology of exceptional students. This led to her profound and never-ending interest in the education of gifted students. While she was studying special education students, she decided to study a student with high intelligence for contrast. At the time, the Stanford-Binet IQ Scale has just been published (Jolly, 2008; Klein, 2000, Silverman, 1992; Passow, 1990). Hollingworth was among the first to use the test as a way to identify special education and gifted students. The child who was selected for contrast scored a 187 on the test. The literature records that it was the highest score recorded on the IQ test at the time. Hollingworth's future had now changed direction. She went on to study gifted students for the rest of her career. She published the first textbook in the field, *Gifted Children: Their Nature and Nurture*, in 1926.

Hollingworth's interest in gifted students went beyond identification and extended to the development of curricula and counseling techniques for these students. She was among the first to recognize that multiple criteria should be used in identifying gifted students. However, she also recognized Terman's Stanford-Binet IQ test as an essential tool, especially when used in a competent manner in the identification process (Klein, 2000). She ultimately recognized that gifted students have special needs that should be addressed in school. During her career as an

advocate for gifted students, Hollingworth sought to answer to several essential questions including how best to identify, teach and counsel gifted students.

Hollingworth is known as a pioneer in the field because of her educational experiments with gifted and profoundly gifted students at the Spreyer School (P.S. 500) and P. S. 165. The literature suggests that these two experiments led to some of the most significant findings in the field of gifted education. The data she collected gave profound insight into the cognitive development and emotional needs of highly intelligent children (Jolly, 2008, Klein, 2000; Passow, 1990; Silverman, 1992). Passow suggests that Hollingworth was amongst the first educators to explore the emotional and social development of gifted students. Her experiments helped to dispel the then-prevailing belief that gifted students could only be educated through acceleration, i.e. the promotion of students into higher classes according to ability. Hollingworth's experiments helped to prove that dedicated or segregated classes of gifted students were a better option than acceleration (Jolly, 2008).

The P. S. 165 experiment was considered unique. The P. S. 165 experiment studied the gifted, children with an IQ range of 134-154, and the profoundly gifted, children with an IQ of 150 and above. Hollingworth developed and implemented a curriculum that was dedicated to engaging the gifted student on many levels. The school was set up so that the students received academic instruction for half the day and the other half was used for enrichment (L.S. Hollingworth, 1926; Silverman, 1992,). The P.S. 165 experiment lasted for three years, from 1922 to 1925. The data collected from this experiment is very rich and has provided researchers with a wealth of pertinent information. Nearly 30 research papers were published based on this experiment (Klein, 2000). The findings included new knowledge about the cognitive, social, and emotional development of gifted children.

The Spreyer School experiment began in 1936 with classes for slow learners and classes for gifted learners. The idea behind the school was to fit the school to the child, rather than fitting the child to the school (Passow, 1990). With the Spreyer School, Hollingworth hoped to 1) nurture the children's natural abilities, and 2) study the children in order to provide adequate schooling for these students. The Spreyer School worked similarly to the P.S. 165 Experiment, using a compacted curriculum and providing enrichment classes in the afternoon. The curriculum and programs that Hollingworth designed and used were breakthroughs and are still used in gifted education programs today.

While Leta Hollingworth is regarded as a pioneer in the field of gifted education, she was also an active feminist who set out to prove that women are just as smart as men are. In her studies of gifted students, she also studied the gifted girl. Her earlier work was concerned with gender issues and she returned to it, often including information about gifted girls. According to Hollingworth (1931):

The intelligent girl begins very early to perceive that she is, so to speak, of the wrong sex. From a thousand tiny cues, she learns that she is not expected to entertain the same ambitions as her brother. Her problem is to adjust to a sense of sex inferiority without losing self-respect and self-determination, on the one hand and without becoming morbidly aggressive on the other. (p. 8-9)

The literature suggests that Hollingworth knew and understood the plight of women and of gifted women in particular (Silverman, 1995, 1992, 1990). Hollingworth and others of her time fought for equality for women and succeeded, but often at great cost to them. At the time of her death in 1939, Hollingworth was still championing the gifted cause at the Spreyer School. Hollingworth's work with gifted students has provided current educational leaders with

invaluable resources. Her work as a gifted individual, a woman, is equally invaluable to the many gifted women across the nation.

The work of Terman and Hollingworth gave gifted education a firm foundation. The Stanford-Binet IQ scale developed by Terman and his graduate students delivered the first test designed to identify students with high intelligence. Terman used this test along with several other criteria to launch his groundbreaking longitudinal study of 1500 gifted students. This study yielded many books, articles, publications, and most importantly valuable information regarding gifted students (Coleman, 1999; Jolly, 2008;). Terman came to believe that the best way to educate gifted students was to accelerate them through the educational process. His study, though it has recently come under fire, disseminated information about the gifted mind, personality, social and home life. The study shed light on issues of how to educate highly intelligent students. Leta Stetter Hollingworth sought to pursue the question of how to educate gifted students through her experiments. She vehemently disagreed with Terman about acceleration, but held great respect for him as a scholar (Klein, 2000). She recognized that many gifted students were underachieving because they were bored in the classroom even if they were in accelerated grades (Jolly, 2008; Klein, 2000). She was among the first educators to recognize that gifted students would need a different type of schooling if they were to achieve (Coleman).

The literature on gifted education is based on the contributions of Terman and Hollingworth. It behooves the leaders of gifted education today to look to the past for help in finding answers to the many questions plaguing the education of talented and gifted students. Terman and Hollingworth disagreed about many aspects of the gifted student experience, but they did agree that gifted education was an important research endeavor.

Definition and Identification of Gifted Students

The identification of gifted students is at the heart of many of the debates raging in academic circles about gifted education. This issue of identification is also the centerpiece of discussions regarding the under-representation of minority students in such programs. What is giftedness? How is it to be defined or redefined in a manner that not only identified students with different gifts and talents but also is also inclusive?

Before a student can be identified as gifted, the term “gifted” must be defined. The definition of gifted has changed over time. Sir Frances Galton first defined giftedness in 1869. Galton viewed giftedness as an inherited trait that was passed on from generation to generation (NAGC, 2008). For a great many decades, giftedness has been defined for all practical purposes by its intimate relationship to IQ (Feldman, 2003). The Binet-Simon IQ test has been the basis of defining giftedness and the identification of gifted students (Feldman). Terman based his definition of gifted on the top 1% in what he termed “general intelligence ability” as measured on the Stanford-Binet Intelligence Scale (Ford & Harris, 1994). The IQ test helped define giftedness, by supplying numbers associated with intelligence to each student. A student scoring 130 or above on the IQ test is considered gifted (Eby & Smutney, 1990). Feldman asserts, “an IQ based-notion of giftedness is admirably clear and can be precisely assessed” (p. 9).

This definition of gifted has had its fair share of criticism almost from its birth, but has stood the test of time. However, other psychologists believe that intelligence is more than just a number based on a test (Eby & Smutney, 1990). In recent times, researchers including Renzulli, Sternberg, and Gardner have maintained that giftedness is more than intelligence test scores and is a broad concept that encompasses creativity and other social aspects not seriously considered in past definitions or identification practices (Ford & Harris, 1994). These psychologists and

educators believe that intelligence is only one-way to measure the gifts and talents of students. The literature reveals that there are many in the gifted community who support this notion (Jolly, 2008).

The identification of gifted students presents problems for federal, state, and local school authorities. In 1972, in an effort to assist state and local school authorities with a clear, usable definition of giftedness, the Federal government formed a task force, headed by Sydney P. Marland, the U.S. Commissioner of Education (Eby & Smutney, 1990). The resulting document is known as the Marland Report. The definition developed by this task force is still the one most widely used by state and local school districts around the country. The Marland definition affirms that:

Gifted and talented children are those identified by professionally qualified persons who, by virtue of outstanding abilities, are capable of high performance. These children require differential educational programs and/or services beyond those provided by the regular school program in order to realize their contribution to self and the society. Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. General intellectual ability
2. Specific academic aptitude
3. Creative or productive thinking
4. Leadership ability
5. Visual and performing arts
6. Psychomotor abilities

It can be assumed that utilization of these criteria for identification of the gifted and talented will encompass a minimum of 3 to 5 percent of school population.

(p. 2)

This definition was an attempt to satisfy scholars who believed that giftedness was more than IQ (Coleman, 1990). While providing a basis for the identification of gifted students, the Marland Report has been criticized for being limited and for promoting elitism (Baum, Reis, & Maxfield, 1998; Feldman 2003;). The literature both supports and rejects the idea of a consensual definition. Cramond (2004) posits that a formalized national definition will not help the cause of gifted education, nor will it help to solve the under-representation of minorities and women in gifted programs: “A single definition would defy the principles of the cultural and temporal relativity of the concept of giftedness” (Cramond, 2004, p. 15). By contrast, Coleman (2004) asserts that having a formal definition helps further the cause of gifted education by providing educational leaders with a concrete set of constructs. Coleman believes that the Marland definition, which has been used for nearly 40 years, should continue to be used. However, this definition does not provide or specify any specific identification practices; it leaves the door open for cultural and/or socio-economic bias to enter into the equation (Ford & Harris, 2000, 1994).

Identification problems must be addressed if progress is to be made in the education of gifted students (Feldhusen, 2004; Feldman, 2003). Public Law 561, Elementary, and Secondary Education Act, revised the definition in 1978, leaving out the psychomotor criteria (Eby & Smutney, 1990; Ford & Harris, 1994). It was also revised in 1988 and again in 1993. The new definition states:

Children and youth with outstanding talent perform or show the potential for performance at remarkable high levels of accomplishment when compared with others their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor. (U. S. Department of Education, p. 26)

The new definition of giftedness brings to the forefront identification issues. The research concludes that identification practices may be one reason for the under-representation of African American students and African American females in particular in gifted programs. Gallager (2005) reports that race is one factor that has shaped the education of gifted students over the past two decades. Because many gifted programs use IQ testing as a criterion for identification, black students are placed at a disadvantage for various reasons (Gallager, 2005; Milner, 2005).

The gifted community itself is divided on the issue of a consensual definition, which makes having a unilateral identification process almost impossible. While the Marland definition is still the basis for state and local definitions, its revisions over the years leave much to interpretation. If there is to be meaningful conversation about the under-representation and the underachievement of gifted African American and other minority students, it has to begin with a clear definition (Hoover-Schultz, 2006). The potential for under-representation of African American students and other minorities is evidenced in gifted programs across the country.

Milner and Ford (2007) suggest that black and other minorities are under-represented by as much as 50%. The dialogue over this issue must begin with identification.

Middle School

Adolescence can be a difficult time for a young girl. There are hormonal and body changes as well as environmental changes. The adolescent experiences many changes during this time including fast cognitive, emotional, physical, and social growth. During this time, the transition from elementary school to middle or junior high school occurs. This transition brings with it many challenges that may not be properly addressed while the student is in school. Pearson (2008) suggests that early adolescence or the middle school years are the most turbulent time of a student's life. It is essential that students during these years receive support so that they can better cope with the transition and the changes they experiencing (Pearson, 2008).

The middle school years are also the time when a noticeable decline in academic achievement occurs (Yecke, 2005). While students are learning to navigate this brave new world and their internal changes, research suggests that academics take a back seat. For the girls and/or minorities in the classroom, the issues can be overwhelming.

The debate on the effectiveness of middle schools is ongoing. Many educational leaders have called for an end to what is known as "middle schoolism". Middle schoolism is the notion that these schools, those that serve students in grades 6 through 8, should focus not on education but primarily on social and character issues (Yecke). Yecke (2005) and Pearson (2008) both argue that during middle school academic performance begins a dangerous decline. This decline, once started, leads many students down a dangerous path that many never return from.

Gifted girls in middle school have to learn to cope with many different concepts and ideas. Teachers and other school leaders have reported that it is during the middle school years that girls, gifted girls included, tend to lose interest in mathematics and science (Barton, Tan, Rivet, 2008). The literature about African American gifted girls during the middle school years is limited, however, and the question merits further research and study. The black girl with gifts manages the same issues as others during the middle school years. However, these issues are compounded by those concerning race, ethnicity, and gender.

Gifted Education and African American Students

The literature suggests that there are many reasons for the under-representation and the underachievement of gifted African American students. These issues are complex, and are not likely to have a single solution. Ford and Harris (1994) suggest that black students face different hurdles to achievement than other students. Underachievement is an issue that must be addressed if gifted black students are to live up to their potential within society. The literature suggests that these students are the brightest among us, yet are not achieving at high levels.

Underachievement can manifest itself in many different ways for the gifted black student. Many of these students choose not to participate in gifted programs, and when they do choose to participate, sabotage their own efforts by getting low grades and not signing up for advanced classes (Henfield, 2006; Moore, Ford, & Milner, 2005; Ward, 2006). In some sad and extreme cases, students drop out of high school or never finish college. The implications are clear for the gifted student with African origins: underachievement can have dire consequences for the individual and for society. The literature suggests that gifted minority students who do not avail themselves of their opportunities, or are not identified for the opportunities of gifted programs, often find themselves underachieving or not living up to their potential (Henfield, 2006; Moore

et al., 2005). For society, this can mean a loss of talent and genius. These students possess abilities and talents for leadership within all sectors of life. The underachievement of these students often leads to a goal unfulfilled.

Issues Leading to Underachievement

The under-representation of gifted students of color is an issue that has been widely discussed and debated. Many states have adopted new identification procedures in order to reduce minority identification issues. The same type of vigor and rigor has not been exercised with regard to underachievement, or the achievement gap that exists between gifted black students and gifted white students. Researchers believe that African American students in gifted programs have many social and psychological obstacles to overcome, and that these obstacles stand in the way to achieving at high levels (Ford & Harris, 1994; Ford, Grantham, & Whiting, 2008; Moore, Ford, & Milner, 2005; Rowley & Moore, 2002). Consequently, schools have found it more difficult not only to recruit but also to retain black students in gifted programs.

One of the biggest issues plaguing the gifted black student is peer pressure. Peer pressure is an issue that is universal, but manifests itself in different ways for gifted African American students. According to Ford and Harris (1994), high-achieving students often feel different from their counterparts. These students often feel they do not fit in. Gifted black students also feel unaccepted by their peers. These students tend to feel that they cannot fail and that perfection is demanded of them (Henfield, 2006). This issue feeds back into the under-representation of gifted minority students in gifted programs. Many of the students feel unaccepted because they are not in class with students of the same racial or ethnic make-up as themselves (Moore, Ford, & Milner, 2005). This situation can lead to underachievement. This idea suggests that racial or ethnic identity is a strong factor in determining achievement in gifted students of color. Rowley

and Moore (2002) suggest that students who have a strong ethnic or racial identity are better able to navigate through different cultures and endure negative environments (Ford et al., 2008). Enduring the negative environment may mean that the students have overcome persistent criticism for “acting white” from their own racial group.

“Acting White”

Gifted educational leaders agree that peer pressure is one of the issues surrounding underachievement. For the gifted black student, the fear of “acting white” is very real. Acting white, as defined by Ford, Grantham, and Whiting (2008), is getting good grades, being intelligent, speaking proper English, dressing in ways different from what is perceived to be the norm, having white friends, and having different attitudes and behaviors. Students who exhibit these characteristics are thought to be “sell-outs” or betraying their own race. This produces a stress on the student who, if he or she decides to continue in the gifted program, must learn to navigate and live in two very different cultures (Moore et al., 2005). Many gifted education scholars have studied this phenomenon of “acting white” (Fryer, 2006; Goff, Martin, & Thomas, 2007). Fryer (2006) and Goff et al. (2007) concluded that gifted black students would purposely perform poorly in school when accused of acting white. Donna Ford, a leading expert on gifted minority education, asserts that the problem of “acting white” has led not only to the underrepresentation of black students in gifted programs, but to the underachievement in those programs as well. For many of these students, the desire to avoid negative peer pressure outweighs the need to achieve (Moore et al., 2005). Gifted students who do not navigate successfully or choose not to find their way through the potential mine field of peer pressure in schools often find themselves not living up to the expectations and standards of gifted programs (Ford et al., 2008).

Teacher Perceptions

Discussion of the under-representation and underachievement of gifted students of color cannot continue without discussing teacher perception as a very real issue. The literature suggests that teachers may have lower expectations for black students as compared to white students. This expectation, and the knowledge of this expectation by the student, can and often does lead to underachievement in the classroom (Henfield, 2006). Researchers suggest that teacher perceptions can have a detrimental effect on the achievement of gifted minority students (Henfield, Moore, & Wood, 2006). Teacher perceptions of student performance can also have an effect on the identification-gifted students (Ford et al., 2008; Ford, 1995; Henfield et al.; Milner & Ford, 2007; Stormont, Stebbins, & Holliday, 2001). According to Henfield (2006), some students view the teachers in their gifted programs as being apathetic or unfriendly. Teachers, who may not have had diversity training, may have trouble relating to and identifying with gifted black students in the classroom (Ford & Harris, 1994).

The Female Gifted Student

Gifted females are a relatively new topic. Today there is little research on this subject (Reis, 2001), and even less when the conversation turns to race and gender. The research done concerning girls with gifts and talents suggest that their school experiences are vastly different from their male counterparts. Smutney (1999) reports that gifted females of all ethnicities are living unseen lives inside the classroom. Sadker and Sadker (1994) published a pioneering book, *Failing at Fairness: How America's Schools Cheat Girls*, about how girls receive a very different education than boys in school. David Sadker (2009) contends that girls are still receiving a very different education in schools today. The high-achieving female faces a difficult situation at school. The desire to be liked, to have friends, dislike for being perceived as

different, and a strong need for acceptance often make girls with gifts attempt to assimilate or hide their gifts and talents. These students have gifts and abilities that urge them forward, yet they do not have a school system that is equipped to support them (Reis, 2003; Smutney, 1999). The issues that affect talented girls are significant, especially when coupled with the underachievement of these girls as they transition from adolescence to adulthood. The literature suggests that the underachievement of gifted girls is seen on many levels during the course of their lives. Nelson and Smith (2001) report that even though gifted girls make up half of the enrollment in gifted programs, they often do not go on to achieve the high career status boys do. Nor do they end up with careers that involve mathematics and science as gifted boys often do (Nelson & Smith; Reis, 2001).

For African American gifted students the school system, instead of being a helpmate, often becomes a barrier to achievement. Frazier-Kouassi (n.d.) states that gifted minority girls have long been “overlooked, ignored, and minimized” (p 151). Gifted female students of color have experiences in school that can and often do influence their performance inside the classroom, most especially in math and science classes. These experiences also affect the future professions of the minority-gifted female. Researchers claim that the gifted black girl is more at risk to underachieve, drop out, or fail at school than African American males or their Caucasian counterparts (Frazier-Kouassi, n.d.). Issues of poverty, peer pressure, and adolescence, the onslaught of difficult male-female relationships, and low expectation of achievement are all salient for the gifted girl of color. How well the high-achieving minority female navigates these issues determines her achievement in school.

The literature suggests that in general gifted girls not only outperform average girls and boys but also gifted boys in school (Kerr, 1994). The literature also suggests that gifted females

make up at least 50 percent of the enrollment in gifted programs around the country (Nelson & Smith, 2001). Gifted scholars believe that these girls do not use their talents to their advantage later in life (Reis, 2001, 2002). In their research on this subject, Reis, Ford, Kerr and others, all suggest that there are internal and external battles that must be won by the gifted female. These internal and external barriers are hindrances to the potential of gifted girls in school (Reis, 2003, 2002, 2001; Smutney, 1999). Only by understanding the internal and external struggles of gifted females can we help gifted educators to be more cognizant of the teaching methods, strategies, and procedures that may help eliminate the underachievement that now plagues these students.

Adolescence and Internal Barriers

For the gifted female, the middle school years can be described as the most difficult of her young life. The high-ability student goes through the same adolescent issues as other children. However, their exceptional abilities often add additional problems (Rakow, 1998). Adolescence seems to be a time of crisis for the gifted female (Johnsen & Kendrick, 2005; Kerr, 1994; Reis, 2002). The exceptional girl is often faced with different situations and difficult choices (Reis, 2002). It is during this time that many girls forgo using and acknowledging their gifts. The preteen years are a critical time when the pressure to “conform” is noticeably intense (Rakow). Many girls struggle with what to do with their gifts and talents. Some high-achieving girls learn to mask their talents. Unfortunately, a high-achieving female can prove to be her own worst enemy by posing too well as the average girl. This can lead to insecurities about her special abilities. Reis (2002) suggest that the gifted female faces clashes and obstacles between her abilities and the social world around her. The internal struggles that exceptional girls face can lead to underachievement in school and in math and science classes. Adolescence is when gifted females begin to lose interest in mathematics and science (Rakow, 1998).The media,

family, and friends who apply pressure on the female to “be like everyone else” exacerbate this internal struggle.

Some of the unique characteristics of the gifted girl speak to the internal battle. These girls are intellectually very smart. They can communicate well and possess superior analytical awareness. The gifted girl expresses a unique point of view, and may have special abilities in creative areas such as art, music, or drama (Smutney, 1999). These same girls can also suffer from low self-esteem; apathy, or ambivalence towards their gifts and talents; fear of taking risks; exaggerated concern about being accepted among peers; and experience conflicts between cultural identity and school achievement (Nelson & Smith, 2001; Rakow, 1998; Smutney, 1999).

These girls are struggling to reconcile their gifts and talents, while coming to terms with new emotions, thoughts, ideas, and situations. This battle is often difficult for the exceptional girl because during adolescence the understanding of self is still being discovered. During this time, the adolescent often looks to outside sources as an accurate source of self-knowledge (Stormont et al., 2001). These girls, much like their average counterparts, are still attempting to find their place in the world. Because gifted females have superior cognitive abilities, they often are able to make comparisons sooner than the average student. Reis (2002) speculate that the gifted female must have a sound sense of self in order for her talents to flourish.

While this sense of self is being developed, the gifted girl may develop a fear of success. This fear of success syndrome is called the Horner Effect, and was introduced in 1970 by Dr. Matina Horner (Reis, 2002; Smutney, 1999). Fear of success can cause many high-ability female preteens to conform to societal norms of femininity within schools. The fear of success can cause the adolescent girl to believe that school peers will reject not only her talents and gifts but also her. If a gifted girl shows talent in the area of mathematics and science, she may begin

to fear that not only will her female peers reject her, but also her male peers. The girls become afraid of success because during adolescence their “likeability” is extremely important (Kerr, 1994; Reis, 2002). The internal battle of the exceptional female is about finding a balance between her gifts and their gender (Reis, 2003). Finding the balance that Reis and other researchers discuss is often difficult.

External Barriers

Gender stereotyping, teacher perceptions and attitudes, family and peer pressure comprise many of the external issues that confront the gifted female. These issues are not confined to the gifted girls; however, these girls deal with them differently than other girls. How the exceptional female student handles these issues is often detrimental to her academic future. For gifted girls going through puberty, the external barrier of peer pressure is very intense. The gifted girl often would rather succumb to the pressure and not use her talents towards academic excellence.

Conclusion

Gifted girls are underachieving in classrooms across America. African American females who exhibit certain gifts are often taught to believe that being smart or talented in the areas of mathematics and science is not appropriate. The research shows that the middle school years are crucial in the achievement of these students. Middle school is a time of stormy transitions and internal and external changes for the student. The middle school years are the time when girls learn how to balance their school self with their outside selves. For some this transition is uneventful and for others it is a time of upheaval. It is during this time that the African American female learns whether or not to display her abilities (Rakow, 1998). The trend away from careers in mathematics and science begins during adolescence and middle school. The African American girl leans towards other careers that may not show her talents at their best.

This leads to a severe shortage in minority females choosing careers that are mathematics and science based.

Summary

The literature describes the history of gifted education. The works of the founder of gifted education, Lewis Terman, are many. His early work with gifted students laid a solid foundation on which current gifted educators can build. If Lewis Terman is considered the Father of gifted education, then Leta Stetter Hollingworth is the Mother of gifted education. Her works gave a first look into the minds of gifted women and the issues that gifted women faced then and still face today.

The literature showed that adolescent girls face many internal and external battles that can effect on school performance (Reis, 2001, 2002). African American students with gifts face a myriad of issues unique to them that can cause underachievement. The literature supports the view that gifted African Americans have many external factors to face that can make achievement difficult, including peer pressure and duality issues. It makes sense, then, that the African American gifted girl has a mountain of issues to overcome in order to reach success. Literature discussing the issues and factors that affect the performance of the African American gifted girl is in short supply.

Chapter 3 described the methodology used to collect data for this study. Factors that can lead to the underachievement of the young gifted minority female have been researched. These factors may or may not be known to the educators who are teaching these students. Focus groups were used to collect data for analysis. The methodology of the study is explained in detail in Chapter 3.

CHAPTER 3: METHOD

The purpose of this descriptive qualitative study was to explore the perceptions of gifted education teachers about the underachievement of gifted African American middle school girls in mathematics and science classes. Rakow (2005) speculated that social and cultural issues, along with emotional isolation can lead to academic underachievement. Knowledge of these factors by educational leadership, gifted coordinators/liaisons, and gifted education teachers allows for corrective measures through gifted curriculum redesign, teaching strategies, and other educational assistance measures.

Research Design

The method of research by Creswell (2005) guided the selection of the appropriate research design for this study. According to Coleman, Guo, and Dabbs (2007) qualitative research is a method of investigation. There are two key issues central to choosing a qualitative research design over a quantitative research design for this study. The first is that teacher perceptions are being studied. Creswell (2005) contends that the qualitative method of research allows researchers to take note of the views of the participants, allows data to be collected where the participants work, and makes researchers and participants aware of the usefulness of the research and enables them to be advocates for change and bettering the lives of young gifted minority females in similar school situations. This research method will be used in order to obtain a deeper understanding of the factors of underachievement for this group of girls (Creswell, 2005).

Qualitative research is exploratory and seeks understanding, whereas quantitative research requires identified and specific variables, the selection of instruments before the study begins, and directed and specific research questions with hypotheses that cannot change during

the course of the study (Creswell). In quantitative research, the intent is to compare and/or contrast two sets of variables. In qualitative research, the intent is not to compare or contrast the variables. Coleman et al. (2007) stated that qualitative research “recasts scientific notions of prediction, meaning, and procedures”. Qualitative research departs from predictive statements such as “if...then” and instead evolves into “in order to” (Coleman et al., 2007, p. 52). One of the major characteristics of qualitative research is that a particular phenomenon is studied in its natural habitat, and the research seeks to understand the phenomena through research participation (Creswell, 2007). Creswell (2005) contended that the quantitative method of research looks at and collects numerical data for examination, collects scores that can be attributed to participants and organizations, and performs correlation studies and surveys. The quantitative method is looking to passively describe or explain the research problem, while in this study the factors leading to the underachievement of gifted African American girls are being actively studied. The quantitative method looks to describe trends, and does not look for the point of view of an individual.

The second issue involved in the discussion of qualitative instead of quantitative methods is that while the factors involved in underachievement are the issue being studied, the culture-sharing group is one that has been largely ignored by gifted experts and scholars. A potential problem is how best to study this understudied group. The method this study employed is a focus group of teachers of gifted students. Focus groups have gained prominence in academia over recent years (Wibeck, Dahlgren, & Oberg, 2007). Cheng (2007) states that the focus group is one of the most common methods for collecting qualitative data. Using this method will allow a small group of participants to discuss a particular issue for a prescribed amount of time under

the guidance of a moderator or facilitator (Cheng, 2007; Kress & Shoffer, 2007; Whitney, 2005; Wibeck et al., 2007).

Focus Groups

The focus group is a specific group that has been brought together for a specific purpose. Cheng (2007) states that focus groups have many applications, and may be used as an independent research method. Barbour (2008) and Krueger and Casey (2008) assert that a focus group has at least five characteristics including (1) people, who (2) possess certain characteristics that (3) provide qualitative data in a (4) focused discussion to (5) help understand the study topic. Focus groups are especially helpful when there is a need for more generalized group data rather than individual accounts (Whitney, 2005). Focus groups are one way to collect data about the perceptions, thoughts, feelings, and beliefs of a small group of people that may share a culture or experience.

Focus groups, though not a new form of research methodology, have grown in popularity through the years (Kress & Shoffer, 2007). There is some debate about the beginnings of focus groups. Krueger and Casey (2008) assert that group interviews actually began in the 1930s, when social scientists began to research alternative methods for conducting interviews. Some researchers argue that focus groups were begun after the Second World War by Robert Merton (Vaughn et al., 1996). Merton and his colleagues used focus groups to gain information about audience perception of radio programming. Focus groups became a common practice in marketing and advertising. Focus groups, once thought to be a preliminary form of research, are now recognized as a legitimate means of research in the social sciences and education (Jowett & O'Toole, 2006).

Focus groups work best when the participants are comfortable, feel respected, and are free to give an opinion without judgment (Cheng, 2007; Krueger & Casey, 2008). The goal of conducting a focus group is to encourage all participants to disclose relevant information. A focus group is not an open discussion, but rather is a focused discussion that involves people with certain characteristics brought together to bring new understanding to or about the topic being discussed. There are many specifics to the focus group, including the selection of group participants, group questions, selecting the moderator, data collection, and data analysis.

Appropriateness of Design

The purpose of this qualitative study was to examine teachers' perceptions of the factors that lead to the underachievement of young black girls with exceptional abilities in mathematics and science classes. The main subjects of the study are mathematics and science teachers of African American gifted girls. The teachers of the girls were studied in their natural habitat.

The designs considered for this study were open-ended surveys, questionnaires, interviews, focus groups, and multiple-choice surveys. One of the drawbacks to using open-ended surveys is that participants may provide a short answer that is difficult to analyze, or no response at all (Creswell, 2005). Surveys do not allow the participants to build on the responses of others. Survey questions may be difficult to understand, and may not provide rich research data. The disadvantages of interviews are that they are often time-consuming and expensive. The information gathered through interviews may be deceptive; since the participant may be able to ascertain what type of answer the interviewer is seeking (Creswell). Creswell posits that another disadvantage is that participant responses may be unclear or inarticulate.

A focus group methodology met the goal of the study. Focus groups have become one of the most frequent techniques for collecting data in the academic area (Cheng, 2007). Research

suggested that focus groups excel at providing insights (Barbour, 2008). The insights gained from the study could help teachers and students within the gifted community. Because this study discovered the perceptions of teachers of gifted students concerning the factors leading to the underachievement of black girls, a focus group discussion was the most appropriate choice based on the intent of the study. Creswell (2005) asserted that a focus group is advantageous when the interaction among the group is likely to give the best information and when the group participants are similar to and will cooperate with one another. Focus groups are a useful and appropriate design because this type of interviewing technique can collect a large amount of data in a short amount of time. Focus groups are also an economical means of collecting data, as a number of people can be interviewed at the same time and in the same place. A focus group gave this study the best opportunity to collect data in a timely manner, with a concentrated and specified group of participants.

Focus groups gave the researcher the opportunity to delve deeper into an issue by allowing opportunities to hear a more detailed revelation from the study participants (Jowett & O'Toole, 2006) Focus groups provided the opportunity for group participants to learn for each other and to share perceptions, opinions, and experiences in a comfortable atmosphere (Cheng, 2007; Whitney). One potential benefit of the focus group is the group dynamic that occurs. This dynamic, encouraged by a skilled moderator, can often lead to new thoughts and ideas that can result in a more in-depth discussion of the issue being covered. Focus groups are dynamic entities, much like qualitative research, that allow for continuous improvement and modification during the process. As this study aimed to discover teacher perceptions of the underachievement of young gifted African American girls in mathematics and science classes, a dynamic

methodology gave the opportunity for more in-depth analysis and study during the group interview process.

Research Area

This study sought to enlighten school leaders, gifted teachers, and school system administrators about teacher perceptions of the factors that lead to underachievement in mathematics and science classes for African American gifted girls. Understanding the teachers' perceptions of these factors may help school leaders plan better professional development opportunities for gifted teachers, and provide additional and innovative teaching strategies for the educator. The perceptions of the teachers are also important in terms of everyday interaction with gifted girls. Teachers' understanding of the internal and external issues that can affect student performance is important.

The following questions assisted in capturing themes and patterns as they pertain to gifted African American girls' achievement: How do teacher perceptions and attitudes in math and science classes affect gifted African American female student achievement? How can teachers and other educational leaders help gifted African American girls in math and science classes be more successful?

Willard-Holt (2008) contends that gifted girls often receive confusing signals from society about the types of careers deemed appropriate for women. While it seems that women have made significant strides in other professions including law, medicine, education and the social sciences, women are still rare commodities in professions such as engineering, computer science, and information technology (Eccles, 2001). Researchers have suggested many reasons for why gifted females are not entering professions involving mathematics and science. These reasons include discrimination, gender bias, self-efficacy issues, and the perceived value of these

professions by young females (Eccles; Ford et al., 2008; Grantham & Ford, 1998; Henfield et al., 2006; Reis, 2003; Shoffer & Newsome, 2001). Gifted African American females represent a largely untapped resource in terms of career development. This group of students, if properly fostered, can assist in meeting the nation's need for a more qualified workforce (Henfield et al., 2006). Understanding teachers' perceptions of the factors leading to the underachievement of ethnic minority gifted girls in math and science classes is vitally important. Understanding the teachers' perception of these factors can assist educational leaders in planning adequate training for teachers and developing curriculums that will enhance student interest in mathematics and science.

The African American gifted girl has particular issues that can influence not only classroom achievement but also future career choices. The educators of gifted girls, armed with knowledge about how to combat underachievement, may be able to assist the student in choosing a career in mathematics and science, therefore assisting in helping to reverse the current trend away from careers involving mathematics and science. Linver, Davis-Kean, and J. S. Eccles (n.d.) indicate that one way to encourage gifted women into science, technology, engineering, and mathematics fields is to focus less on the academic achievement or underachievement but on how to make these professions seem more interesting to the gifted girl.

Population

The participants were selected for the focus group through purposive sampling. Purposive sampling means that the participants share one or more common characteristics. The population for the study came from various school districts in North Georgia. Each participant met three of four requirements for participation in the study. Each participant 1) had to be

currently teaching gifted education in mathematics and science, or 2) have taught gifted education in mathematics and science within the past three years, 3) be a certified teacher in middle grades, and 4) taught for at least five years. The participants are recognized as a sample of the population of gifted education teachers. Colleagues within the field of gifted education nominated many of the participants.

Informed Consent

The teachers participating in the study were informed of the purpose of the study and any potential risks to themselves. The researcher addressed any questions before the study began. The teachers were asked to sign an informed consent form before taking part in the study. The teachers had the opportunity to read the consent form before signing and participating in the study. The participants signed and returned the informed consent form before participating in the study. Consent from the teachers to participate in the study was acquired using the Informed Consent form from the University of Phoenix, School of Advanced Study Handbook (see Appendix A). The consent form emphasized that participation was strictly voluntary and confidential. No repercussion should come to the participants for their participation in the study. The teachers also had the option to “opt out” if they did not want to participate at any time during the course of the study. The consent form also described the purpose and intent of the study. The participants were informed that their participation in the research was voluntary and confidential. Participants will not encounter any consequences for participating in this study.

The informed consent form notified the participants that any comments made during the focus group were strictly confidential and designed to provide an understanding of teachers’ perceptions about the experiences of African American gifted girls in math and science classrooms in a middle school setting. When informed consent was received and processed, the

focus group began. The consent form also informed the participants that fictitious names and/or codes would be used to protect their identity in the focus group sessions. The note-takers and videographer were asked to sign an informed consent form before participating in the study (see Appendix B). The note-taker and videographer had the same rights and privileges as the study participants.

Sampling Frame

Participants in the study are gifted-endorsed middle school teachers from various school districts in North Georgia. Potential participants were contacted by phone, email, and by written letter about participating in a research study. Once confirmation of participation had been received, the study participant received a follow-up letter and an email containing information about the location, date, and time of the group session and researcher contact information.

Confidentiality

All information provided by the study participants will remain confidential. All participants were required to sign a written consent form in order to avoid any breach of confidence or any contractual breach. Each participant was assigned a fictional name to ensure confidentiality. The participants were not required to sit in any particular order or adhere to a seating chart. Codes, themes, and patterns were assigned to meeting places and subject-matter material.

Pseudonyms were used during the focus group sessions to maintain confidentiality and anonymity. The focus group moderator also used a pseudonym. The focus group data collectors used fictitious names and pattern codes to ensure the anonymity of the participants. All information was typed, coded, and kept on a private and secure secondary USB external drive.

The external drive requires a password to open any file located on the drive. The researcher will be the only person to know the password to access the drive. All information gleaned from the focus group including notes, coding information, taped or recorded sessions, and the data analysis process will be destroyed after three years and kept on a protected disc that is password protected in a locked box until that time.

Geographic Location

The geographic location is restricted to the state of Georgia and to school districts located in the North Georgia area. The school districts are located in the Northeastern part of the state of Georgia. The state of Georgia is located in the Southern part of the United States.

Instrumentation

The focus group was the main data collection instrument. Focus groups collect data through group interaction on a specific topic determined by the researcher (Morgan, 1996). Focus groups provide a method of obtaining group participants' unique understandings, observations, and perspectives on an issue or topic (Kress & Shoffer, 2007).

The participants will be given a demographic information sheet to complete before the focus group begins. The demographic sheet will provide information on race, age, number of years in education, and number of years teaching in gifted education. A moderator will lead the focus group. An effective moderator is crucial to the effectiveness of focus group data collection. The moderator was not expected to be an expert on gifted education. Kress and Shoffer (2007) contend that the moderator should emphasize the function or the purpose of the group and provide clarity about the group's role in the process. The moderator was to supply clear examples of expected individual behavior as a member of the focus group. The job of the moderator was to encourage participant interaction, probe for details, and direct the conversation.

The moderator asked open-ended questions to foster discussion, monitors the group response, and uses the responses to aid the discussion of emerging perceptions, thoughts, and ideas (Kress & Shoffer, 2007). Typically, the moderator will ask established, sequenced, and structured questions developed to guide the discussion (Cheng, 2007). The moderator should have a list of approximately 5 to 10 questions that are designed to lead to an in-depth discussion of the issue by the group. The person chosen to be the moderator had training on question sequencing, body language, and moderating skills before the first focus group discussion.

Research supports the idea that there is no conclusion as to what number of participants constitutes a viable focus group (Cheng, 2007; Hyden & Bulow, 2003; Jowett & O'Toole, 2006; Kress & Shoffer, 2007; Whitney, 2005). Typically, the size of the group range from five to 12. There must be a balance between having enough people to have a lively and educational debate and discussion, and the pitfall of having an overwhelming group size. The focus group for the study consisted of 10 to 15 gifted educators who are currently teaching mathematics and science classes at the middle school level. Specifically, the educators involved in the focus group must teach or have taught gifted African American girls in mathematics and/or science classes. Potential group participants will be asked to participate through letter, email, and telephone communication. The participants will be given written notification of the location, time, and place for the focus group discussion. The questions for the focus group are open-ended and have been designed to promote fresh insights and in-depth discussion of the topic.

The focus group questions were an essential part of the data collection. The questions were designed to facilitate discussion among the participants. The questions in a focus group are designed or sequenced so that the participants are eased into the conversation and are allowed to state an opinion, thought, experience, perception, or belief, and then expand those views later on

in the discussion. Krueger and Casey (2008) contend that questions for the focus group should be clear and concise, understandable by the participants, easily recited, open-ended, and focused. The moderator should avoid asking “why” questions, as these types of questions can make the participants feel defensive. The moderator should ask the questions using a conversational tone.

The questions for the group should be sequenced in a manner that allows the participants to travel from the general to the specific. The moderator should first ask the participants what Barbour (2008) and Krueger and Casey (2008) call non-threatening or general questions. Transition questions are those questions that bridge the gap between the general questions and the subject-specific questions that constitute the reason for the focus group. According to Cheng (2007), one to two transfer or transition questions are enough before moving on to the specific topic questions. The transition questions were intended to connect the participants to the research topic.

The topic or key questions drive the study (Barbour, 2008; Cheng, 2007; Krueger & Casey, 2008). These questions are generally the first questions developed, require the most time for discussion, and the most attention during the analysis stage. Ending questions were designed to end the discussion and signal the closure of the group. These questions are just as important as the general, transition, and key questions. The ending questions gave the participants the opportunity to reflect back on previous statements and to summarize perceptions. The moderator should save time for this question or questions. Creswell (2005) asserts that focus group interview questions should be submitted to a review committee for determination of the accuracy and sensitivity of the questions asked. The results of the questionnaire will provide reliability and validity for the questions asked during the focus group sessions. The data provided by the group will be categorized into themes identified by the researcher.

An important part of the focus group discussion is the meeting date, time, and location. The meeting date and time for the focus group was convenient for the study participants. Dates and times were selected that do not conflict with other popular activities or events (Barbour, 2008; Krueger & Casey, 2008). The location and room set-up are also important factors to be considered. The location has to be a place where study participants can feel comfortable. The room should be large enough to for everyone to feel comfortable, but small enough so that all participants can see each other. The location for the focus group was a small conference room (see Appendix D). The conference room was able to seat at least 10 to 12 people comfortably. The conference room had a large table with movable chairs. The conference room had a whiteboard or easel and was wired for audiovisual equipment such as an overhead projector. The recording equipment, a small audio device, was noticeable by all participants and was handled by the moderator only. The audio device will not be used if study participants object to its usage. The moderator will follow a focus group protocol sheet (see Appendix E). This protocol sheet outlined the focus group session and provided the moderator with the opening and closing salutations, icebreaker questions, and the main focus group questions. The protocol sheet served to remind the moderator to use phrases that will prompt the participants to provide more information.

Data Collection

The focus group was used to discover teacher perceptions of the potential factors leading to underachievement by gifted African American middle school girls in mathematics and science classes. The focus group was selected by purposive sampling. The first 10 to 15 teachers of gifted students that agreed to participate were selected for the focus group. Purposive sampling includes choosing random people (teachers) that have a similar purpose to come together to

discuss a particular issue. The focus group met one to two times for one to one and one half hour to discuss the factors of underachievement for the African American gifted girl. One advantage to using a focus group design is the ability to gain an understanding of the perspectives of the teachers of gifted students. Another advantage to focus groups is that a large amount of data can be collected at one time during the group session. Several note takers accompanied the focus group moderator. The purpose of the note taker was to observe and record focus group participants' responses via movements, gestures, statements, and unwritten cues. Neumann (2003) states that good notes contain maps, graphs, notes jotted in the field, and those recorded while thinking back on the observation. Another note taker for the focus group took observational notes. Observational notes are a detailed description of what was said or heard in concrete terms (Neuman, 2003). These notes are often an exact recording of what is said in the focus group (Neuman, 2003). Researcher inference notes are another type of note taking that occurred. Research inference notes allow the researcher to listen to the participants in the focus group, compare statements or thoughts with statements and thoughts given previously in the focus group, and then make inferences or interpret the statement for better understanding. Barbour (2008) contends that the note takers selected for this type of study should be from outside the realm of academia in order to prevent the temptation of getting "side-tracked by the often fascinating content" (p. 78). The researcher chose the note takers and each received training prior to the first focus group discussion. The training included how to take notes effectively, body language, and taking observational notes. The focus group moderator recorded each session with the permission of the group participants as a means of data collection backup. The data collected were subjected to appropriate forms of data analysis.

Data Analysis

Qualitative data consist mainly of words, text, and observations. As with all data, there is a need to analyze and bring meaning to the data. Qualitative data analysis is a process through which the data is collected into some type of explanation, understanding, or interpretation (Taylor-Powell & Renner, 2003). The focus group will be the primary method of data collection. The goal of the study was to discover teachers' perceptions of the factors that lead to underachievement by gifted black girls in mathematics and science classes. Krueger & Casey (2008) states that focus group data analysis require a clear purpose. That purpose should be at the forefront of the analysis process. A key idea was that the analysis is determined by the purpose of the study (Barbour, 2008; Krueger & Casey).

The data collection process of a qualitative study involves the simultaneous analysis and collection of data (Creswell, 2005). Creswell contends that data analysis in qualitative analysis requires the researcher to cycle through both the collection and analysis stage together. The data analysis and data collection process for a focus group has to be sequential. It is deliberate and planned. This type of systematic process helps to ensure that the data collected from the group are truthful. The researcher reads and rereads the content and writes down observations and impressions. Taylor-Powell and Renner (2003) contend that the analysis of the data depends on the purpose of the research and how the research will be used. The data will be organized by question in order to look for consistencies and differences among the respondents. The connections and potential relationships will be explored as well.

Once the focus group participants have signed and returned the informed consent form, data collection and analysis can begin. Data collection and analysis begins at the beginning of the first focus group session. The data are reviewed for content coding and emergent themes.

Open coding is an initial step that allows the data to be broken down into manageable categories. This process continues until the last focus group session is finished. Once the focus groups are completed, then axial coding is used to combine the open codes into similar categories. This type of data analysis helps to deepen understanding of the perceptions of teachers of gifted students. The coding of the data is the process of making sense of the data. It divides the data into segments for review or analysis (Creswell, 2005; Neuman, 2003). Themes and patterns begin to emerge during the coding process and are an essential part of the analysis stage.

The data was analyzed using the computer program *NVivo 8*. This is a versatile computer program that is designed to analyze qualitative data. *NVivo 8* can import, sort, and analyze audio and text files, videos, and photographs. The program is designed to work with or without transcripts. It can analyze data straight from audio or video files. This simple program allows the user to search for and code data. The program is user friendly and allows for clickable coding and instant analysis onscreen. Information, such as codes, can be imported during analysis. *NVivo 8* allows the user to query data and provides a graphical project display. The program can assist in shaping and sorting the data and the subsequent analysis of the data. It is designed to keep researcher notes and observations made during the analysis phase of the project. Reports, queries, analyses can all be printed, exported or copied from the program for use in the written results.

Validity and Reliability

Qualitative researchers are more concerned about the study being authentic than the study being valid (Neuman, 2003). According to Creswell (2005), validity is defined as drawing reasonable conclusions from the results of a certain sample of population. Validity in research implies the credibility or truthfulness of the findings (Neuman, 2003). Morse, Barrett, Mayan,

Olson, and Spiers (2002) contend that validity means to check, question, and theorize. The validity of the study is whether the study actually measures what it purports to measure. Internal validity suggests that there are no errors to the internal design of the research study. The participants will be certified teachers of gifted students. Threats to the internal validity of this particular study are experimenter expectancy and maturation. Experimenter expectancy threatens the study's validity because the study participants are made aware of the desired results (Neuman, 2003). Maturation poses a threat because participants are asked to complete the questionnaire and become members of the focus group. The participants could become bored or disinterested in the results, or in participation in the study (Neuman, 2003).

The study can be validated through plausibility. According to Neuman (2003), plausibility means:

that the data and statements about it are not exclusive; they are not the only possible claims nor are they exact accounts of the one truth in the world. This does not make them mere inventions or arbitrary. Instead, they are powerful, persuasive descriptions that reveal a researcher's genuine experiences with the empirical data. (p.185)

The research may gain validity because of supporting data and responses from the participants in the study (Neuman, 2003). The validity of the study will increase when the participant responses are analyzed together and reveal connectivity to the responses or data (Neuman, 2003). Convergence is another method that will be used to aid in the validation of the study. Convergence is defined as comparing the results with knowledge gained from the literature (Creswell, 2005). Validation can be achieved through the transcripts of focus group, transcripts of the audiotape, and through participant quotations. Member checking will be another method used for validation in this research study. Member checking is when the

researcher goes back to the participants and checks the accuracy of the interview answers (Creswell, 2005).

To ensure reliability in qualitative research, trustworthiness is crucial. Reliability speaks to the accuracy of the research methods and the techniques used to produce the data. Neuman (2003) contends that reliability in qualitative research means that the research or results can be reproduced. The alternative form of testing reliability was used to prove the reliability of this study. The advantage of this method is that it allows the researcher to compare the responses of the two measures for consistency, themes, and patterns. The disadvantage is in the assumption that the two measures are equal or compatible for comparison (Creswell, 2005). The validity and reliability of the research was also ensured by inter-rater reliability. Because an independent group of gifted education teachers was asked to group the focus group responses according to established gifted underachievement factors, inter-rater reliability provided both reliability and validity for this study.

Summary

This descriptive qualitative study investigated teachers' perceptions of the factors that can lead to underachievement by African American gifted females in mathematics and science classes in middle school. The future ramifications of the underachievement or under-performance of this population of girls are significant to both the female and the black communities. Past research support the contention that African American females with identified gifts are underachieving, and that little attention has been paid to this group (Ford et al., 2008; Henfield, 2006; Holmes, 2002; Kerr, 1994). Teachers spend a great deal of time with

these students each day. Teachers' perceptions of the factors that can lead to the underachievement by this group of students can shed light on the severity of the problem.

The study will be conducted using the teachers of gifted students in middle schools from various school districts in North Georgia. All participants were teachers of gifted students in a middle school setting. The focus group protocol guide assisted the moderator in guiding discussion during the focus group session. The focus group participants consisted of 10 to 15 educators of gifted students in middle school. The data was collected from the focus group through note takers, video, and audiotape recordings. The data was coded using open and axial coding processes. The data was transcribed and analyzed using *NVivo 8*, a qualitative data analysis computer program. This program also helped to discover any emergent themes and patterns from the responses of the focus group participants. An independent group of gifted education teachers studied and grouped the focus group responses according to established gifted student underachievement factors. The study will be checked for validity and reliability via inter-rater reliability.

CHAPTER 4: RESULTS

The purpose of this descriptive qualitative study was to explore the perceptions of gifted education teachers about the achievement of the African American girls in mathematics and science classes. The study explored the potential relationship between teachers' perceptions and African American gifted female student achievement. Chapter 3 discussed the specific methodology used to conduct the study. Chapter 4 provides a detailed discussion on the how the use of a focus group was conducive to exploring the thoughts, ideas, and perceptions of gifted education teachers in the subjects of mathematics and science. This chapter presents an analysis of the data and research outcomes by outlining the procedures associated with the data collection method.

Focus group results included responses from two focus groups with 12 participants in total. Data collection included audio and videotaping, transcribed focus group responses, and emergent themes using *NVivo 8* qualitative data analysis software from QSR International. The research focus for emergent themes consisted of how teachers of gifted African American girls perceived this groups' achievement in mathematics and science classes, whether the educators were aware of the factors that can hinder achievement, and how these factors were showcased inside the classroom. The data analysis results align with the research questions, related literature review, and the research study's overall objectives. The research questions are as follows:

- 1) How do teachers' perception of and attitudes towards the African American gifted girl affect achievement in mathematics and science classes?
- 2) How can teachers of gifted students and other educational leaders help gifted African American girls in math and science classes be more successful?

The research questions helped to formulate the topics discussed during the focus group sessions. Essentially, six topics were discussed during each session. The focus group moderator facilitated the discussion, using the focus group discussion points to answer the study's research questions.

Focus Group Demographics

The participants were required to complete a demographics survey consisting of seven questions (see Appendix E). The questions included information about race, gender, age, grade level, years of experience in teaching, and years of experience teaching gifted students. The purpose of the questionnaire was to obtain sample demographic information for the study. No information from the demographic questionnaire was used in the analysis of the research data.

The 12 focus group participants were all teachers of gifted education in the subjects of math and/or science. Of the 12 participants, two were teaching high school, two were teaching in elementary (5th and 6th grade) school, and eight were teaching in middle school. One of the elementary school educators taught at an independent charter school whose enrollment included kindergarten through eighth grade students.

Two of the focus group participants were Caucasian, 10 were African American. Two of the participants were male and 10 were female. The years of teaching ranged from 3-5 to 16-20 years. Seven of the educators had taught gifted education from three to five years, four had taught gifted education from 6-10 years, and two educators had taught gifted education for 11-15 years. Figure 1 shows the relationship between the years of general teaching experience versus the years of teaching within the field of gifted education.

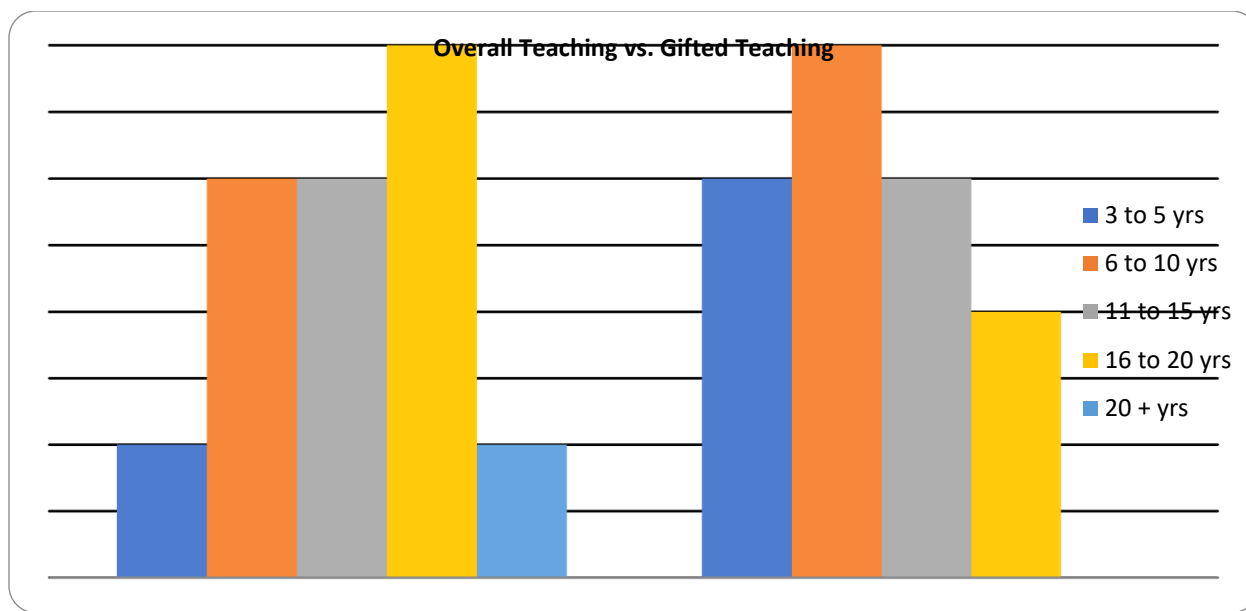


Figure 1. Overall Teaching Experience vs. Gifted Teaching Experience.

Focus Group

The moderator is an integral part of a successful focus group. The moderator was introduced to focus group participants before the start of the discussion. The moderator used an open approach that allowed each participant the opportunity to respond to the questions asked in his or her focus group session. The moderator reiterated that participant responses were voluntary and that there would be no repercussion for non-responsive answers. The participants were made aware that they could decide to terminate their participation at any time if they became uncomfortable for whatever reason during the discussion. The moderator informed the participants the reason for the discussion and made sure that each participant had read and signed the informed consent form. The note takers and videographer were introduced to the participants before the discussion begin. The confidentiality of the participants was discussed and participant questions were answered. The participants were told that the information gleaned from the study would be used as data collection in a research study on gifted education involving gifted African American girls in middle school. Each participant was assured of confidentiality and that all

notes, video, and audio recordings would be kept in a secure location for a period of three years and then disposed of after that time.

The goal of the moderator was also made known to the group. The goal of the moderator was to facilitate an open and honest discussion about the topic, ensure that all participants were comfortable, and assist participants who might feel hesitant about actively participating in the study by prompting and asking for input on the questions. The moderator used a focus group protocol sheet to assist in guiding the discussion (see Appendix F).

Focus groups are time-consuming to plan and execute. Focus groups involve time and location scheduling, participant no-shows, late arrivals, and unexpected interruptions and events. Sixteen educators for gifted children were asked to participate in the focus group discussions. One declined, two were no-shows on the day of the scheduled focus group, and one had a family emergency on the day of the first scheduled focus group discussion. There were two focus group sessions, scheduled two weeks apart to give the researcher time to analysis data from the first focus group. The focus group discussions ranged in duration from 60 to 90 minutes. There were five to seven participants in each session. The focus group setting was a conference room located on the campus of DeKalb Technical College (see Appendix C). The conference room sat twelve people comfortably with a videographer, moderator, and note-takers. The focus group was the main method of data collection for this study. Additional data sources included observation, researcher's field notes, moderator notes, and observer notes (note takers). The participants received no compensation for participation in the focus group.

Focus Group Transcripts

The focus group discussions were sent to MRTBabbletype transcription services one day after the sessions were complete. For 16 years, MRTBabbletype has delivered high quality transcription services to clients all around the world. The company takes a customer-centric approach to its transcription services by ensuring a quality result and fair pricing practices. The audio and video files were uploaded to the company's secure site to be transcribed. The company subscribes to a three-prong approach to transcription services. A specialist with a college degree and years of experience transcribes the audio tape. Then the file is audited and compared with the transcript to ensure that all words, phrases, sentences, and syntax are captured. Lastly, the audio and transcript file are reviewed a third time by another specialist to ensure accuracy. The average wait time for transcription completion was three days. The transcripts were verbatim and were emailed as Microsoft Word documents. The focus group discussions were transcribed in two separate documents: Focus Group 1 (see Appendix G) and Focus Group 2 (see Appendix H). The transcripts were read for accuracy and re-read for preliminary coding. These two documents could then be loaded into the *NVivo 8* software program. The transcripts, audio, and video files were loaded into *NVivo 8*, however only the transcripts were used to code, query, and model relationships from the data. None of the demographic questionnaire responses was used in the analysis of the data in *NVivo 8*.

Data Analysis Procedures

During a qualitative study data collection, coding, and analysis occur at the same time. During each focus group session, at least two people took detailed field notes. The focus group session was audio taped and videotaped and then transcribed. Before coding the data, the purpose of the study was reviewed and the transcripts were reviewed without attempting to look

for themes and patterns. The transcripts are reviewed for accuracy before coding. The transcripts, audio tape, and video tapes are used to assist in completing any inaudible portions found by the transcriptionist in the transcripts. The transcripts were reviewed again to begin the preliminary coding process. A line-by-line analysis was done and meaningful words, phrases, or sentences were coded using descriptive category names and kept in a notebook by the researcher for initial coding purposes. Data clustering was used to determine potential themes found for each focus group discussion topic. This process was done for both focus group discussion transcripts. The transcripts were imported into the *NVivo 8* program which assisted in the organization and coding of the data. The data analysis included comparing, grouping, and reducing the data into queries, relationships, cases, and models within the data.

The *NVivo 8* software codes are called nodes. Nodes in *NVivo 8* help to organize the data into “chunks”. Tree nodes are the established themes, patterns, factors. These nodes are used to organize the data into categories. As the coding process, continued, “free” nodes were established. According to Bazeley (2007), “free” nodes are nodes for which there is no relationship or connection. These nodes can be used help discover a new theme or pattern within the data. Free nodes can later be grouped into the established tree nodes or may be used to form a new tree node.

The coding for the study was completed using free nodes and tree nodes. Free nodes were established from the preliminary coding (descriptive category names) process done by the researcher. Phrases, words, and sentences were assigned to the free nodes from the transcripts. Tree nodes were assigned by using established factors of underachievement for African American gifted girls. Free nodes were also used to code data that did not necessarily fit into the established factors and were deemed relevant to the study. The relationships found between the

free nodes and the three nodes helped to establish emergent themes and patterns based on the data from the transcripts.

Queries were run using the descriptive category names and respondent phrases. The query in *NVivo 8* helps to locate data that meet certain criteria that is set by the researcher (Bazeley, 2007). The query provides information about the number of finds there are in each data source (transcripts) (Bazeley). Models and relationships can be determined using tree and free nodes to determine whether a relationship exists between one or more free nodes i.e. Peer pressure vs. family pressure. This process was done with free nodes and tree nodes to assist in establishing the current themes found in the study.

Data clustering for content analysis was also used to identify possible themes in the study. Data clustering and queries resulted in the emergence of several overarching themes regarding African American gifted girl achievement in mathematics and science classes. Several themes also emerged relating to teachers of gifted African American girls and their knowledge of the established factors of achievement in mathematics and science classes.

Data Grouping and Data Clustering

The data was grouped according to specific considerations from the focus group responses. These considerations included (1) words, (2) phrases, (3) frequency of comments, (4) frequency of phrases, and (5) specificity of responses relating directly to established factors of gifted underachievement. The data was grouped according to key words and phrases from the focus group respondents.

Data clustering and querying established the various themes found in the study from the focus group responses. Clustering allows concepts to be analyzed together in order to determine whether a broader meaning exists or essential themes exist within them. The focus group

responses were then grouped into models, sets, and queries to link Focus Group 1 responses with Focus Group 2 responses. A few common themes outside of the known factors emerged through data grouping and data clustering in the *NVivo 8* software. Data clustering was done for the focus group discussion topics.

The researcher used member checking to ensure the reliability and validity of results throughout the study. Selected participants received written summaries and interpretations of their experiences via email within the focus group to demonstrate the strength of the internal validity. The participants provided feedback that ensured agreement with the researcher's interpretation, thus providing evidence of credibility. The validity of the study was strengthened by using inter-rater reliability techniques. An independent group of gifted education teachers reviewed the transcripts and codes. This independent group of educators discussed and compared the data and came to consensus about the emergent themes and patterns resulting from the data.

Focus Group Topic Areas

The focus group participants were asked to discuss seven topic areas involving gifted African American girls' achievement in mathematics and science classes. The topic areas includes describing the "typical" African American gifted girl, the role of peer pressure and stress in the lives of African American gifted girls, and observation of family relationships and the effects it may have on the girls. The topics of discussion included teacher observation of overall attitudes or self-perceptions of the gifted girl about her own abilities, and the perception of student/teacher relationships. The last topics of discussion included how student achievement could be affected by the student/teacher relationship, opinions about techniques, innovations, and ideas to counteract some of the factors that affect gifted girl achievement in mathematics and

science, and opinions on three areas that can predict success or failure for these girls inside the mathematics and science classroom.

Two gifted education teachers and the researcher developed the discussion topics. The gifted education teachers had been teaching in gifted education for over 15 years each. Both had taught at all levels of the K-12 arena. The questions were designed to discover whether the participants knew of the factors that could affect gifted minority girl achievement, why the educators believed these factors to be important, and how the educator could assist the student in overcoming these factors inside the classroom. The first four discussion topics were designed with multiple purposes: 1) to begin the conversation about the gifted African American girl; 2) to discover the teachers' perception of the African American gifted girl; and 3) discover whether the teacher knew, consciously or unconsciously, of the factors that can lead to underachievement for this particular group of students. The last two discussion topics were designed to 1) get a clear understanding of the factors discussed during the session; and 2) to discover potential ways to combat underachievement by these girls.

Focus Group Findings

During the coding process, the educators' knowledge of the researched factors was coded in *NVivo 8*. Teacher responses were coded using the established factors of underachievement for African American gifted girls and descriptive category headings found through the preliminary coding process. During the review of the focus group transcripts, 127 code words and phrases were established. Some of the code words were similar and were combined into 97 code words and phrases. Some of the new code words matched the established factors of underachievement for the African American gifted girl and were combined to leave 40 code words and phrases. The remaining codes were divided into the established themes of the study.

Discussion Topic #1

The first discussion topic had the participants describe the “typical” African American gifted girl. There were eight general themes associated with this particular discussion topic. The themes that emerged from the data clustering of the first focus group question include the typical African American gifted girl being seen as 1) outgoing, 2) very vocal, 3) inquisitive, 4) arrogant, 5) conscientious about work, 6) liking to challenge answers and others, 7) creative, and 8) a leader inside and outside the classroom.

The teachers’ perceptions of the girls were contradictory. The teachers saw that the girls possessed great potential inside the classroom. Some even liked being challenged by gifted girls. The teachers agreed that being inquisitive was one of the best qualities of the gifted girls because the girls’ inquisitiveness often led to new discoveries and interesting conversations in the classroom. The talented girl cares about the work. However, the majority of teachers in both Focus Group 1 and 2 agreed that the students tended to think about the work only in terms of the grade received instead of the concept learned. The teachers also agreed that the girls did not like doing homework and often had to be prompted to complete or turn in assignments. The gifted girl is a leader at school and at home. The teachers acknowledged that these leadership qualities were not always used in a positive manner, especially if the girl was attempting to navigate between the two worlds of school and home.

One of the major researched factors included the idea that gifted girls often attempt to hide their gifts in order to fit in with their peers and classmates. Respondent 3 of Focus Group 1’s response that “sometimes she can be very vocal, but I do see that she often dumbs herself down” provides support for the researched factors. Rakow (1998, 2005) contends that the gifted

girl often feels the need to conform. The Horner Effect or Fear of Success is when a gifted girl purposefully holds back her abilities in an effort to please others. According to Sally Reis (1998, 2002), gifted girls have been taught to hide their gifts and talents, to lower their own expectations, and to discount their own skills and knowledge.

Another issue discussed was the idea these girls often will internalize their success and failure. Respondent 6 in Focus Group 2's response provides additional insight on the topic: "I think they show academic excellence, but they're humble about it....Girls across the board but especially African American girls. They sort of just internalize that success." Research suggests that girls who internalize success and failure, especially in mathematics and science classes, do not pursue careers that involve either. Gifted girls have been taught to downplay their abilities and talents. Achievements by the gifted girl are not valued and the girls have learned to accept it, internalizing the results. The Imposter Syndrome is when the gifted girl feels the need to explain success, especially since success is contrary to popular belief or prominent social stereotyping of girls, and coincides with the girls' self-image. These girls often find themselves filled with anxiety, and have self-esteem issues that can lead to underachievement.

Discussion Topics #2 through #4

Topics 2 and 3 asked the respondents to discuss the pressures that the student feels from her peers and her family. All respondents agreed that peer pressure was an issue for the African American gifted girl. The respondents in Focus Group 1 believed that the girls were able to successfully combat issues of peer pressure by creating a subgroup of friends that they associated with on a daily basis. The girls tended to hang out with girls who they were in classes with, and who were like themselves. This subgroup helped to insulate the girl and provided mutual support when they were confronted with peer pressure from those who were not like them.

Many of the respondents also felt that the African American gifted girl was protected because of the group structure of the school. The schools use the team structure, where students were assigned to a team. The team was developed using different strategies, from ability grouping to random grouping, depending on the school. Students on a team travel from class to class with each other all day. There were five North Georgia school districts, one private school, and one independent charter school represented at each of the focus group sessions. All except the independent charter school used the team method. The gifted students were grouped together in all the schools represented in both focus groups. The respondents agreed that because of the group structure in place, while peer pressure was an issue, it was not a major one for African American gifted girls.

Family pressure was seen by the respondents to be very important, and potentially destructive. Respondent two from Focus Group 2 stated that "...for me, the biggest issue from a girl's perspective is the pressure that they feel from home." The family of the gifted girl can and does add to the pressure on the girl. The girl wants to do well to please her parents or guardians instead of herself. Respondent two stated:

There are often times when that child does express her feelings of insufficiency because the parents have these super high expectations for the girl because she is gifted and they're not very sensitive to the fact the being gifted may not be content-specific.

Family pressure can take many forms, including competition with siblings or other family members, and attempting to please parents or guardians with academic success. The respondents in Focus Group 2 believed that the pressure on the gifted girl is internal in some cases. The girl wants her parents, friends, and peers to be proud of her and to know that she is successful.

Therefore, she places pressure on herself to be the best in school. One of the characteristics of the gifted child is the need for validation.

The self-perception of the gifted girl is an important issue. Does the gifted African American girl express negative or positive feelings about herself, and how does this self-perception manifest itself in mathematics and science classes? The group was asked to discuss this topic from the teacher's perspective. The minority-gifted girl's identity is often developed outside the school. The student's relationship with the parents can play a huge role in how the girl perceives herself, especially in mathematics and science classes. If the parent(s) tell the gifted girl about their own lack of ability in mathematics and science, the gifted girl may internalize that and assume that she cannot succeed in these areas. The gifted girl needs validation from her parents in order to feel good about herself and her abilities inside the classroom. The respondents stated that lack of validation can lead to the girl becoming uninterested in the subjects. This leads to the minority-gifted girl not choosing a career that involves mathematics and science.

Discussion Topic #5

Discussion Topic 5 asked the educators to discuss the teacher-student relationship with the African American gifted girl specifically from the academic point of view. The respondents agreed that having a relationship with the gifted girl was a vital component of success. The respondents contended that having a positive relationship with the gifted girl could influence her behavior, academic progress, and future career choices. The respondents thought that relationships with the students could assist in counteracting some of the factors that can lead to underachievement by African American gifted girls. Respondent 6 of Focus Group 1 stated:

They have a desire to establish that relationship...I think there's a special bond that occurs because I'm like them so they actually can see you're African American and you're good at this. You've been through these struggles at some point because you couldn't become a teacher in this area if you were successful in this area throughout both secondary and postsecondary school.

Respondent 7 of Focus Group 1 noted:

I push the African American girls. I'm very hard on them because I feel like I've experienced some of the things that they're going to encounter as far as when they get ready to go to college. They'll go ahead and pursue other avenues farther than college.

Respondent 1 in Focus Group 1 described how:

They would come to me and I would really emphasize because of my experience as a woman in science was that I was one of the few in science. I was almost always the only woman in the lab and I was certainly given the crappier jobs....So I embraced that and I would whisper things like that to my girls, girls make the best scientists. Every single girl in my science classes has heard that and I whisper it to them because I wanted them to think that was a message just for them, not even for all girls but just for them.

Respondent 4 of Focus Group 2 said, "It's very important for them to build that relationship, to have that connection...so that they can get comfortable and come to you and question you because they love to question you on things". Respondent 5 of Focus Group 2 responded:

I'm looking at it as sometimes, this is the only true and positive role model that the girls might possibly have... Some of them are not even exposed to half of the things that we

expose them to because even in my classroom, we share [information] sometimes. We share different things because I tell them that Math class is about more than just Math.

An interesting development was the difference in perceptions about the importance of the relationship between the student and teacher between male and female educators. All of the female educators contended that the student/teacher relationship with gifted minority girls is vitally important in academic success in the classroom now and for the future. The male teachers did not share this view. The two male teachers contended that the girls were “needy” and “want your approval at each step”. The female teachers took a nurturing attitude towards gifted female students, whereas the men did not see the need for it.

The teachers felt that teachers’ standards should be set high for these students, especially in mathematics and science classes. The teachers felt that their own personal experience during their early school years had led them to push their current female students in mathematics and science classes. Respondent 5 of Focus Group 1 replied:

Going through elementary school, during the 60’s with the whole tracking and being discouraged as a minority, even though we were tracked, I was personally tracked in some of the higher classes. You still weren’t given that whisper in the ear and that encouragement from school. I had a strong foundation at home but it would have been nice to have that matched at school.

The teachers believed that by nurturing gifted African American girls their underachievement will lessen. The respondents also contended that these girls needed to see positive role models in the areas of mathematics and science so that they would know that having a career involving these subjects was attainable.

Discussion Topics #6 and #7

The respondents were asked to discuss possible ideas, academic and non-academic, that might counteract some of the factors affecting gifted girls of color. The respondents were also asked to discuss what they thought might cause the gifted girl to underachieve beyond the established factors. The respondents were further asked to pick three areas that could lead to success for gifted girls of color and three areas that could lead to failure.

There are intrinsic and extrinsic factors when it comes to success or failure inside the classroom. The gifted girl faces many barriers to success, including peer pressure, family pressure, stereotyping, and discrimination. However, the gifted girl is still expected to succeed inside and outside the classroom. The respondents of both focus groups contended that there was not one single remedy for the problem of underachievement. The respondents believed that because each girl is different, the answer might lie within each girl. Respondent 6 of Focus Group 1 responded, "I am not certain what causes them to excel or fail. I really do think for kids, especially high school maybe in middle school, it's about their group, the school culture, and the environment they can create at school."

Many of the respondents in Focus Group 1 agreed that the subgroup of the gifted minority girl is an area that should be considered. Because the majority of the respondents teach in a middle school that uses the team approach, many saw that the girls in their classes created their own subgroup. This subgroup is the group of friends that the gifted girl is with for much of the day during school. The gifted girl surrounds herself with students who are like her, in the sense that all members of the group are gifted as well. Within the group, there may be healthy competition. The girls may also receive the validation they need to sustain them during the

school day. The subgroup of the African American gifted girl may provide the girl with the motivation to succeed in mathematics and science.

The respondents agreed that the teacher needs to be a positive role model inside the classroom for these girls, regardless of race or gender. The student-teacher relationship is significant in the life of the gifted female of color. This relationship should be nurtured and allowed to mature to the advantage of the girl. The advantage of the relationship is that the gifted girl has a mentor, someone to aspire to become like. Another advantage of a positive student-teacher relationship is that it can help the girl resist peer pressure. This relationship can help build the self-esteem and character of the gifted girl as well.

These girls need to see adults pursuing careers that involve mathematics and science. The girls also need to be able to equate the work they are doing in the classroom with “real world” examples. The girls need to understand that mathematics and science affect various facets of their everyday lives. Understanding how they can play a role in the development of the future through mathematics and science may capture their interest in pursuing a career in mathematics and science, and positively affect their success in school. Respondent 6 of Focus Group 1 said:

I really push all of my students and I let them know that regardless of what your aspirations are for a career, in most cases, success in math and science is going to help you there faster or make more money while you do it....Math is important not just so you know how to solve a quadratic equation but it's the logic that you go through as in addressing a problem and getting a solution that you will use across any career.

The respondents agreed that inside the classroom teachers should make learning of mathematics and science relevant, and that any interest seen should be encouraged. The lessons

should be interactive and engaging. Differentiated instruction is key towards teaching in the gifted classroom. It allows students to be met where they are and taken to the next level. Using differentiated instruction along with the kinesthetic or “hands on” approach is beneficial to all students. The respondents agreed that the teacher should strive to create an experience within the mathematics and science classroom.

The respondents were asked to rank the top three concepts that they individually believed could lead to the success or failure of the African American gifted girl in mathematics and science classrooms. Nine of 12 (75%) respondents ranked peer pressure as the number one reason for minority gifted girl failure in mathematics and science classes. Seven of 12 (58%) ranked low self-esteem as the number two factor in underachievement. Six of 12 (50%) ranked parental involvement or non-involvement as the number three factor in underachievement. 10 of 12 (83%) respondents ranked the student-teacher relationship as the number one factor of success for the African American gifted girl. Eight of 12 (63%) respondents ranked a positive subgroup as the number two factor for success, and seven of 12 (58%) respondents ranked school culture as the number three factor of success for the gifted girl of color.

Summary

The purpose of this study was to determine whether the teachers of gifted minority girls understand the factors that can lead to the underachievement of African American gifted girls and how these factors can affect the girl in mathematics and science classes. The study also proposed to discover possible solutions in order to assist these students in being more successful in the classroom, and in choosing careers that involve mathematics and science. The themes developed included (a) finding balance through a gifted girl subgroup or subculture with other gifted students, (b) parental involvement or non-involvement, (c) the importance of the student-

teacher relationship, and (d) creating an environment. Chapter 5 will address the conclusions and recommendations gleaned from the study, and discuss implications they may have for the educators of the gifted and for school, county, and district administrators.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

The purpose of this descriptive qualitative study was to explore the perceptions of teachers of gifted students with regard to the factors that can lead to underachievement. This study specifically studied teachers' perceptions of African American gifted girls and their achievement or underachievement in mathematics and science classes as seen by their teachers. The study also proposed to discover potential solutions to the underachievement of this population of students. A focus group methodology was used to collect the data. A skilled and qualified moderator followed the focus group discussion guide (see Appendix E). The focus groups had 12 respondents in total (seven in focus group #1 and five in focus group #2) who participated in discussions over the course of a month in North Georgia. The data analysis methodology was aligned with the research questions, the literature review, and the study objectives.

The objectives of the study were twofold. First, the study sought to determine whether teachers of African American gifted girls were aware of the factors that could lead to underachievement. Second, to discover what techniques, programs, classroom procedures were being implemented to counteract the underachievement. The intent was to discover any themes and patterns that might assist gifted education teachers, school, county, and district leaders in providing professional development to the teachers, providing the students with better opportunities, and give new insight and knowledge about a little-studied group of students. Chapter 5 contains an overview of the study, interpretations of the emergent themes, implications, and conclusions from the results, and recommendations and suggestions about future research on the topic.

Overview of the Study

This study examined the perceptions of gifted education teachers about African American gifted girls and their achievement or underachievement in mathematics and sciences classes in a middle school setting. Moore, Ford, and Milner (2005) contend that educators, counselors, and administrators are troubled about the reality that many young black and gifted students are underachieving in schools across the country. Many factors can lead to underachievement by African American students (Ford & Thomas, 1997; Ford & Grantham, 1998; Moore, Ford, & Milner, 2005; Ford, Grantham, & Whiting, 2008). The research on underachievement is centered on the minority student in general or on males (Moore et al., 2005). The African American gifted girl is often overshadowed or overlooked in the analysis of underachievement.

The literature suggests that girls, in general, have a vastly different experience at school than boys. However when the issue of race is brought into the equation, the research is minimal. African American gifted girls have not been studied as a group. These girls are often living invisible lives inside classrooms each day (Smutney, 1999). They face a very difficult situation. They are asked to contend with racial issues, the desire to liked, having friends who are different from themselves, peer pressure, parental pressure, the idea of being perfect, and internal issues of self-efficacy and self-esteem, to name just a few.

These girls have abilities that push them ahead academically and socially, yet currently schools are ill equipped to support them (Reis, 2003; Smutney, 1999). Schools often fail to provide gifted students with the support they need to enhance learning (Bainbridge, 2007; Chandler, 2004; Ellet, 2004). The research suggests that gifted girls make up half of the gifted population in programs across the country. The research also contends that these girls do not go on to have high-powered careers or careers that involve mathematics and science (Nelson &

Smith, 2001; Heilbronner, 2009). The problem is that there is a lack of awareness of the factors that can lead to underachievement by gifted black girls in mathematics and science classes. The lack of awareness of these factors by gifted education teachers can lead to underachievement by African-African gifted girls. Understanding the factors that affect underachievement can lead to corrective measures in a myriad of ways, including new teaching strategies for gifted minority students, curriculum redesign, and professional development opportunities for teachers of gifted students.

The purpose of this study was to discover themes with regard to factors of underachievement by African American gifted girls, specifically in the subjects of mathematics and science classes. The study was limited to middle school teachers of gifted students in the subjects of mathematics and science. Gifted education teachers were selected based on personal invitations and nominations from other gifted education colleagues. A focus group allowed for a large amount of data to be collected at one time. The study adhered to moral and ethical principles and was based on an atmosphere of mutual respect and non-coercion. The participants were aware of their rights to privacy and confidentiality. The study was validated by an independent group of gifted teachers who reviewed the data to assist in the development of the themes that emerged from the study.

The next section presents the conclusions drawn from the literature, data analysis and study group. The theme interpretation, evaluation, and conclusions of the study will be important for educational leaders in terms of understanding the unique factors of achievement for African American gifted girls. This study could be meaningful to school, county, and state administrators who influence policy in gifted education. The study may also be meaningful for

teachers of gifted education, and help them provide adequate support and differentiated instruction for minority-gifted girls.

Interpretation of the Emergent Themes

The purpose of this descriptive qualitative study was to discover teacher perceptions of the factors that can lead to underachievement by African American gifted girls in middle school mathematics and science classrooms. The study also attempted to discover if teachers knew of ways to counteract this underachievement and were actively practicing these techniques in the classroom. To aid in the development of the emergent themes, an independent group of gifted teachers, who were not a part of the focus groups, was selected by the researcher. The three teachers selected have 20 years of experience between them. Each teaches in a different school system in North Georgia and has taught in gifted education for a minimum of three years.

The independent group was asked to look for emergent themes by reviewing the transcripts of teacher responses from the focus groups. The group met together to compare themes. The group submitted the themes to the researcher for inclusion in the study. The independent group data, observation notes, and focus group data were triangulated and analyzed together. Several dominant themes emerged in the study: (a) a gifted girl subgroup to achieve school/life balance, (b) parental involvement, (c) the importance of the student/teacher relationship, and (d) creating an environment for learning.

Subculture or Group of Other Gifted Student and Life Balance

One theme that emerged was that the gifted minority girl tended to find a group of girls and boys within the gifted community to befriend. The respondents indicated the gifted girl surrounds herself with others who are like her. The girl and her friends create their own culture at school and are able to shelter themselves from peer pressure and sometimes from parental

pressure. This group of friends becomes vitally important in the life of the gifted girls. These friends are the ones who help defend her from others and help lift her self-esteem should it become an issue. This group of friends is going through the same life stage and helps the gifted girl navigate through it.

This subculture becomes a comfortable “place” where the gifted black girl feels that she can be herself. Within the framework of the group, the gifted girl is valued and feels relief at being able to be a “regular” girl. This group of friends pushes the gifted girl to succeed by providing competition and comfort because the group members are all gifted themselves. One respondent replied, “They [the subgroup] strengthen and encourage each other too”. Rakow (2005) contends that the gifted girl is:

...developing meaningful interpersonal relationships, physical comfort with their own changing bodies and evolving sexuality, a personal and social value system, psychologically healthy self-esteem and identity, and increasing independence from and in their families. (p. 2)

The black gifted girl subgroup assists each other through this process. The literature supports this claim, as the gifted girl has many unique factors that can hinder achievement including issues of self-esteem, oversensitivity, and perfectionism.

Finding balance is a part of the development of the subgroup or subculture that is so important to the gifted minority girl. This balance is achieved in many different ways. The respondents concluded that balance is an essential part of the academic success or failure of many girls. For many gifted students, minority girls in particular, middle school is the first time that school is difficult (Rakow, 2005). Middle school becomes more of a challenge and having a balance at both school and home becomes significant. The girls need time to be a girl, time to be

with friends, time to be with family, and time to be a student. The focus group respondents suggest that underachievement can happen when the girl begins to feel overwhelmed by her own life. This can and often does include internal pressure and pressure from friends and family. Balance includes providing the gifted girl with many opportunities outside of her world. Giving the gifted girl experiences that can enhance her knowledge provides her with the ability to balance her life.

Parental Over-Involvement or Non-Involvement

Half of the respondents agreed that parent involvement is an important issue for the minority-gifted girl in terms of underachievement. Six of 12 (50%) ranked parental involvement or non-involvement as the number three factor in underachievement. All respondents acknowledged that raising a gifted child can be challenging, especially if the parents are not themselves gifted and have no knowledge of what being gifted means for the student. Parental influence is one of the established factors of underachievement for the gifted girl. Rakow (2005) contends that during the middle school years the relationship between the gifted girl and her parents changes. This development can be especially troubling for the girl. The parents are still the primary influence. However, they are vying with the gifted girls' peers. The influence begins quite early for the gifted minority girl and often stems from the mother. The mother may reinforce stereotypical roles of women for the girl that can have dire effects on her future choices (Reis, 2001). These stereotypical behaviors can be contradictory for the gifted girl. Minority girls raised with mothers who work or are career-oriented have less conflict about career-choice or being an independent woman (Reis).

Parental influence extends beyond the home and into the school, as the gifted minority girl often has undue pressure placed on her by the parent(s). The pressure to succeed, to

perform, to be the best can become too much to bear for the gifted girl of color. The gifted girl becomes disinterested in her gifts and talents. The girl may decide to leave the gifted program or begins to underachieve in class. Holmes (2002) suggests that parental involvement can lead to increased pressure for the gifted girl and can lead to underachievement.

Parents who push the girl into more gifted activities (i.e. clubs, other classes) may feel that they are helping the student to maximize her potential when, in essence, it makes the student feel pressure to be good or perfect all the time. The respondents believe that the girl attempts to be “perfect” to impress her parent(s). The girl may feel that she cannot ask her parent for help because she is supposed to know the answer. The expectations for the girl are so high that she feels that she must hide the fact that she may need help. The familial support may increase the anxiety felt by the girl, increase the pressure to be perfect, and increase fear of success by the minority gifted girl (Holmes, 2002).

The struggle is getting, keeping, and holding parents’ attention for those girls whose parents are not involved. Parents may feel that the gifted child does not need them. All that is expected of her can overwhelm the girl and she may shut down. The respondents felt that parents place a high value on the academic achievement of the gifted girl, and are unprepared to deal with failure. The gifted girl internalizes this information and does all she can to not fail.

The Importance of the Student-Teacher Relationship

During the school years, teachers spend as much time with students as their parents do (Rolnicki, 1998). A consequence of this fact is that many teachers form important relationships with minority gifted girls. The consensus from both of the focus groups was that the student-teacher relationship is an important factor in helping African American gifted girls become successful in mathematics and science classes. The educators believed that in some cases the

teacher is the only positive role model available to the girls. The middle school years provide the student with many new opportunities, and it is the teacher who can present these new opportunities to the students. The teacher should be sure to not limit the student's exposure or enthusiasm (Rakow, 2005; Gavin & Reis, 2003).

In the areas of mathematics and science, the respondents discussed the issue of perceived male dominance, and stereotypes about women and mathematics. The respondents stated that these preconceived notions and often-unconscious thoughts need to be understood and overcome in order for the gifted girl to achieve in the mathematics and science classroom. Peers, parents, or teachers may hold these stereotypes. Gavin and Reis (2003) suggest that "stereotypes influence perceptions and performance in school and in life and are often cited as contributing to girls' problems in math and related fields such as technology"(p.149). The women respondents felt that just their presence inside the classroom was a good first step towards putting a dent in the stereotypes and preconceived notions that the gifted girl might have about these subjects. The relationship with the student gives the educator the opportunity to plant seeds that may grow into interest in careers that involve mathematics and science. Support and encouragement from the teachers is needed in order for the minority girl with gifts to become more comfortable in mathematics and science classes (Gavin & Reis; Reis & Graham, 2005). The respondents believed that they have the opportunity to expose the gifted girl to a multitude of areas involving mathematics and science because of the relationship with the student. The gifted girl is more likely to listen to someone who is considered a mentor. Jones (2007) contends that teachers who demonstrate a sense of caring and had a relationship of mutual respect with the girls had more positive results in terms of academic achievement, particularly in science classes. "Teachers had a profound ability to influence African American [girls] to high level of achievement in science

with positive interaction and modeling behaviors” (Jones). Reis and Graham (2005) contend that gifted girls need female role models and mentors in mathematics and science classes.

The student-teacher relationship is seen as pivotal in terms of success for the gifted girl. Respondent 1 from Focus Group 2 said, “success depends on how much that teacher can engage that child to help them perform on a gifted level.” The teacher can make all the difference for the African American gifted girl by establishing a relationship that allows the gifted girl to express herself, tell of her fears, establish acceptable boundaries, and talk about her dreams and to seek advice. The respondents suggest that parents may not understand the child’s giftedness, and that this may cause stress in the parent-child relationship that does not exist in the teacher-student relationship. Gavin and Reis (2003) contend that teachers should make a point with parents of supporting the minority-gifted girl’s abilities and talents in mathematics and science.

Creating a Positive Environment

When confronted with the question of how to capture and retain the interest of African American gifted girls in mathematics and science classes, the respondents said that creating a positive environment was a first step in that endeavor. Creating a positive environment included a safe classroom, where students knew the class expectations, respected each other, were free express themselves, and were given projects and other “hands on” opportunities to drive the content home. Gavin and Reis (2003) argue that teachers should provide a classroom environment that will nurture and develop mathematical and scientific abilities, and assist the gifted girl in gaining confidence in her abilities. The respondents suggested that creating a positive environment helps the gifted student make the connection between the concept and how it could be used in a “real world” situation. When the student is able to make this connection, interest may be sparked, and if that interest is kindled in the classroom, it may be sustained

enough so that the girl pursues a career that involves mathematics and science. Teachers can create a positive environment by encouraging any interest seen from the minority-gifted girl and providing opportunities to make “real world” connections (Heilbronner, 2009).

The focus group respondents concurred, saying that creating a positive environment includes providing the students with exposure to people, organizations, and programs outside school that involve mathematics and science. Creating “real world” experiences inside the classroom is another concept the respondent agreed kept the minority gifted girls interested in mathematics and science. The respondent contended that making the connections, having the exposure, and creating a positive environment would allow the African American gifted girl to be well prepared for a career involving mathematics and science. The respondents believe that the African American gifted girl needs an environment that is conducive to her interests and nurtures her on both a personal and academic level. Reis and Graham (2005) contend that when the teacher creates a creative environment, girls feel nurtured and supported, especially in the areas of mathematics and science.

Other Findings

During the focus group discussions many interesting and thought-provoking concepts were discussed with regard to gifted education in general that merit some discussion and consideration here. The respondents of Focus Group 1 felt that society, as a whole does not value mathematics and science. Respondent 1 contended that:

“We really don’t value math and science. We value what we *get* from math and science in terms of our iPods and our hybrid cars and this and that. We don’t value mathematicians and scientists regardless of their ethnicity or their gender. We don’t have

a coin that has a scientist or a mathematician on it. We don't have a day that's devoted to Einstein or Banneker, either one.”

The other members of the focus group concurred with this statement, and believed that this sentiment is seen throughout the United States. The focus group participants contend that how the country really “feels” about math and science is seen everyday inside their classrooms. The children, the participants, believe are representatives of the adults that are running companies and making decisions that affect education and industry.

The respondents of Focus Group 2 felt that math or science anxiety was something that should be taken seriously at the elementary level, where the teacher is expected to teach every subject and might not feel comfortable with mathematics and science. A recent study by Beilock, Gunderson, Ramirez, and Levine (2010) contends that female teachers may pass on math anxiety to female students. The study found that when the female teacher feels anxiety about math, it has negative consequences for the female students in her classroom. The respondents in this study felt that teachers in middle school and high school should be considered specialists in mathematics and science. The respondents also felt that teachers spent a disproportionate amount of time undoing some mathematics and science errors or concepts that were taught to the students in elementary school. The respondents of both focus groups, mainly the science teachers, felt that there was a general lack of enthusiasm felt in their classes.

Recommendations

The four prevalent themes address the teachers' perception of potential solutions to the problem of African American gifted girl underachievement. Based on the study findings, literature review, and related research the following recommendations for teachers and principals, parents and for future research can help improve the achievement levels of the

African American gifted girl in mathematics and science classes. These recommendations are a first step towards leading the African American gifted girl into improving in mathematics and science classes and in choosing a future career that involves mathematics and science.

Recommendations for Teachers of Gifted and School Administrators

In order for the African American gifted girl to prosper in academics, the parents need a keen understanding of gifted education. This education includes a definition of giftedness and how giftedness may manifest itself in individual students. This understanding is needed so that parents can provide assist to the girl in all ways. Understand that the girl may not be gifted in all subjects and that she may need help in some subjects. The parent should not make the girl feel insecure or that she cannot ask for help. Girls feeling that they have to be perfect leads to feelings of insecurities and fear and can lead to underachievement.

Teachers and school leadership should assume personal responsibility to encourage the girls in mathematics and science classes. Gavin and Reis (2003) and Reis and Graham (2005) contend that adolescent girls often receive mixed messages from their peer group, parents, and teachers. To counteract the mixed message the school should have one message for all students and teachers that have bought into the message. The teachers should encourage the young black gifted girl and help them to believe that they have potential to be exceptional in the areas of mathematics and science classes. The girls should also be encouraged to continue to pursue mathematics and science studies in high school and beyond. The school leadership and teachers of the gifted should attempt to provide the gifted girl with color with opportunities to enhance mathematics and science knowledge through outside activities. This can mean partnering with local businesses to provide opportunities, having speakers come to the school to present information to the girls, having a career or STEM (Science, Technology, Engineering, and

Mathematics) day where students are introduced to women in science and mathematics. These opportunities can foster new interest or renew interest in mathematics and science classes for the African American gifted girl.

The teacher should create an environment for and have a classroom atmosphere that is comforting and comfortable for the girls. Minority adolescent girls need feel that they have a place where they feel nurtured and loved, where they can express themselves without censure and discuss ideas. The classroom should also be one where creativity and imagination live. This requires that the teacher spend time getting to know the girls then building activities around specific interests. Heilbronner (2009) contends that encouraging interest and then building on it can spark long-term curiosity that may lead to career aspirations.

The focus group participants and research support the recommendation to provide female role models for the minority-gifted girl specifically in the areas of mathematics and science classes. The respondents of the study contend that they are the role models for the African American gifted girls. Heilbronner (2009), Reis and Graham (2005) and Gavin and Reis (2003) all contend that showing girls, women who have succeed in careers that involve mathematics and science provides the girls with more opportunity to realize the benefits of having a career in those areas. The role models represent hope for the girl. Providing positive role models or mentors for the African American gifted girl offers a unique vision of what the future could look like, “motivates them academically to do more, and shows them new avenues”(Heilbronner, 2009,p. 50).

Teachers should continue to grow their knowledge in the gifted education world. School administration should make professional development for the teachers of gifted students a priority. The focus group respondents in the study felt that professional development was often

left to the school administrator with little thought to the gifted education teachers. Gifted education must be a priority for school leadership. The teachers can then become effective advocates for gifted students in general, African American gifted girls specifically. Henfield, Moore and Wood (2008) contends that principals should provide professional development opportunities so that educators can become consciously aware of the “actions and inaction” (p 447) of the African American gifted student. Principals should provide professional development because it will increase teacher understanding of the experiences of the gifted minority student inside the classroom.

Curriculum development within the gifted community that involves cultural and gender diversity should be considered and developed. Gavin and Reis (2003) speculate that much of the gifted curriculum in the areas of mathematics and science has a strong male influence. The vocabulary used in the books and other material relate to *mastery* or *dominance* over rather than the *internalization* of the material. Teachers should look at strategies to revamp the curriculum or use different examples to highlight the materials that will allow girls the opportunity for intrinsic understanding. The curriculum should provide a challenge for the girls and the teacher should encourage the girls to attempt to navigate through the curriculum (Gavin & Reis, 2003). Having a challenging curriculum gives the gifted minority girl the opportunity to explore and challenge herself in other areas. The curriculum should provide the girl with new opportunities for growth within the areas of mathematics and science.

Recommendations for Future Research

The issues facing the gifted girls have been researched and studied (Reis, 2001, 2002, 2003). The issues facing the gifted black student have also been researched and studied (Ford, 2005; Ford & Harris, 1994; Ford, Grantham, & Whiting, 2008). When the issue of gender is

brought together with race, the research is sparse. African American gifted girls in general are an under researched area (Ford et al. 2008; Henfield & Witherspoon, 2006; Stormont, Stebbins, & Holliday, 2001). Leta Stetter Hollingworth and Lewis Terman began the journey of gifted education in the 1920s. The journey has led to continued growth in understanding the gifted mind and how to teach the gifted student. The Jacob Javits Law helps to fund gifted programs around the United States. The Jacob Javits Law helps the United States in maintaining the quest for the country's most bright and best. In our quest to continue the journey of excellence, specifically in the areas of mathematics and science classes and African American gifted girls, researchers may want to consider exploring the following areas:

1. Repeating the study in a different state to investigate trends of underachievement.
2. Duplicate the study using high school mathematics and science teachers to investigate any trends.
3. Conduct a study that explores the attitudes of gifted black girls about mathematics and science classes in a middle school setting.
4. Conduct a study exploring parental perceptions of African American gifted girl achievement in mathematics and science.
5. Conduct a study exploring school principal perception of African American gifted girl achievement in mathematics and science.

In conclusion, the African American gifted girl has many talents to offer to society. The gifted African American girl believes that her talents lie in areas other than mathematics and science. Ford and Thomas (1997) have highlighted the struggle of educators, parents, and school leader's face when gifted girls fail to perform up to the level of their own potential. This study examined the underachievement of the African American gifted girl in mathematics and science

classes from the perceptions of the teachers. Future research is needed so that this population of students is not forgotten or forsaken. Research on the African American gifted girl must be conducted. These girls are living invisible lives inside the classroom of America. It is time that we allow the talents of the young, gifted, black girl to shine. The time has come to change the course of gifted education and of gifted learners in schools today. In order to do that we must first educate, then act. It is the job of parents, teachers, and administrators gives these students prime opportunities to develop and grow into strong productive citizens. The African American gifted girl has talents and abilities that will be useful to the world, however these girls need the opportunity to nurture and explore them.

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APPENDIX A: INFORMED CONSENT-PARTICIPANTS

INFORMED CONSENT

Dear Middle School Educator of gifted African- American students of the DeKalb County School District,

My name is Natoshia Whaley Anderson and I am a student at the University of Phoenix working on a Doctorate degree in Educational Leadership. I am conducting a research study entitled “An Analysis of Gifted African American Middle School Girls’ Achievement in Mathematics and Science Classes”. The purpose of the research study is to discover the teacher perceptions about the factors that are affecting minority gifted girls achievement in mathematics and science classes in a middle school setting.

Your participation will involve answering a demographic survey and active participation in a focus group comprised of other gifted certified educators. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you can do so without penalty or loss of benefit to yourself. The results of the research study may be published but your identity will remain confidential and your name will not be disclosed to any outside party.

In this research, there are no foreseeable risks to you.

Although there may be no direct benefit to you, your participation can lead to invaluable knowledge about the African American gifted girl achievement in mathematics and science classes. This knowledge may lead to the development of a better curriculum for all gifted students. Educational leadership may be able to use the knowledge gained from this study to provide better and more effective professional development opportunities for teachers of gifted students. The teacher of gifted students may also discover alternative strategies to reach the students.

If you have any questions concerning the research study, please call me at 770-778-3423 and email natoshiaanderson@bellsouth.net or Natoshia@email.phoenix.edu.

As a participant in this study, you should understand the following:

1. You may decline to participate or withdraw from participation at any time without consequences.
2. Your identity will be kept anonymous.
3. Natoshia Whaley Anderson, the researcher, has thoroughly explained the parameters of the research study and all of my questions and concerns have been addressed.
4. If the interviews are recorded, you must grant permission for the researcher, Natoshia Whaley Anderson to digitally record the interview. You understand that the information from the recorded interviews may be transcribed. The researcher will structure a coding process to assure that anonymity of your name is protected.

5. Data will be stored in a secure and locked area. The data will be held for a period of three years, and then destroyed.

“By signing this form you acknowledge that you understand the nature of the study, the potential risks to you as a participant, and the means by which your identity will be kept confidential. Your signature on this form also indicates that you are 18 years old or older and that you give your permission to voluntarily serve as a participant in the study described.”

Signature of the interviewee _____ Date

Signature of the researcher _____ Date

APPENDIX B: INFORMED CONSENT-NOTETAKER/VIDEOGRAPHER

INFORMED CONSENT

Dear Note Taker,

My name is Natoshia Whaley Anderson and I am a student at the University of Phoenix working on a Doctorate degree in Educational Leadership. I am conducting a research study entitled “An Analysis of Gifted African American Middle School Girls’ Achievement in Mathematics and Science Classes”. The purpose of the research study is to discover the teacher perceptions about the factors that are affecting minority gifted girls achievement in mathematics and science classes in a middle school setting.

Your participation in this study will involve taking notes during one or two focus group sessions. You will assist in discovering teacher perceptions of the factors that can lead to the underachievement of gifted black girls through a variety of note taking styles. Your responsibility is to provide the participants with confidentiality and reliability. While taking notes, you will use the fictitious names provided each participant to maintain their confidentiality. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, you can do so without penalty or loss of benefit to yourself; however you must maintain the confidentiality of the research study participants. The results of the research study may be published but your identity will remain confidential and your notes will be used to create qualitative data for the research study.

In this research, there are no foreseeable risks to you.

If you have any questions concerning the research study, please call me at 770-778-3423 or 770-484-6921 and email natoshiaanderson@bellsouth.net or Natoshia@email.phoenix.edu.

“By signing this form you acknowledge that you understand the nature of the study, the potential risks to you as a participant, and the means by which your identity will be kept confidential. Your signature on this form also indicates that you are 18 years old or older and that you give your permission to voluntarily serve as a participant in the study described.”

Signature of the interviewee _____ Date

Signature of the researcher _____ Date

APPENDIX C: FOCUS GROUP INVITATION

Dear _____,

I am Natoshia Whaley Anderson, a student at the University of Phoenix pursuing a doctoral degree in Educational Leadership. I am studying teacher perceptions of African American gifted girls' achievement in mathematics and science classes.

I would like to invite you to attend two focus group sessions about African American gifted girls on:

Focus Group #1

Date: **Saturday, February 6, 2010**

Time: **10 am to 12 pm**

Where: **DeKalb Technical College, Room A 207
495 North Indian Creek Drive, Clarkston, GA 30021**

Focus Group #2

Date: **Saturday, February 20, 2010**

Time: **10 am to 12 pm**

Where: **DeKalb Technical College, A 207
495 North Indian Creek Drive, Clarkston, GA 30021**

The two-hour focus group session will include 10-15 mathematics and science teachers who are currently or have taught gifted students, and will be facilitated by Latoshia Whaley, Med. Latoshia Whaley is a teacher of the gifted with 13 years of experience. The focus group will be video and audio-taped; however, no participants will be publicly identified in the focus group report. There are two focus group sessions planned to ensure saturation of data for the study. Based on your classroom experiences, you will be asked questions encouraging you to reflect and speak on your experiences with African American gifted girls without any bias or prejudice from the researcher. There are no potential emotional, psychological, physical, or social risks likely to occur to you from participating in this study.

A light continental breakfast will be provided at 9:30 am. I have enclosed a map to DeKalb Technical College, along with information about parking. If you have any specific needs related to your participation, please let me know so we can accommodate them. You can call or email Natoshia Whaley Anderson at 770-778-3423,

natoshiaanderson@bellsouth.net to confirm your participation, or to request additional information. I appreciate your consideration of this request, and look forward to hearing from you soon.

_____ Yes, I will participate in the gifted education focus group sessions.

_____ No, I will not participate in the gifted education focus group sessions.

Print Name _____

Sign Name _____

Email Address _____

Phone Number _____

Researcher Signature

Natoshia Whaley Anderson

APPENDIX D: PREMISSSION TO USE THE PREMISES

UNIVERSITY OF PHOENIX
PERMISSION TO USE PREMISES,
DEKALB TECHNICAL COLLEGE

DeKalb Technical College

Name of Facility, Organization, University, Institution, or Association

Check any that apply:

I hereby authorize Natoshia Whaley Anderson, student of University of Phoenix, to use the premises (facility identified below) to conduct a study entitled "*Teacher Perceptions of African-American Gifted Girls' Achievement in Mathematics and Science Classes.*"

I hereby authorize _____, student of University of Phoenix, to recruit subjects for participation in a _____ study entitled (insert title of research study or a brief description of research study).

I hereby authorize Natoshia Whaley Anderson, student of University of Phoenix, to use the name of the facility, organization, university, institution, or association identified above when publishing results from the study entitled "*Teacher Perceptions of African-American Gifted Girls' Achievement in Mathematics and Science Classes.*"


Signature

2-10-2010
Date

Dr. Tonya Gorman
Name

Vice President of Academic Affairs, DeKalb Technical College
Title

DeKalb Technical College
495 North Indian Creek Drive
Clarkston, GA 30021

APPENDIX E: FOCUS GROUP DEMOGRAPHIC SURVEY

Survey for Gifted Teachers**Demographic and Background Information**

1. What is your gender?
 - a. Male
 - b. Female
2. What is your ethnic or cultural background
 - a. White, Non-Hispanic
 - b. Latino/a or Hispanic
 - c. Asian or Pacific Islander
 - d. African American or Black
 - e. Other _____
3. What is your age?
 - a. 21-30
 - b. 31-40
 - c. 41-50
 - d. 51-60
 - e. 60+
4. What grade level are you currently teaching?
 - a. 6th grade
 - b. 7th grade
 - c. 8th grade
5. How many years have you been an educator?
 - a. 1-2
 - b. 3-5
 - c. 6-10
 - d. 11-15
 - e. 16-20
 - f. 20+
6. How many years have you taught gifted classes?
 - a. 1-2
 - b. 3-5
 - c. 6-10
 - d. 11-15
 - e. 16-20
 - f. 20+
7. Have you had diversity training?
 - a. Yes

b. No

Name _____ School _____

APPENDIX F: FOCUS GROUP PROTOCOL SHEET

Focus Group Protocol

Qualitative Analysis of Teacher Perceptions of African American Gifted Girls
Achievement in Mathematics and Science Classes

Moderator:	Date:	Site:
# of Participants:	Session #:	
Note-takers:	Researcher:	

Focus Group Phases

Phase One: Greeting and Introduction- 5 to 7 minutes

- ✓ Purpose: Welcome participants and express appreciation
- ✓ Introductory Remarks:

Thank you for taking the time to come together for this focus group discussion with me today. This discussion will probably take about 90 minutes to complete. As I mentioned to you before, we're doing this focus group with teachers of gifted students, particularly those teachers who have had direct interaction with African American gifted girls. The information from your discussion will be pulled together and used to inform district and school administration, staff and participants about issue concerning this group of students and to improve the professional development and support provided by the research.

The information you share today will be used for this purpose only. You will not be identified by name or recognizable in any way in the report I prepare. If, for any reason, you don't feel comfortable sharing something with the whole group, please feel free to contact me outside of the group setting for discussion and possible resolution of the problem.

Each of you are different people with different experiences, therefore you will likely have different points of view to share. I encourage and want your different points of view. We hope to have a lively and informative discussion on this topic. Please be respectful of your colleagues during this discussion, avoiding side conversations and dominating the discussion.

The moderator for the focus group sessions will be Latoshia Whaley, a gifted educator, colleague and friend. She will introduce herself to the group shortly. I will be here primarily as an observer. Do you have any questions at this time? I will be available after for any additional questions.

Phase Two: Utilities 5 minutes

- ✓ Purpose: Setting the stage for the session
- ✓ Confidentiality: highlight definition of confidentiality
- ✓ Recording: highlight the presence of an audio/video equipment, purpose of items in qualitative design (accuracy, data charting, unspoken ques)
 - Sample script: *These sessions are being taped in order to gain the fullest information from the comments you make. The tapes will be transcribed and listened to or read only in strict confidentiality. Your comments will be transcribed only as information will be used only as those made by participant 1, participant 2, etc.*
 - Observers: highlight the purpose of observers, who they are (introduce them), ignore them
 - Moderator: Introduction of the moderator
 - Note-takers: introduce the note-taker(s), role in the study
 - Ensure confidentiality again.

Phase Three: Icebreaker 5-10 minutes

- ✓ Purpose: Preliminary fun questions that everyone can relate too. Develops rapport, comfort, and an initial relationship.
 - Sample question: *“What would your ideal day at school look like?”*
 - Allow chatter, and giggle. Then quickly refocus without talking over anyone.
 - Participant Introductions
 - *Sample Script- Hello I am Participant 1. I have taught mathematics for 10 years, 4 years as a part of the gifted team.*

Phase Four: Focus Group Questions/ Answer 60 minutes

- ✓ Purpose: Discussion Questions
- ✓ Focus Group Topics for Discussion
 - Describe the typical African American gifted girl.
 - Tell me your observations of the role that peer pressure has on the gifted African American girl.
 - Family pressure
 - Teacher perception
 - Tell me about student relationships with their parents/ family.
 - Tell me about the self perception of the gifted girls within your classes
 - Adolescence
 - Family pressure
 - Horner Effect
 - Tell me about student/ teacher relationships (academic)

- Discuss ideas (classroom, curricular, etc.) that might counteract some of the factors affecting gifted girls of color. What leads to their success or failure in the classroom?
- What are the top three things that predict success or failure of these girls academically?
- List the top three factors that lead to the underachievement of African American gifted girls.
- List the top three factors of achievement of African American gifted girls.

Phase Five: Gratitude and Future of Data 5 minutes

- ✓ Purpose: express appreciation
 - Things to include:
 - Emphasize the importance of their voice
 - Communicate that results will be made available
 - Dismiss participants with a big THANK YOU

Phase Six: Wrap up 5 minutes

- ✓ Purpose: collect materials
 - Researcher and Moderator should ensure that all materials are collected and recordings.

APPENDIX G: FOCUS GROUP 1 TRANSCRIPTS

**AFRICAN AMERICAN GIFTED GIRL PROJECT
FOCUS GROUP 1****(0:0:01.0)****RESEARCHER:**

Thank you for taking the time to come together for this focus group discussion with me today. This discussion will probably take about 90 minutes to complete. As I mentioned to you before, we're doing this focus group with teachers of gifted students, particularly those teachers who have had direct interaction with African American gifted girls. The information from your discussion will be pulled together and used to inform district and school administration, staff and participants about issue concerning this group of students and to improve the professional development and support provided by the research.

The information you share today will be used for this purpose only. You will not be identified by name or recognizable in any way in the report I prepare. If, for any reason, you don't feel comfortable sharing something with the whole group, please feel free to contact me outside of the group setting for discussion and possible resolution of the problem.

Each of you are different people with different experiences, therefore you will likely have different points of view to share. I encourage and want your different points of view. We hope to have a lively and informative discussion on this topic. Please be respectful of your colleagues during this discussion, avoiding side conversations and dominating the discussion.

The moderator for the focus group sessions will be Latoshia Whaley, a gifted educator, colleague and friend. She will introduce herself to the group shortly. I will be here primarily as an observer. Do you have any questions at this time? I will be available after for any additional questions.

(0:00:30.2)**MODERATOR:**

Hello, I am Latoshia Whaley. I started teaching in 1996. I have taught every grade except from elementary school to middle except for kindergarten and eighth grade. I plan to teach eighth grade gifted student next year. I have taught gifted science classes for the past six years and have been through the gifted education program for the district that I work. I have a love for teaching and specifically teaching science to gifted students.

(0:00:55.6)

MODERATOR: I want you to think about how the family sees a gifted young lady African American student, so think about that and what their role is as far as how parents see them before they actually get to school. What do you think their role is and how they function within their family itself? How do they perceive themselves if the girl is within their family, how do they perceive themselves?

RESPONDENT4: You want it academically? Because a lot of my gifted girls are seen as an equal to the mother as a helpmate. They take care of the siblings, especially if they have younger siblings. Sometimes they stay at home to take care of the younger siblings, act more responsible. Like I said, a helpmate or are we just looking at just the academics and their dynamic in school with their peers?

(0:01:43.4)

MODERATOR: We are looking for an overall perspective.

RESPONDENT 7: In my experience, they have always been a very supportive student. When you meet with their parents, you often see that they're moms, like as Ms. Pitt has explained. As far as the academics, I think they've been taught that they have too have many roles and they wanted to have many tasks; such as they're going to take care of home as well as when they're academically sound, so they can go out and go to college and become a successful young woman. Their parents are grooming them to be able to balance work, school, and home.

RESPONDENT 1: I've seen some different things with that, depending on where the child is chronologically in the family. Is the child the eldest, the middle, the youngest? That birth order, I've seen a real influence on their roles in the family. Are they the precocious, youngest baby and lifted up, oh, you're our shining star or are they the eldest and then they're placed on the platform of, you have to do all these roles to be successful, but you definitely have to do them in our family as well. I've seen both. I haven't had as many children to be that middle child. I know there are middle children out there and that might be interesting, totally other different thing. How many middle children are gifted? I don't know. I've seen those two dynamics. In both cases that girl was lifted up but for two different reasons because they were the eldest or they were the youngest. Either way they were kind of stars but their roles were different based on their birth order.

RESPONDENT 3: I agree with you. I understand. I don't even think it matters what age they are according to it family-wise, if they're the youngest, oldest or whatever. Their parents still, mostly mothers are getting

them to take on an adult role. What was interesting to me, I could think of one young lady in particular. This young lady was very bright. We had her sixth grade and that's all the way to the eighth grade and her mother, she would get all these accolades, awards and whatnot, we never saw the mother, ever. Until she won the title of the school's queen, then we saw the mother but not prior to that. She had leadership qualities; she was playing this adult role in the family. She took care of younger siblings but she also had an older sibling but they look to her for everything. I thought that was really interesting that you're looking at this child as an adult. I feel sometimes they lose their childhood because of how bright they are. In some cases, they know more than the parents.

RESPONDENT 1: I've taught through high school and I think it changes a little bit depending on where, from my observation, now that you said that. Because I started to see what you're describing a lot more in middle and definitely in high school but for the girls who were in elementary, I don't think they had raised them up to that point yet. That's what I was thinking of the younger children, because most of the gifted children, the girls especially. The African American girls I saw in elementary school had older siblings. Maybe that sort of excuse, I don't remember any other ones that I in particular saw as being the eldest but I did see the eldest later in my middle and high school teaching. I don't know how much of that is attributed to their age or their birth order so much as just where they are in their own schooling and what the parents are willing to or already thinking about having them do. With all of them, there was definitely expectation. It's really interesting when you said that because I noticed in general, I always saw parents in elementary school and less and less through middle and high.

RESPONDENT 2: In my experience, the students that I had and I guess it all depends on where you are, demographics and social economics, but most of the children that I had, I haven't seen quite the role of the leader. Maybe because it was elementary, but most of them are very supported. There are some few instances that maybe not but most of them, they were very supported. They were very celebrated, they have free spirits. They never talk about home. They play sports, they are very active. They have the support at home for most of them. There is only one child that I would say may not have quite the same support. It's a little bit different but I don't see them having to take on the responsibility of adults. Most of them have not had to be adults. Most of them are children, they are very socially adjusted, their parents are completely there to support them. They put them in extra programs; they want the best for their children. If you as a teacher, in my experience when I identified it I said, I see these things in your child, they're surprised and then

they are elated and then they celebrated. If I suggest something like being extra or if I suggest a program or something I'm thinking about. It makes them actually do the same thing for their child. Usually they have a lot of support. I haven't found that they were bearing the burden of the household. Maybe that was because they may have been younger. It may have been because most of them did have siblings but not all.

RESPONDENT 6: I wanted to say that I do see in high school that they're expected to be more mature than their peers. They're expected to show more responsibility in more diverse areas, not just in the classroom. You're also involved in some clubs or some sport or band or there's something else. I can't say that I noticed that they have a large role as far as caretaker at home but that's not to say that they're not an authoritarian at home. Their siblings may still have to listen to whatever they have to say and be obedient to them. In that regard, they are treated like adults, but I don't think they necessarily have to cook or clean or carry on some of those domestic tasks. I think overall for the African American girls I've seen, they've been required to act in a more mature manner. You would expect them, they would match someone that was several years older.

RESPONDENT 1: I can really say, I do interviews for the governor's honors program in science. I can echo that with the young African American girls that come through the referral process and that's something that I could say from the interview process just observationally they appear to me to be somewhat more mature than their peers. At least in how they presented themselves in the interview process and that they had, without exception, prepared for that interview. In fact they were still preparing. I would look over to the side and they would be helping each other, kind of quizzing each other in role playing without exception and way more than their male or female peers of any ethnicity. Now, that you mentioned that.

(0:11:11.8)

MODERATOR: Along those lines, let us think about what a typical African American gifted girl, what are those qualities that we see that would label them to fit into that category, a typical African American gifted girl. Let's get some specific things as far as characteristics of the African American gifted girl.

RESPONDENT 6: I think they show academic excellence, but they're humble about it. I don't think they gloat. I haven't seen students gloat when they do well. It's just something that is sort of understood. Whereas for their male counterparts, if they have the highest grade, we're all going to know. (Laughter) For the girls, that's not the case, girls across the board but especially African American girls. They sort of just internalize that success.

RESPONDENT 5: I've seen in these girls, both in school and in organizations outside of school that they tend to, they have leadership qualities and that they're helpful to their cohorts. They're encouraging to one another and they truly have that leadership role that they take on and it's kind of effortless to them.

(0:12:46.0)

MODERATOR: We have academic excellence, leadership, any other?

RESPONDENT 3: Organized, they are organized.

(0:12:54.2)

MODERATOR: Organized, okay.

RESPONDENT 2: Responsible.

(0:12:57.6)

MODERATOR: Responsible.

RESPONDENT 7: I said creative. They tend to think outside of the box. If I ask for one element of a story, they may give me three. You said wow, she thought of that, so I thought creative.

RESPONDENT 1: I would say it really leads on the way because I was thinking organized at the same time you said it but beyond that they're multi-taskers. I don't want to say effortless because it takes a great deal of effort, but they are apparently effortless multi-taskers.

RESPONDENT 6: I think some of that may come from the fact that they've been doing it for so long. Now, they're proficient at it. I would say they're also good time managers because it would be very difficult to be successful in school and still nurturing the friendships. I do think they have friends and they have deep friendships while you have all these other things in your life going on.

RESPONDENT 1: I'm glad you said that because my daughter is 17 and is one of the achievers but her deepest friendships are with her African American girlfriends. I think they nurture that more so, and they nurture that with their achieving peers. Not to the exclusion but they nurture that depth. It's like they need to have friends who know their silent struggles. I can't say because I'm not a 17-year-old girl as to how much they share of that struggle. Looking from the outside as both an educator and a parent, I see that they do, but they don't share those struggles with me. I can see that they share them with each other. With all the time that they spend on the phone and Facebook, they got to be sharing something.

RESPONDENT 6: I think they also create a protected environment in high school especially as a freshman. There is always that chance that you might be bullied or picked on for your academic success or feel left out because you're not going to parties where they're doing things your parents would never allow you to do. They've created an environment where they can still have the same sort of fun but in a way that's not going to cause them to lose their edge in class or hinder their future success in life. I think they do a great job of creating a community that supports them and their goals.

RESPONDENT 1: That's so true. They get to be geeky together.

RESPONDENT 6: It's okay.

RESPONDENT 1: I have t-shirts, I'm a geek. I'm proud of it but they only wear them with each other and that's something that you're so right.

RESPONDENT 2: My daughter is gifted and she's in high school. She fits a lot of what we're saying as far as her characteristics, but she also is very cool. She is very into being cool and she doesn't want to be known as, we actually had to push her this year to keep taking more of that math and science. For her it's got to be together, she's got to look right and her giftedness comes out in a different way. She is a leader, but she doesn't want everybody to know that she's as smart as she is. Though she knows she's smart, she's very quick, she's very witty. She's very organized, she's a multi-tasker. We almost have to slow her down because she gets it so quick and she is mature. Naturally, she has always been that way but at the same time she was the captain of the cheerleading team. She wants to be America's next top model, (Laughter) all of these things but that's just her personality. Sometimes you want to steer her but she's like, everybody got to know her at the school, she wants to be miss popular, all of it. She fits some of it but she doesn't.

(0:16:55.0)

MODERATOR: Along those same lines, let's think about peer pressure within your school or academics for a gifted African American girl. Do you see a lot of that or do they shun it? How is that peer pressure affecting them in their academics and their life at school?

RESPONDENT 5: I've seen the girls that had been through our classes, they will shut that down. They embrace their giftedness. The ones that I've seen, they don't really shun it. They'll come back really quick to their peers who try to intimidate them or try to make them feel less because they are gifted. They tend to be very assertive in their giftedness, the ones that I've seen.

RESPONDENT 6: I think it depends sometimes on the culture of the school. My current school, our culture is changing. Not demographics, our demographics are fairly the same or as far as ethnicity. Our socioeconomic demographics are changing and that's caused the biggest change in the culture of our school. I've seen a change and also their response to pressure. Previously, because they were able to create a subculture with other gifted African American girls, they would dismiss any sorts of comments about what are you doing or you're not being true to your ethnicity. They would be very quick to dismiss all of those comments. Now, I see kids that are almost ashamed to acknowledge that they're gifted cohorts. They do things outside of class that traditional gifted students do not do, get into fights. You typically don't see gifted kids in school suspension or out of school suspension. But I've seen that increasing in my classroom now. The number of students in African American girls as much as any other, if not more than any other subgroup. I think it also depends on just the culture of the school and whether or not they have enough other people that they can connect with to create a safe haven where then they'd feel comfortable and standing up for themselves and their beliefs.

RESPONDENT 1: I think you're absolutely right about the culture of the school and the influence of other subcultures because if the culture of the school honors a lot of subcultures. There's often times intermingling what you're talking about with your daughter. My daughter was a cheerleader for a while too but the culture of the school changed and that's not welcomed now. It's interesting, you were describing with your school that it was a change based on socioeconomic of the student. This was a change in administration that changed the culture of this school. Not in the positive because all the children and their subcultures honored each other and appreciated cross-pollination even if it's just briefly. There was nothing closing them out. I think sometimes we think that adults don't have any impact on how any child, much less a subgroup of giftedness and African American girls feel but adults can make a tremendous impact and it can be just sometimes one adult as in the case with this school.

RESPONDENT 2: Also, just bring back what you were saying, you're right, the culture of the school. This year my daughter was entering high school; I had to change her culture on purpose. Because I need her focus to be on the right things that she didn't get off on the wrong things because she was absorbing so much of the culture. She still has straight A's. Her teachers still loved her, but she wasn't proud of being the teacher's pet anymore. That wasn't a good thing. She wanted to be accepted by her peers, so I had to move her peers, so

that her peers were on another level. Now she's making that adjustment, realizing that she has to keep the academics first. She's now learning the new culture of her school, her school's culture is academics first, sports and being the top in whatever you're doing. She's adjusted to that but I have to move her culture because it was definitely starting to absorb here and she was losing it. She was losing her purpose for being in there. I agree as a gifted girl, she wanted to be accepted what you've thought for a long time. She would have risen above the peer pressure. You thought she had been above it because she was so mature and I have already seen this. She went right back into it and she just absorbed right in it. It wasn't enough and it was partially because all the other gifted girls did the same thing.

(0:22:26.8)

MODERATOR: That brings me to the topic of “acting white” for African American girls. Have you all seen the girls being affected by the idea that their classmates accuse them of acting like a white person by speaking correct English and being smart?

RESPONDENT 5: I've heard that in some of my classes directed to some of my kids and I think as an African American myself. I try to use that as a teachable moment for all of the kids to understand that as African Americans in a majority culture, we have to learn and have the ability to turn them on and turn them off as you will. What they're labeling as acting white, I will label as situational appropriateness. I talked to them about situational appropriateness even the fact that you go to church, depending on what church you go to nowadays. In an African American culture, traditionally, we went to church and we dress in our church clothes. We went to school and we dress in our school clothes. When we came home from school, we took off our school clothes and put on our play clothes and try to envelop all of that into the broader topic of situational appropriateness and that as you're achieving certain things in your life and as you are increasing your stature in life per se that you do have to learn how to turn it on and turn it off.

RESPONDENT 4: I'm thinking about the gifted class that I have. Some of the girls have identified themselves with who they see is like them. What I see going on is we have those girls who said, I don't care what you all do, I'm going to go ahead and get my education. Maintain my straight A's and then I have some girls over here who just kind of, the peer pressure has gotten to them. I don't know if they think they're cute or what, but they have identified with I'd better not be too smart because I won't get a boy to like me kind of thing. I have sixth graders, so right now, they're trying to find their niche. I

actually see this group over here, this group over here. And then I have another group, they're kind of just to themselves. They just do their own thing and maybe that's the little subculture you were talking about but they're in sixth grade, they're only 12. They just keep to themselves and they support each other and it's just amazing, that's just in one class.

RESPONDENT 3: With me, I think the classes that they are in our school, they're pretty much segregated. I don't care what anybody says, they are. Most of the girls that are gifted are in the class with other gifted students. They don't encounter as much as you're trying to acting white or whatever. Because they're among their peers, they're among the people that are on the same level that they're on. Matter of fact, if you put a student in there, like some of the [0:26:32.1 *inaudible*] then they seem to be the ones that they target. They actually end up being the reverse. Don't you know that this word is so and so? Some of them are very, I'm not like that, they try to work with the kids, because I don't know what it does with their self-esteem but when they help somebody it lifts them up even more but then others can be very rude and mean to the kids that's not in their group, in our case, in their class, so I don't see that. I've never seen this since I've been at my school, where the African American girls are singled out as trying to be white because they're already in the group together, so I don't see that.

RESPONDENT 2: I have seen that, only my daughter says, oh, mom, no, they act like, I'm not going to hang around them. She doesn't even associate with anybody that she thinks, no mom, they're not even black and she'll say that to me. I didn't know that was in her or even her vocabulary. I didn't even know that was something that she was looking at. She thought her school was lame because she was like, no, they don't even. I don't want to be with them. I want to be with my other friends. Because she did not identify with them and it is not because of her English, she speaks fine English. She's always spoke properly but her school has been predominantly black. She knows a culture of being predominantly black and she also knows what's not. When she went into this new school and it was more integrated and it was actually probably more 60% white and 40% black and of course, in the higher classes, there are less black children than there are, especially there is more black females but she is one of the only ones in her gifted math and some of her other classes. There is rarely any gifted black boys in there. She's already figured it out and she chose to keep herself separated because she already knew they're not like me. They don't think like I do and she made that in her own mind and I've heard her say that. My students, because the schools I've taught in are predominantly

black, I don't hear that as much at all. Possibly in a new setting or different setting they might say something different.

RESPONDENT 1: I was going to say that schools I've taught in have been predominantly black and I've never heard it. In schools very early in my career where I actually went from school to school to school. It went back again to some of the ethnic divide but way more the socioeconomic divide. It was almost like a class divide there as to whether I would hear that. I used to pride myself on being the listener to see what the kids were talking about. Actually I guess I was so good at it they would just say whatever was going on. I was young enough to look like one of them, but I never used that against them, so they felt free enough to talk. I heard this type of statement way more in schools where there was a deep socioeconomic divide; the haves, the have not's and typically I heard it more from children you could say the have not's. My best guess was that you're encouraged to achieve typically in higher socioeconomic or middle class homes on your own merits. On the merits of who you are internally, not who you are externally, whether you're black or white, short or tall, fat or skinny. Any of those and for the children whose family struggled economically. I definitely heard whatever they could latch on to as the other more apparent achiever as being; you don't want to be like that. I don't know what the whole message was or other places but that seemed to be the real underlying current there. It was more in those settings of a class statement rather purely an ethnic one.

RESPONDENT 6: I have taught in both environments. My first few years of teaching was predominantly African American school and then I switched to a more diverse school and by diverse 45% Caucasian, 40% African American, 5% Asian and then the balance Hispanic so everyone was covered. What I saw in the class then was that because so many people had different home languages that there was one established norm for the classroom. So regardless of what went on at home you understood that there was an established norm for the classroom now that the socio and economic dynamics have changed at our school. Our ratios are still about the same ethnically but now that we have a different socioeconomic group that's when I hear that comment much more and it's more from the kids that are not coming from, the have not's, that are saying it to the haves. The kids that aren't academically successful, they're saying this to the gifted students. Whatever they consider to be traditionally an African American strong suit whether it's playing sports I haven't heard them saying you're acting white because you're good at basketball. I've only heard them say that when it's an academic or if you're a good dancer I don't hear them saying

you're acting white. It's strictly when we're referring to academics in that area only.

(0:33:12.1)

MODERATOR:

Okay. Let's talk about student-teacher relationships and how you relate to an African American gifted girl and what are your perceptions or how you perceive them? How do you interact with an African American gifted girl? Do you push them in a certain direction? Are you nurturing?

RESPONDENT 6:

I think girls always desire to have a relationship that's why women talk a lot (Laughter) much more so than men I'll say or I have my cellphone minutes are much higher than my husband's by far. There's always been that need to establish a relationship between any student and their teacher especially for girls. They have a desire to establish that relationship but my African American girls I think there's a special bond that occurs because I'm like them so they actually can see you're African American and you're good at this. You've been through these struggles at some point because you couldn't become a teacher in this area if you weren't successful in this area throughout both secondary and postsecondary school. I have a greater number of them that will come in, sit at my desk after school. If it's just doing homework they'll always make a point when they come in the morning. How are you doing today? It's more familial than it is with, I have that with other girls but as far as the amount, if I spread that it's probably closer to 100% of the African American girls that are going to actually check on how I'm doing as a person and try to establish a relationship with me. They're going to tell me about their weekend whereas for the other ethnicities I have one or two from each that do the same thing but as a percentage my African American girls, they're going to establish a relationship.

RESPONDENT 7:

I push my African American girls. I'm very hard on them because I feel like I've experienced some of the things that they're going to encounter as far as when they get ready to go to college. They'll go ahead and pursue other avenues farther than college. I try to instill in them that you have a lot of struggles that you're going to have to overcome so there are some things that we need to stop now because I think that I have myself, groups of my gifted girls. I have my social girls. I have my girls that are off to themselves and I have my girls that are, I'm focused, I want to learn but I still want to be cool. I'm going to do what I have to do in the classroom but in the hallway I still want to look like I fit in with everyone else. These girls, with the girls who are trying to get there, education who are trying to go find, I'm trying to expose them to more types of literature because I'm teaching language arts and I'm noticing

that they're always reading African American books by African American authors, about African American things and that's the group that I was in. I felt like when it was time for me to go to college I wasn't used to these things. I feel like I have been in the shell from kindergarten to 12th grade because all I knew was black things. When I went to Georgia State and she was one of my instructors. When I went to Georgia State I was in culture shock because I'm there like I didn't know. I didn't know the classics, so what I tried to do is I try to expose them to the classics and I will take these Terry McMillan books that they're reading. No, you're not reading that. Let's go to the library and let's find something else to read whereas those girls who are still trying to be Miss Social Butterfly I want to hide how smart I am. I'm trying to get them into self-help books. You need to read *The Skin I'm In*, although it is an African American book by an African American author, you need to see. You have to find yourself because if you don't you're going to get lost and although they're only in seventh grade, I think that if we don't start now they're not going to get out of it because it seems like every year they are getting more mature. Their bodies are more developed and I'm like, wow, she's 12. She's towering over me and I'm fussing, don't you do that, blah blah blah. I think I'm very hard on them. Harder than maybe I need to be.

RESPONDENT 1: I think it's interesting Anne that you said that the girls will come to you before school or after school because I have mostly been in a predominant way African American or very mixed where Caucasians were low in terms of numbers and where the majority of the teachers were also African American. I always find it really interesting and I enjoyed seeing how many children, boys and girls would come to me. I always found that fascinating, that connection, and I think the connection was very human because I demanded excellence of everyone. Now, what I did do with the girls, and I don't know if the boys knew that I did this, but as a science teacher and as someone who is much older than most of my teaching peers too, if someone who's 50 years old, the other teachers maybe first or second year teachers are in their 20's might be the age of some of their own siblings or something and I'm their mother or grandma and they never could, you're not that old. Thank you child. They would come to me and I would really emphasize because my experience as a woman in science was that I was one of the few in science. I was almost always the only woman in the lab and I was certainly given the crappier jobs. You can do the dishes. It's very important to do the dishes in the lab actually, so I embraced that and I would whisper things like that to my girls, girls make the best scientists. Every single girl in my science class has heard that and I whisper it to them because I

wanted them to think that was a message just for them, not even for all girls but just for them. Over the years, all kinds of girls have come back to me and I happen to live in a neighborhood intentionally, I bought a house there where I was teaching in an elementary school and it was very much a community. Some of those children still live there. They're in high school now and beyond and they'll come knock on my door to tell me what's going on in their lives. Some of them fully have gone into science, but I think that adult, whoever that adult is, is critical to empower them as a person and I of course can't imagine what's all on your shoulders to empower them as young African American girls. I was just trying to empower them as a girl and I will honestly say to let them hear from one white person that they were of value. That whoever else they encountered they could always remember Miss so and so valued me. They could never blankly say, everybody treated me this way. Not that I was trying to say in writing but Albert's white where I'm not but they're authentically because I actually have to say if they weren't really scientist material I whispered something else. (Laughter) Language arts is powerful too. (Laughter) I taught it at high school. I did prose and high school English teacher too and I directed it towards you when they were better readers than they were scientist. We all have our gifts.

(0:43:29.2)

MODERATOR:

Do we as African American women in that world, when you're teaching a gifted girl and you see their drive. Do we have a responsibility to push them on their way to help them along? I know at times sometimes their personality, your personality, you may have conflict with one but you know she needs that kind of push, that kind of thing. What things do we instill in them?

RESPONDENT 3:

I think our standards for them have to be very high. I know a lot of times they always say oh, she's so strict. There you go. Out of all the teachers on the team, I'm the mother on the team. No matter what team I'm on. I'm the mother because I'm going to tell you the truth and then you leave. You go to high school and you come back and say, you're so right. Yes, I was absolutely right. I don't believe in babying them. I don't. I believe in producing productive citizens and as an African American young lady that's sharp, that's gifted, you have the world at your hands so I don't want you to just be thinking this is it. I don't want you to think just in the box. You got to think out of it. You got to be well rounded to be successful in this world. My goal is always that I don't want you to stop just being a teacher. I want you go above and beyond. I want to look and say she's making \$100,000. I was there. Come on back. Come see me. That's my goal. I always want them to do or excel more than I did. That's how I value them. I want them to see, I expect

more from them and I push them as hard as I can because I do want them to be successful. I don't think if they don't have that little drive, that little push because some of them need us more so because they don't see their parents. At my school, they don't see their parents that much, just a few. The ones that need us, they just need that extra push. I expect better from you. Could I turn this out? Oh, no. That is trash dragging in. Oh my god, she said it was trash. Yes I did. Do it over and do it over now. This is what I'm talking about because I want you to excel, so high standards.

RESPONDENT 5: I think I did it also in the school that we are in. That little socioeconomic has a lot to do with the perceptions of themselves. Going through elementary school, during the 60's with the whole tracking and being discouraged as a minority, even though we were tracked, I was personally tracked in some of the higher classes. You still weren't given that whisper in the ear and that encouragement from school. I had a strong foundation at home but it would have been nice to have that matched at school as well and I just wondered if I didn't have that home backing because I didn't have a lot of teachers that looked like me coming through the 60's in New York City. A lot of predominantly female Caucasian teachers and you might find that one teacher that might show an interest in you for whatever reason. But because of all of that is in my background, they're my baggage, when I see those students and really all students but definitely those students that you know they are gifted, the expectation is even, like everybody's been saying, it is a little bit greater and I will tend to...Come here, whether you're my student or not, whether you're in my class or not, if I know that you are on that gifted team or that high achiever, come here. What are you doing? Sometimes like you're saying, just add extra push and to know that somebody's really watching me. We're encouraging you trying to build that culture at our school to let you know that that's not acceptable. It's not acceptable and to let them know that it's not acceptable. A lot of times that peer pressure takes them out of what's the expectation at home. Sometimes it needs for our perceptions to be there. We're looking at you. We're checking on you and you know that's not acceptable at home. We're not going to make it acceptable here either and in that push I think, especially we're in the middle, especially when they're still trying to find themselves. They need that positive push sometimes on a daily basis, but you have to be willing as a teacher to be able to give that extra push and that extra nurturing to those girls that are in a precarious situation. I want to be liked. I want to be popular. I want to have a boyfriend. Everybody else has one. That I'm smart. Bad boys are not going to come and approach me because I'm

smarter than him. I think we just have to really be that angel on their shoulder to keep giving them that encouragement.

RESPONDENT 4: They'll come back. They always come back. I have sixth grade, they always come back even the groups that have decided they want to be popular. They want to be with the boyfriend, that relationship with them was horrible but eighth grade they always come back. How are you doing miss? How are you? Are you okay? Can I come help you? The relationship can be nurtured even after they leave you. I have found out that they are trying to find their niche. They are trying to identify who I will fit in with. I really want somebody to like me. My gosh they're so cool over here. It's just an identity crisis going on in middle school.

(0:49:29.9)

MODERATOR: Do you think they kind of take that for granted that they now have an equal representation of seeing themselves visually where I can go, where I can be here for granted? Do you think the girls take that for granted or does it have effect on them at all?

RESPONDENT 6: I think we as a society were more hopeful that the reason why they weren't succeeding in those areas was that they didn't have successful role models because now they have the role models...

Now they do.

They're not succeeding in that area. Obviously, that could have written what it was but I'm not certain what causes them to excel. I really do think for kids, especially high school. It's very much about their group, the culture, the environment that they can create at school. We have some girls that are honors, accelerating, gifted girls that want to have a boyfriend. Surprisingly, I see a larger number of them dating the special ed boys. (Chuckle)

RESPONDENT 4: Yes.

RESPONDENT 3: Yes.

RESPONDENT 6: Any other and I'm not certain if they can help with the homework and that's how they're building that relationship.

RESPONDENT 4: I have sixth grade and I've seen it.

RESPONDENT 7: I agree with...

RESPONDENT 3: High school, yes.

RESPONDENT 4: Are you really dating him? Yes, we are in love. Oh (Mouth sounds).

RESPONDENT 5: And proud.

RESPONDENT 3: You don't want to say, are you serious?

RESPONDENT 1: Could it go back to that nurturing thing that we talked about earlier that that's one of the roles that they've been given; the caretaker, the nurturer? I'm surprised we haven't touched on this because I'm different in this group. This is something I have seen when I was one of only two white teachers in an entirely black school, both students and administrators and every other teacher. One of the other teachers who is a very good friend of mine is very light-skinned to the point that not so much the students but the teachers would refer to her in the derogatory manner and in the same way they referred to me. Both she and her daughter are gifted. It's something that her daughter who is a little bit darker-skinned still got in her own schooling from her peers and surprisingly from her teachers. I, at least, it was surprising to me. I was like wait a minute... What I observed was that actually more students in that setting came to me for encouragement. Now, it's just as tough on them as she was, maybe even tougher than they did to her. The only thing I can see was skin tone that made the difference and the attitudes of other adults towards that woman. When you were talking about the good role model and we still see not as great achievement. I wonder if there is that something a little subtler that goes on. It's something that no matter how good every single one of you are here, it's not just your achievement. It's something else. I remember back in my own schooling, in sociology class, just reading about the brown bag test and things like that and just being, wow. There's a lot of moments for me and it was certainly, maybe obviously much different than any moment that would be for any of you. It's something that I don't know how we address. Do we address it the same way we address other types of races? Does that affect the girls that way too in terms of their achievement? Sorry. Then that covers writing something you didn't want brought in. Not that you didn't want but a factor...

RESPONDENT 4: That you don't see.

RESPONDENT 7: You can't quantify.

RESPONDENT 2: I don't see it as much.

- RESPONDENT 4:** I got a light skin. The light-skinned gifted girls are more popular, more well-liked. You got this beautiful, smart dark-skinned and they just hate her. I don't understand. They hate...
- RESPONDENT 6:** Or vice versa. I've seen it be vice versa too.
- Just depending on...
- RESPONDENT 6:** Yes, just depending again on the culture of the school.
- Yes.
- I'm just like, [0:55:05.2 *inaudible*].
- Yes. (Chuckle)
- RESPONDENT 4:** I do find the girls that have their own little small subgroup. They're very well-rounded in reading, math. It doesn't matter. They do well in both subjects. The ones that have identity issues or issues, they tend to not do well in the science and the math. That's what I've seen, just sixth grade though. I don't know what they're internalizing. I don't know what their goals are. If it's just to be, I wish I were pretty. I don't know why they don't go towards the math and the science.
- RESPONDENT 1:** I think it's one more layer because as a society as a whole in America, we really don't value math and science. We value what we get from math and science in terms of our iPods and our hybrid cars and this and that. We don't value mathematicians and scientists regardless of their ethnicity or their gender. We don't have a coin that has a scientist or a mathematician on it. We don't have a day that's devoted to Einstein or Baneker, either one.
- That's true.
- Yes.
- RESPONDENT 6:** A Pi Day and if it wasn't a dessert, I don't even think we'd have that. (Laughter)
- RESPONDENT 7:** Exactly.
- RESPONDENT 1:** Then Pi Day is only recognized by mathematicians and scientists...
- RESPONDENT 4:** Mathematicians, that's right.

Much less Mole Day. (Laughter)

Yes.

Yes.

Yes.

RESPONDENT 5: You brought up that aspect that's very interesting in terms of as a science teacher. I don't get very much enthusiasm in my classes, I believe, because all we have to do is passing language, arts and the better portion of the CRCT. That throws another...

RESPONDENT 1: Even though the math portion is applied science and social studies and the reading of the CRCT is reading, science, and...

RESPONDENT 5: That's the culture of the county.

RESPONDENT 2: Of this state.

RESPONDENT 5: Right, yes.

RESPONDENT 6: I think sometimes just middle school because your hands are tied for a lot of counties as far as most children know that that still would be promoted regardless of whether or not they've learned the material. There are a lot of issues that you face to really get a child to learn and I don't envy your position in high school at least. I let them know when they start. We can have you until you're 22. (Laughter) There are some kids here that claim to be your age and they're not. I can't tell you by law. (Laughter)

RESPONDENT 2: That's right.

RESPONDENT 1: Just like that guy with a beard over there. (Laughter) Looks like the grandfather could not...

RESPONDENT 6: Not everyone that appears to be faculty and staff here are. I really push all of my students and I let them know that regardless of what your aspirations are for a career, in most cases, success in math and science are going to help you get there faster or make more money while you do it. Regardless of what your goals are, I point out that those honors and gifted kids, they care about that. We discussed how and when you win scholarships, anything over the amount that it cost for schools is now yours. You have earned. You are being paid. I said you're just getting your check four years later. Your freshman year's performance, you're going to get a check your freshman year in college based on what you're doing now.

How much are you going to make? I tell them about kids that have extra because one of the motivating factors for me was a student a year ahead of me that she ended up with so much money, she bought herself her first car, cash, outright. No loan. I remember thinking, why not? What are you going to do with the rest of that and no loans. I really encouraged my students. We don't talk about this as important. Math is important not just so you know how to solve a quadratic equation but it's the logic that you go through as in addressing a problem and getting to a solution that you will use across any career. Go ahead and learn how to do that. (Laughter)

RESPONDENT 2: What she's saying is how I teach my younger children before in fifth graders. I always try to expose them to math and science though I was a language kid. I grew up in New York City, so I can tell you my career from kindergarten all the way to 12th grade. I saw only two African American teachers and one was very distant. She was very excellent, but she was very distant and wasn't friendly. She was actually cold and mean. The other one was a chemistry teacher. I didn't relate to her because she looks so...

Out there.

Dorky. (Laughter) She looked like she couldn't see. Her eyes are half open. The people who loved her, she only talked to the children in the lower tracks. I never had her. Everybody calls her mama. There was a certain thing about her that I never got to really know her or relate to her, but these were the two extremes I had. One was in fourth grade, the other one was in high school. Everybody else that I had, all my other teachers were Caucasians the way through. If I had encouragement, it had to come from them. That was how I was moved along. As far as my students, I have always pushed them when I realized that a lot of my children were great in language arts and maybe some of them love science. I began to push them towards math and science. That's how I began to be that teacher who teaches the accelerated math classes because even in my focus class, the resource class, I do a lot of science because I know that those are not taught. I know that when you do the hands on and you really get them engaged, their engagement, their intensity, everything is different. I began to do neuroscience and different units with the kids or physics of flight in third grade. Those are the units that we do. I chose to do that because I knew that that was the part that they had not received. Even though the language part, they could get some of that, the math and science was what they did not get. Children really began to gravitate towards me because I was teaching in their language. Teaching what they wanted to know. Teaching and answering the questions that they're sitting in the classroom having going on in

their mind that no one is addressing and no one is hearing. That's why I really believe that kids, they really need that focus on math and science and always apply it to the real world. We're talking about personal finance and talking about the stock market and doing those things because they need to know how it applies to their real world or having a mechanical engineer come in and speak to them about area and perimeter and volume and things like that.

RESPONDENT 1: What you said is so critical. Both math and science, in order for us, anyone to really learn, it needs to be hands on. The student, regardless of their age, needs to command that content. To command the content in language arts is to hold a book or now, in this day and age, an electronic reader. Still, it is the interaction with print. The interaction then can be internalized. However you can envision that or not, or sometimes then, you can use multimedia and see, okay, this is the story I just read. It's now being acted out. I can interact with that and write about it. It doesn't take anymore hands on than that. For other contents, social studies, math, science, but especially science, you got to get in there and do that. One reason and we see this whether we're talking about gifted children or not that we don't see greater achievement or greater interest. We don't actually give them those opportunities. However, we almost exclusively give them those opportunities in gifted classes. We truly do differentiate in gifted classes. For African American girls, what they were forbidden for lack of another phrase, of getting in other classes they can get in theirs. You can whisper around, oh, you're going to get this if you are or if you do qualify or if you'd get into these classes. Is that turning on to learning? For African American girls, maybe what we started talking about of their roles at home that they may have been the one that has been assigned to take care of younger siblings or get the dinner done, that may be, I don't want to say their limit, but so much of what they do. That is hands on. It's like reinforcement to be in gifted programming. This is my sense of self and my reality and why I get to transfer it here comfortably, but to even learn more and to do more and to have opportunities that my peers don't have. I know I have always enjoyed teaching gifted classes more because I got to do more in terms of teaching. I didn't just, and I didn't teach high school language arts. Fortunately, nobody watched me pretty much because I didn't just hand them a book. We did some other things. Not that you do and I doubt that you do, but you were probably talked to only do that as a language arts teacher until you went into gifted education. We limit our children and our gifted children too unless we teach people how to teach gifted which is really what we should teach everybody, but that is

another topic. For our African American girls, it's great that they have that opportunity. Now, do they know? Sometimes they do know that, oh wow, I'm getting something extra here. Not just the label of being gifted, but ooh, they don't get to do that over in that class.

RESPONDENTS: They know because they've talked about it.

Yes, they talk about it.

They talk about it.

That's [1:06:32.4 *inaudible*] everybody else's class. (Chuckle) [1:06:35.6 *inaudible*] allow me to do more. They do understand that they are given an opportunity that some of their peers aren't given because of the scaffolding and things like that that you have to do.

(1:06:50.6)

MODERATOR: How do we translate that, the extra that they get in gifted classes into general interest and subjects that involve STEM in general; mathematics, science, technology, engineering? How do we translate the extra into interest?

RESPONDENT 1: If we taught those general ed versions of STEM classes the way we teach gifted or special education classes because both of them are taught the same way. With rich differentiation towards looking at what students/learners really need. It's not just problem, here's your book, read it. I'm going to test you or do those questions at the end of the chapter that are so lame and you're never going to touch anything. Whether we're in gifted classes or were in special ed classes for moderate, not severe and profound, but more on moderate intellectual or physical disabilities even, those kids are getting real teaching. General ed, okay, here's the bulldozer, let's go on through from beginning to end. You don't need anything extra, you're general ed.

RESPONDENT 6: Some of it, it's just the logistics of school as well. Gifted classroom is smaller than somewhere, the special ed courses.

Last year. (Laughter)

RESPONDENT 1:

RESPONDENT 6: I know. We refer to as the glory days. (Laughter)

Mm-hmm. (Affirmative)

RESPONDENT 6: You had the ability in the class period to do those things. In a general ed class, when you're packed to capacity, I can't differentiate and still try to address percents because you may not be learning it. I'm showing it to you. Whether you master it or not is up to you.

RESPONDENT 1: I taught you, you learned it. (Laughter)

RESPONDENT 6: I'm showing you the content by the end of the semester. You can't physically do that with that many kids. In a gifted setting or in a special education setting, they have then reduced the number of kids so you could. If you did that with all children, they would all realize that they could excel in areas that they didn't previously excel in. They would now be interested in areas they didn't realize that they had a previous interest in, but who can afford to do that.

RESPONDENT 1: Oh, you're absolutely right. There are all kinds of research that proves that smaller class size raises achievement regardless because you can differentiate, you cut down on competition, you build collegiality, all the wonderful things.

RESPONDENT 6: We have six furlough days this year. God only knows how many next year. If we're not laying off teachers, the only other way is to increase the class size. You're going to see achievement go down across the board regardless.

RESPONDENT 1: Everybody turn off recording devices, get along about audition. (Laughter)

RESPONDENT 2: I would say also creating an experience. As much as possible, when you incorporate when you can, I'm thinking about for general ed or for any and just really creating an experience or having the professional come in. If you can, having someone else to experience so that they can walk away with something like, oh, you mean to tell me we can actually do this? I can use this in the real world? Making connections and that's something I try really hard to do. This is what I do in my regular ed classes as well as my gifted classes. Making connections. Whatever math we do, whatever science, they have to make connections. I have to show them how this extends out in the real world or a career or field or whatever they're doing. They have to be able to see, okay, if you're doing physics right now, what careers go with this? If you like geometry and certain maths, where does this fit in? How can you use this in the real world? That's one of the questions I constantly ask them and they always have to make connections whether it's in journals. Then I try as much as I can to get someone to come in who is another expert in that field so they can see. Oh, there's

something else, there is someone that does this. This is actually a job or this is actually a career or this is actually a field of study or just different things. I know that by doing that, it actually brings a connection to the learning that we're doing. It doesn't matter if they're gifted, special ed, or if they're in regular ed. If they just have the exposure and the connection. If it's pulled out of just the context of the classroom. That's what I try to do. I try to take it out of the classroom. How does this relate to me? How can I use this again? I create projects that they have to put together whether it's just learning about lines of symmetry or whatever we're learning so that they can create a street map or something on that order.

RESPONDENT 3: In Connecticut, I read an article not long ago where this principal, first, it was high school, they started off with block classes like most of our schools have now. They said it took care of the traffic in the hall and less movement, things of that nature. However, he said it wasn't good enough. He wants to move it up another notch. What he did was, he brought, he changed the whole school environment. If you were a mass com major. In high school, that's what your focus was, you were responsible for plays in the school, but not just the play. You have to make sure you get the stage manager and you have to make sure you handle the finances of it. Everything was on them. If you were into some type of civics class or whatever, they made it some kind of way where the 70 yards can participate in primary voting to give them their opportunity. He put them in the experiences. Not just bringing the person in. He put them there. If you were in banking, they had a whole bank set up in the school where the kids could bring in their money and they had to handle the transactions and everything. They gave them the experience.

RESPONDENT 2: Real world.

RESPONDENT 3: Real world experience in the classroom. If we could do that, wow. Whether you give to general ed, special needs, whatever, you could do nothing but excel.

RESPONDENT 6: There's a school here that does that. Is it Ron Clark?

Mm-hmm. (Affirmative)

Yes.

That does that? Oh okay.

MODERATOR: Ron Clark Academy.

RESPONDENT 7: Mm-hmm (Affirmative), but that's just one.

RESPONDENT 6: That's one school.

RESPONDENT 1: Hand-picked children.

RESPONDENT 2: It only goes up to seventh or eighth grade. It stops. It doesn't go up to high school.

RESPONDENT 3: Bill and Melinda Gates have a high school. Actually, they just started, maybe it was about three years ago, four years ago. It's really a new school, but they say, I haven't been there yet, they say that school was almost like a continuation of what Ron Clark Academy is doing.

Oh.

(1:14:12.6)

MODERATOR: Right. That's in Fulton?

RESPONDENT 1: Ron Clark...

That school is in Atlanta.

It's in the city of Atlanta, but it's not a city of Atlanta school.

Right, it's a charity school.

Yes.

It's a charity school.

MODERATOR: Even the Bill and Melinda Gates is...

There's one that they have, but I don't know exactly what the word is. Here's the one, I don't know, somewhere, but it is out there.

No. (Chuckle) I just feel like if we did that across the board, it should just be two schools.

One school.

Right.

Right.

RESPONDENT 3: It needs to be a standard. That makes them more global. That makes them ready. For when they walk out the door, they come out with something more than just the diplomas. They are graduates.

RESPONDENT 1: I think it's really interesting as a concept. What you just said that whether they are gifted, whether they are general, whether they're special ed. I think that real world experience and certainly is at every minute of their day. With that application of knowledge, they also see that everyone has a role in that application. I wonder if, then it becomes less of a matter of acting whiter, acting smart, or just being who you are. You can go into Wal-Mart for instance and you'll see a bagger or a checker and oftentimes, it will be someone who has been set up through their SEC class at school to job test. That they're going to have to earn a living. I remember way back in high school, really envying, as I sat there in trigonometry class, the people who were learning how to balance their checkbook. Those were the dumb ones. I'm like, no they're not. They're the ones who know to balance their checkbook and I'm not. (Laughter) Trig is not going to help me balance my checkbook. (Laughter) The whole idea of giftedness, we say gifted or talented, oh that's just the uber smart kids or the kids who can already act without taking acting lessons or play a musical instrument without years and years of instruction. That doesn't make their lives any better or any richer unless they're balanced.

RESPONDENT 7: You're right.

RESPONDENT 5: What do we do for African American girls to help balance their lives. A lot of you talked about the balance that so many of them have. Your daughter with her balance of cheerleading versus this or that. I know because I struggle with that with my own daughter that where is she going to find that balance? Can we create that balance? It probably wasn't easy for you this year to change her culture. She's going to push against that. Her friends are going to put, why are you dissing me? Why are you blowing me off? I thought we were friends. All these then ties into what are the definitions of all these things? What are the definitions of achievement? Are any of our children greater achievers because they make more money or get higher grades? (Chuckle) Or is it because they care more about someone else? What's the definition of achievement?

RESPONDENT 6: One of the things you said earlier is that every child is gifted. I truly believe that. Unfortunately, in a public school system, we don't acknowledge all of those gifts as being equal in value. To be fair to the school system, we offer free and appropriate. It never said excellent. (Laughter) It said free and appropriate.

RESPONDENT 1: It didn't define appropriate either. (Laughter)

RESPONDENT 2: Appropriate to whom?

Yes.

RESPONDENT 6: You could argue. I understand and in a culture, it bothers me. I don't think that we value education, politicians value education as much as they feel or they say because I believe, you'd put your money where your mouth is. If you truly value education, you would do things to help kids realize that they're gifted in some area. I think it would take away some of these, you're acting white, or you're doing this or picking on other kids because I have an area where I excel. I have an area where I have value. I don't need to feel bad about myself because I don't match your area, which happens to be the area that the school system promotes as being the ideal.

Mm-hmm. (Affirmative)

Yes.

(1:18:59.2)

MODERATOR: Let's talk about success and failure. Success and failure. What are the things that a gifted girl would need to be successful? What are those things that are blocking their way that leads them to failure? Why is she not meeting her potential?

RESPONDENT 5: Everybody was talking about balance. To both extremes, you have those girls that maybe not, they don't have the push, the drive, the information from home. Then you go to the other extreme where I've seen some gifted kids that are wound up because their parents are putting too much pressure on them. As I'm listening to everybody, you have to achieve that balance. I don't think that balance is the same for me as it is for you. You have to find in your child that personal balance and as a teacher, help guide the parent and the student because I have talked to some parents, a couple of parents in the past to say, listen, maybe you need to try to pull around this and this and this and this. Have you thought maybe it's a little bit too much? It's finding that magic balance. Again, that's individual from person to person.

RESPONDENT 1: It's a definition of what success and failure would say because to some people and the different parts of society, success is all those A's or success is six figures a year. I can guarantee you, we could go out and go to the street corner right now and ask the next person

who came along and they would all think, I should say, they would probably think, that person would probably think none of us is a success because we are educators. (Laughter) If we went to certain other places in the world or even certain other places in America or in this city...

It's hard.

RESPONDENT 3: I'm sitting here and I'm thinking, you are all major successes because you are all passionate about what you do. You all have a grasp on, a horrible phrase here, but where you came from. What your authentic experiences were and what brought you here. Certainly, every single one of us that sits around this table who has STEM skills could go out and make six-figure salaries. Those jobs are there today. Yes you can. (Laughter) Is that what you think makes your life a success? When we talk about what makes these girls' lives successful, our daughter is not being successful was tied in to being a cheerleader at least for a little while in their lives. They also think what's being successful is getting an A. Hopefully, and mine does now, I know and I worried about it for a while, but when you don't achieve like you're used to, that doesn't make you a failure. Maybe that's not your best effort or there are things beyond your control. That person who judged your science fair project who couldn't speak English, who couldn't ask you questions to find out what really and therefore you didn't get a high enough rank in that science fair to go on in the competition, that wasn't about you. There are a lot of things that are not about us that feed into our success or failure. It's as much our internal definition of that. What we're talking about with balance, I think a lot of the girls we've talked about here today who have that balance also have that balanced sense of what success and failure is for them.

RESPONDENT 5: Balance assessments. (Laughter)

RESPONDENT 1: You're right. Balance personal assessments. (Laughter) Boils down to that definition of what success and failure is. If we're only measuring academic success and what helps them get to an A, how do we help that girl who's not striving for an A? Maybe she didn't want to strive for an A. Maybe she just wants to strive for understanding or another type of balance. Oh, I want to do this and I'm interested in that so I don't really have time to spend six hours study. If I want to get to this too. A B is okay for me. When did a B not become okay? (Chuckle) You're still above average. C is average. B is above average. A is, we couldn't figure out...

Any other letter.

Yes. (Chuckle) This is so great, we didn't imagine you'd do that well. That's why you got an A.

RESPONDENT 4: She said she changed her daughter's environment. Did your daughter decide internally?

RESPONDENT 1: Sometimes, she decided internally. Sometimes, there were some parental direction. (Laughter) Sometimes, that parental direction was not mutual parental direction.

RESPONDENT 6: It's still home.

Yes it is.

Yes.

It's still home.

Home plays a big part.

Yes.

RESPONDENT 4: Although sometimes I do have an influence because they will come and talk to me. They do come and sit.

RESPONDENT 1: You are absolutely right because sometimes even me, the science teacher-parent and the science teacher-geek-daughter would not listen to the science teacher-geek-parent. She had to get it from her science teacher before it was true. (Laughter)

We do that sometimes.

Sometimes because it was the parent voice. No, I'm not going to believe that. Talk to the hand. (Laughter)

Yes.

Once that science teacher that she revered put the rubber stamp on it, okay, I'll believe it. (Laughter)

RESPONDENT 3: You said something about the failing student. A lot of times, they're failing because of lack of self-esteem. I've seen that in a lot. They feel a lot of times, and I know because they have talked to me about it, inferior for some apparent reason to the girls that are also gifted but they are excelling. This has run on that. They'd rather be in the shadow. That's how they run. Instead of being next to them as a leader, they're behind. That's because I have just been

pondering because it's been several, just like a pattern. It's all about their self-esteem. Then you said, the parents in their home, it has a lot to do with that as well because my standard is so high with my children. I expect this, so when you do this, there's a problem. Then for those kids or those girls with the low self-esteem, they don't get that at home. They tend to be more or less, I hate to say it, followers instead of leaders. If we could help them boost their self-esteem in some way, that may help bring them up more. Maybe put them in more leadership roles.

RESPONDENT 1: We can't have leaders unless we have followers too.

RESPONDENT 3: Yes, that's true.

RESPONDENT 1: The follower today, could be the leader in this tomorrow. There are very few people who are just exclusively leaders or could be, should be. That goes back to the one I was talking about, the definition of success or failure. This is not this one what you said, but I think we do this as a society. We're not the leaders. If we have nothing but leaders, where are we going to go? (Laughter) I'm going over here as a leader and I'm going here as a leader, and nobody is going anywhere.

Yes.

Yes.

RESPONDENT 6: Part of my reason, I wish we'd bring back the technical diploma. I really don't need to pay a mechanic with a PhD to fix my car. (Laughter) *[1:28:00.0 inaudible]*.

RESPONDENT 6: I don't need a doctor.

Yes.

Yes.

RESPONDENT 2: I will *[1:28:10.9 inaudible]* about this and mechanics. I can't afford a technical diploma mechanic. (Laughter)

RESPONDENT 6: Exactly, but when we talk about successes and failures for all students, as long as you are supported in some area that you feel you are valued and that you have a sense of achievement. Those three things, you're supported, you feel that you're doing something of value, and there's someone else that's actually giving some credibility to what you're doing. If those three things are present, then you'll excel in that area. Kids have excelled socially; have

those things from their peers. Kids that excel academically have those things whether it's from their teachers or from home, it doesn't matter where you're getting it from. You just need those three in my opinion. Then you'll be able to be successful because then you will have faith that there's something under that. There are other people that agree I'm good at it. I have the confidence because regardless of what others have said, I have a support group that said, they don't know what they're talking about. You are good at this.

RESPONDENT : Right.

RESPONDENT : That's right.

RESPONDENT : You've seen value in this. Here's the proof that you're successful in this.

RESPONDENT 3: They're building your self-esteem.

Mm-hmm. (Affirmative)

Yes.

RESPONDENT 7: They have to build it because they're not there.

RESPONDENT 6: Your self-worth, more so than your self-esteem, your self-worth. You have to understand that there is value to you because you are you. Just because I don't do well on any math test or a science test, that doesn't change my value.

Right.

RESPONDENT 6: My value is innate.

RESPONDENT 2: That's good.

RESPONDENT 6: Not by ability. When they do that, they can be successful and any child can be successful.

RESPONDENT 2: I also think just like we need to define success, we need to define failure because if we help them to understand that failure is a lesson that can be learned, then they will be able to be successful. This is what I find in my gifted classes is that there are children who have been in there who, and statistically, they come in knowing 50% of curriculum before they even walk in the door. They've already mastered most of these. They never have to struggle. They've never even attempted to struggle. They've always

been in classes where everyone knew everything and they really didn't have to do a whole lot of studying. When they get into places where they are challenged and that's why it's important for teachers and not to just always say, oh, they're the top of the class and let them stay there, but also continue to push them towards the direction of their strengths so that they can continue to be challenged because when they fail, they actually have meltdowns or they drop out of the program or they move away from the thing that is challenging them. Because they have never learned how to fail. They have never learned what it takes to struggle through and actually study something until they get the point. Children who, for instance, I'll use my daughter. My daughter was identified gifted in the fifth grade going into middle school. All of those years, she was in classes where she was not gifted. She wanted to be in the gifted class, but no one ever pulled her for testing. Her scores never ever seen anything. Then in April for fifth grade year, she was tested and all of a sudden they went, oh, she's brilliant, but she was brilliant all along. That goes back to people being gifted sitting not in the spotlight. They've been there all along. Did she all of a sudden turned gifted in April or (Laughter) was she gifted all along which we all know. What happened for her was, she was able to struggle through subjects and so she learned how to achieve. She learned how to push herself. When she didn't know something, she went back and she studied or put the extra effort in. Whereas, some of the children who were termed gifted from the onset, maybe in first grade, they've always excelled and they've always been...

Have been lucky.

RESPONDENT 2: Given and had the opportunities and therefore, when they get to something where it is like a wall. It's like, (Mouth sounds) and they just shut down. They don't know what to do. I have kids that literally just cry if they see something that they've never seen before or they don't know the answer and they're brilliant, but they will just shut down. Literally, we had a benchmark assessment a couple of months ago. My student was taking this math benchmark and she came across a problem she just didn't know what to do with. I had literally go get her out of her classroom. Her teacher said, she had such a meltdown. It was for a problem. She ended up with a 96 or something on that test, but I want you to know that she had such a meltdown that I had to literally come bring her out of her classroom into my classroom setting. When she got in my room, she calmed herself down and she was able to finish the test, but because she just did not know how to handle it. They put themselves on to us. They need to be trained in that. As teachers, our job is to support them and understand the nature of a child who is gifted and nature of a child and really just help them to learn

how to deal with what is success, what is failure, what do you do when you get to this roadblock, and that goes with problem solving. It goes with how do you deal with any problem? How to deal with life? How to be a leader in a group? What are the roles of a group leader or follower? What happens when you don't participate when you're in a group and what does that do to the rest of the group? Just really understanding all of the different roles so they can understand life more. Just get a better picture or they'll be skewed in the wrong direction. That helps with defining success and failure.

RESPONDENT 1: We have all these criteria from county to county on what is gifted and when we will test them, when we don't. What those test employ and whether we use standardized measures or other measures and this and that. When we label a child gifted, I don't know that that label is any more desirable than any other quote and quote special ed label. We label a child in special ed, oh you're dumb. That's their ceiling, you're dumb, you can stay dumb in special ed. You'll be taken care of. You label that child gifted, oh okay, we're all going to think you're glowing and wonderful. They do on either end of that spectrum. They already have a bar set. If we mess with their reality, the reality we've given them that they do. They have that meltdown. If suddenly that special ed kid has major success, oh my god. I can't get out of this. This is my comfort zone. That failure, oh my god, I'm not gifted anymore. They're going to kick me out my comfort zone. In all of those labels, to label them anything is artificial anyway.

Mm-hmm. (Affirmative)

RESPONDENT 5: Because the child that is gifted in Virginia doesn't get to come to Georgia and suddenly be gifted. They have to be retested because we don't have a universal definition of giftedness that we can all agree on. Why should we? One thing we don't do especially in gifted and talented, but we sometimes do in special ed, a little in general, is say you're building. That was an excellent statement. You need to build on this. That failure, I don't allow even mother to use that word failure, oh well, you didn't get the result you wanted to achieve, you didn't achieve where you're used to achieving. Why didn't you? Was it because you really didn't understand? Because you didn't put the effort there. You just didn't achieve what you're used to. You have to build on that experience. Yes, by the fact that we have to assign a numerical grade, you failed. This failure of the day is probably not going to prevent you from earning this salary, if that's your goal or being the next top model, if that's your goal or whatever. It's all about building.

Sometimes, I think with all kids who are gifted, we don't deliver that message. Maybe based on going back to where we started, of those children, little African American girls already having these roles that we really don't give them the message that this is building for you. You got to fit. You got to be that achiever and that's all you can be. You got to be that leader, that's all you can be. You got to be that caretaker and that's all you can be. To get to those places, we don't tell them you're going to have this stumbling block. You're going to have this opportunity to build something else. You're going to have this opportunity to develop some other passion. Maybe that caretaker role is great. Now you're going to go on to be the next megastar in the Merry Maids world of creating that business or something. Along the way, you're going to have to clean a lot of houses and do a lot of different kinds of work.

RESPONDENT 6: That's also a message for parents as well because often times the child feels this way because that's the only thing the parent has valued.

Oh yes.

RESPONDENT 4: It's not so much that they couldn't be okay with getting a B or C in that class or on that exam, but because their parents have taken such pride and ownership in the fact that they have produced a gifted child, that now you're challenging their worth because you're challenging my child.

RESPONDENT 1: You were talking earlier about how, as children go along, we see less parental involvement in middle and high school. I know our gifted, I don't even know what we call it. It's like the parent association for the gifted kids. (Chuckle) Those elementary kids, even there, we don't see the engagement of parents in the middle and high. To some extent, with that group, I know we in Fulton County deliver that message that there are a lot of other things related to giftedness. Don't overburden your child, don't do that. Not so much don't, but these are the best practices for parents with gifted children and because we don't get those middle school or high school kids or the kids who are identified later and their parents, I should say. Then you're right, you're absolutely right, it's as much about educating parents as it is children.

(1:39:35.4)

MODERATOR: Thank you. (Chuckle) There is that one last question and then we'll do a wrap up. If you guys have questions, then you can ask those now. If you have to rank the factors of underachievement for the African American gifted girl in order from one to three, in terms of

the one that has the greatest affect, which one would it be. Because you've got pads, so I'll just have you rank them from one to three. The top three, the ones that lead to under-achievement. Rank them from one to three and pass them in to me.

RESPONDENT: Can you go through the list one more time?

(1:42:02.0)

MODERATOR: Okay. There's peer pressure, low self-esteem.

RESPONDENT: Slower. (Laughter)

You're not sure?

(1:42:09.4)

MODERATOR: Low self-esteem...

RESPONDENT: Thank you.

(1:42:15.1)

MODERATOR: Parental involvement, the impostor syndrome, the fear of success. I believe those are the ones we covered right?

RESPONDENT: We can write on the same paper.

You said the top three causes of failure?

(1:42:42.2)

MODERATOR: Yes, for failure.

RESPONDENT: Wouldn't peer pressure and the impostor syndrome, wouldn't they try to be the same thing?

(1:42:55.9)

MODERATOR: No. One is external, one is internal.

RESPONDENT: Okay.

I was wondering about low self-esteem and peer pressure because without low self-esteem...

(1:43:04.7)

MODERATOR: One is internal, one is external.

RESPONDENT: The same thing.

Which one is the highest on one of the three?

(1:43:14.2)

MODERATOR: The one that you think is the worst problem.

RESPONDENT: The worst problem.

Okay.

That's the regular.

Okay.

(1:43:34.2)

MODERATOR: To that and, the flip side of that is, which one of those factors if we change, could lead to the greatest success?

RESPONDENT: And help the girls.

(1:43:47.4)

MODERATOR: Thank you.

RESPONDENT: Okay.

Can I ask a question about this? Low self-esteem sometimes shows itself through achievement, through, I have to achieve. I have to achieve because I'll be approved. I'm trying to figure out how this, that if I'm going to rate that, how to put this on the list because it seems a little different as far as, you think that you're asking us the top three causes for failure for gifted girls. Failure in grades or failure in life?

(1:45:09.3)

MODERATOR: Academic. We're just talking straight academics here. Okay, I don't know if you guys are done, but does anyone have any questions, comments, concerns?

RESPONDENT: I really enjoyed this discussion.

Me too.

Could we do it again?

(1:45:39.2)

MODERATOR: Yes.

(Laughter)

RESPONDENT: Can we do?

We will be right back here next week. (Laughter)

Yes, this is great.

END OF AUDIO

APPENDIX H: FOCUS GROUP 2 TRANSCRIPTS

**AFRICAN AMERICAN GIFTED GIRL PROJECT
FOCUS GROUP 2****(0:0:01.0)****RESEARCHER:**

Thank you for taking the time to come together for this focus group discussion with me today. This discussion will probably take about 90 minutes to complete. As I mentioned to you before, we're doing this focus group with teachers of gifted students, particularly those teachers who have had direct interaction with African American gifted girls. The information from your discussion will be pulled together and used to inform district and school administration, staff and participants about issue concerning this group of students and to improve the professional development and support provided by the research.

The information you share today will be used for this purpose only. You will not be identified by name or recognizable in any way in the report I prepare. If, for any reason, you don't feel comfortable sharing something with the whole group, please feel free to contact me outside of the group setting for discussion and possible resolution of the problem.

Each of you are different people with different experiences, therefore you will likely have different points of view to share. I encourage and want your different points of view. We hope to have a lively and informative discussion on this topic. Please be respectful of your colleagues during this discussion, avoiding side conversations and dominating the discussion.

The moderator for the focus group sessions will be Latoshia Whaley, a gifted educator, colleague and friend. She will introduce herself to the group shortly. I will be here primarily as an observer. Do you have any questions at this time? I will be available after for any additional questions.

(0:01:50.2)**MODERATOR:**

Hello, I am Latoshia Whaley. I started teaching in 1996. I have taught every grade except from elementary school to middle except for kindergarten and eighth grade. I plan to teach eighth grade gifted student next year. I have taught gifted science classes for the past six years and have been through the gifted education program for the district that I work. I have a love for teaching and specifically teaching science to gifted students.

(0:02:49.8)

MODERATOR: I want everyone to describe the typical African American gifted girl that you see on a daily basis.

RESPONDENT 1: I teach gifted eighth-grade students and for me, they are conscientious about their work. As far as the tidiness of their work, as far as the neatness of their work, there often is an element of creativity where they achieve to always out do the other girls in the aspects of creativity. My concern lies within their ability to think and critically problem solve questions. They often shy away from the problems that are more difficult and engaging and focus primarily on making their work pretty if it's, per se, good choice of words. Is that sufficient?

(0:03:50.8)

MODERATOR: Yes, keep moving.

RESPONDENT 2: I teach sixth grade math. What I typically see is, the students are analytical thinkers. They don't think outside of the box, my gifted students, the sixth-grade students that I taught. They see white and black and that's it. They don't see anything else. They don't like to use manipulatives. They like to use pencil and paper. That's it.

RESPONDENT 3: I teach sixth-grade Math. Pretty much, my kids are the same as her kids, but my kids are manipulative. They could care less about it. As far as they draw pictures, they have them with their problem solving. As far manipulative, if they have them, they have them, if they don't, they don't.

RESPONDENT 4: A typical gifted girl for me would be, they're discussers. They like to ask probing questions with all the teachers, I should say.

RESPONDENT 2: They will challenge other people in their class. They are very creative and they are detailed to a certain extent. It would depend on which girl you're talking about. Some are not very detailed, some are. The creativity stands out for me and some of their originality that they show.

RESPONDENT 5: I teach eighth-grade Science. I guess ditto. The girls tend to be real aggressive and very assertive or a lot aggressive when they're having classroom discussions. They know what they know. Very much bottom line what is the answer. What is the answer? They had to get to that one thing and have the answer.

(0:06:22.2)

MODERATOR: It's concrete?

RESPONDENT 1: Very concrete.

(0:06:28.5)

MODERATOR: Is there any conceptual understanding?

RESPONDENT 2: I think they have a hard time with the conceptual than they do with the concrete.

(0:06:39.3)

MODERATOR: Mm-hmm (Affirmative). Okay. Tell me about the self-perception of the gifted girls. What do they believe about themselves understanding that these girls are in the midst of adolescence?

RESPONDENT 3: In comparison to boys, they seem to have easier time being comfortable being smart. They take pride in being considered a gifted student and they don't succumb to the peer pressures that I see that some of the male students may succumb to as being called a nerd or being called a know-it-all. They seem to embrace the idea that they are gifted and wear it quite proudly.

(0:07:40.6)

MODERATOR: Any others?

RESPONDENT 4: My children are the middle children. Some wear it as a badge of honor and some, you find them not to fit the typical mold of being the nerd. They're social too. They're popular at the same time. They fit that mold. They're still some trying to find their way to go about doing their work but they're also social at the same time. In some grade, they're still trying to find that balance.

(0:08:28.3)

MODERATOR: Okay. Tell me your observations of the role that peer pressure or pressure in general has on the gifted African American girl. We're talking from their peers, from their family, from their teachers, and from themselves. Tell me about the role that it play in their world.

RESPONDENT 5: It would depend on which girl you're talking about. If you got that girl that is really confident in her academic ability, she doesn't necessarily succumb to the peer pressure here in the schoolhouse. As far as at home, her world is going to be different depending on which child she is, is she the first child, the middle child or the baby child. I have some where they're the oldest so you see them trying to direct the kids in the class and, you got to follow this, you got to follow this. I have the middle child where she's in the middle

so she just follow everybody else. It would depend. The social butterfly that I see, the ones that I've seen had been the ones, in my class, they are the middle child in their family. They are the middle children or the baby child. They're still just building their way through. It depends on which day they get them. Today, they're going to be like I'm going to get on point today. Tomorrow would be, I'm a socializing today. They fall in to that middle child and just trying to feel their way through.

RESPONDENT 4: If I could add, for me, the biggest issue from a girl's perspective is the pressure that they feel from home. Particularly, I have students that are involved in extra-curricular activities as well as they have a lot of responsibilities within the class, outside the class. My biggest issue for them is that they develop a sense of wanting to good for themselves and not wanting to good for their parents. Typically at conferences whether or not the child has a high A or low A, that becomes an issue more for the parent than for the child. There often are times when that child does express their feelings of insufficiency because the parents have these super high expectations for their child because they are gifted and they're not very sensitive to the fact that being identified as gifted may not be content-specific. They may be gifted in Math and they may not like Science. They may be gifted in Language, Arts, and they may not like Math. The parents have a hard time understanding that giftedness is not necessarily all around. They have these conceptions of excellence for that child and that child may not be a mathematically gifted child. Their biggest issue when they look at themselves is, I'm never going to be good enough, and that sometimes affects how they perceive themselves.

RESPONDENT 2: I would say that with the gifted students who are the babies in the family and they're competing with the older siblings. They're not really getting good grades for themselves. They just want to be better than their older brother or their older sister. The parents are also putting the pressure on them. I've seen that too in that conferences.

(0:12:53.7)

MODERATOR: Interesting. Let's talk some more about the relationship within the family of the gifted girl. You guys have mentioned, where they fall in terms of their birth order, is important. You've also talked about how much parental involvement or non-involvement, on the flip side, affects them. Let's expand on that and talk about that in particular in terms of the pressure that these types of girls feel. My question then becomes, is it more detrimental or helpful in your

observations overall? Because you guys have been teaching for quite a while.

RESPONDENT 2: For me, it's difficult to assess. It depends on that specific child and the relationship that that child has at home. For example, I have some gifted students that from day one open house, their parents introduced themselves, made me aware of who they were, whenever the materials that I needed, their parents make their presence felt and that child knows that that support is there and they tend to rely on that support. On the other hand, I have gifted girls who I have never met their parents and even maybe for an award ceremony, the parents never showed up. They still excel, they still hold themselves to a high standard. It's difficult for me to make a conclusive statement as to how significant that parental involvement is and for the most part, it seems as though they do what they do regardless for the truly gifted child. Outside of the parental involvement aspect, it seems as though they have, at eighth-grade level, understood the importance of them being successful. The motivation to do their work seems to be more an intrinsic factor versus their parents stimulating them.

RESPONDENT 3: I see that at the sixth-grade level too surprisingly. In one situation, I had a very high student and mom stated that she didn't have to come to the conferences but the student want her to come just to hear that she's doing a great job. She wanted that re-enforcement but mom didn't want to come. They still want it regardless of how well they're doing.

(0:16:03.7)

MODERATOR: Okay. Tell me about the student-teacher relationships. How important is that to the gifted girl?

RESPONDENT 4: It's very important for them to build that relationship, to have that connection with those students so they can get comfortable and come to you and question you because they love to question you on things. That's important for them to have that relationship.

RESPONDENT 1: One word, needy. (Chuckle)

Mm-hmm. (Affirmative) (Chuckle)

RESPONDENT 2: They're needy.

RESPONDENT 3: Very needy.

(Chuckle)

(Chuckle)

RESPONDENT 5: They do need you because they're inquisitive about different things. Sometimes, they'll ask you specifically, do you want it like this, is this okay, and you're right, I'm going to need you to just work that out for yourself. It will be alright.

RESPONDENT 1: They want to know step by step.

RESPONDENT 2: Yes, they do.

RESPONDENT 3: They want your approval at each step.

RESPONDENT 4: At each step. Okay, I've done this much is this...

RESPONDENT 5: That speaks that too, maybe, not able to think out of the box, per se.

Mm-hmm. (Affirmative)

(0:17:19.7)

MODERATOR: We've talked about how they learned very early that they have pressure put on them to be able to succeed, be perfect, be excellent, be what a concept of a gifted person is. Do you think that that would have a little bit or something to do with why they are rather needy?

RESPONDENT 2: The previous outweighs the latter in that they just have and develop an ability to think independently. They just like being directed as to what to do and the creativity is dependent on making it look pretty versus coming up with solutions in various...

RESPONDENT 4: Multiple ways.

RESPONDENT 2: Yes, multiple ways.

(0:18:21.3)

MODERATOR: Why do you suppose that is? My question is, do you think it's just a matter of their age, the period that we're talking about? Because we all know there's a lot going on during middle school years.

RESPONDENT 1: I think it's a skill that they have and develop at that point.

(0:18:45.3)

MODERATOR: Okay.

- RESPONDENT 3:** I think because along their way, they've been taught to do certain things a particular way that is hard for them to break that mold because they will make it quickly...
- RESPONDENT 5:** Mm-hmm. (Affirmative)
- RESPONDENT 1:** They adapt quickly to what a particular teacher might need. In that aspect, it is, they limit themselves to, where you have four different teachers, she likes it this particular way, she likes it this particular way, that's how they mold and shape their assignments.
- RESPONDENT 4:** That goes back to what you were saying about them being able to or not being able to develop any or to critically think about a subject or a concept or an idea and bring it forward or make it their own using American *[0:00:43.0 inaudible]*.
- RESPONDENT 2:** It depends on what their giftedness is *[0:00:48.8 inaudible]*. I'm more analytical than I am creative.
- RESPONDENT 1:** Maybe the same for them.
- RESPONDENT 5:** I was just going to say. That would provide good insights for us as educators to determine one, the area of giftedness and two, what component of that is creativity, cognitive ability, I guess so that we can drive our instruction to ensure that their strengths and what we're focusing on that, setting expectations that they're not qualified as gifted for, that would be interesting.
- (0:01:40.8)**
- MODERATOR:** Okay. This leads us into the next question or the next talking point. That is a discussion of some ideas, classroom extra-curricular and curricular that might counteract some of the factors that are affecting gifted girls of color. The question is, what leads to their success and failure in the classroom? What do you think would lead to their success and failure? How might we counteract some of these factors?
- RESPONDENT 2:** Success comes when they are in an environment that understands their giftedness and they are allowed be themselves, for example, one of my gifted girls, when her mom came to me and said that this child really looked up to you, what have you done to her, she seems like you brainwashed her. If I tell her to do something, she said, my teacher doesn't do it this way. I think for them, when they do see other, especially teachers that do embrace education, do love to learn and it's presented to them in a positive way, that motivates them to want to continue to excel.

- RESPONDENT 4:** Having teachers, especially in the areas of science and math who like science and math that certainly helps to make them feel comfortable about understanding the subject and wanting to do the subject. In a negative way, some of the pressures that they may experience are always having to be perfect. I say that for example, another student, she's involved in several extra curricular activities and it came to a point where I noticed that her grade was slipping and her struggle was, she doesn't want to ask for help because she thinks that asking for help means that that's showing a sign of weakness. As we said before that that constant perception that they always have to be perfect, sometimes really is what causes them to not succeed because by the time, they cry out for help. Mentally, they've already shut down and they're not even aware of that shutting down was taking place, then they just get burned out. They just don't feel that they're able to anymore because they always have had this feeling of I've got to do this, I have to do that, and that they become overwhelmed.
- RESPONDENT 5:** It helps for them to see there are other African Americans in those roles of science and math teachers and I think it helps the girls to see women of color in those positions period (Laughter)
- RESPONDENT 1:** That's powerful because I know growing up most of my science and math teachers were males.
- RESPONDENT 2:** Caucasian.
- RESPONDENT 3:** Caucasian males too. I was one of the few black female in my class that like science. There were times when I felt awkward and nerdy, even though I was involved and I was considered a popular girl, it wasn't until after I went post graduate that I really appreciated that it was to like math and it was okay to like science and that took some time because most in my class were boys and teachers were males. It was refreshing when I did go outside of that environment and see that oh, there are African American females that do like science and that's a good thing.
- RESPONDENT 5:** Grouping too has something to do with it as well. I think for myself. When we were grouped together, they didn't call it gifted back then but we were grouped together and we had healthy competition amongst ourselves. The blacks in particular and the girls then in general and we would quiz each other, we would help one another, talk about areas of giftedness. I can remember right now a young man that deceased now, his gift was in writing, mine was not. We would help each other in the weak areas. That helps

too when you're in that total environment of teacher and the other students that are engaging and pushing in an environment that lends itself, that it's relaxed, that it's acceptable, I think that helps a lot too. When you see some of those kids that are smarter than the other kids. That 's where sometimes you'll see that picking on, that term of nerdiness coming out but if they're grouped together and they're going along, I may even see them in the hallways, where people try to disrespect or whatever and they'll just straight up, if you don't get your dumb self up, not those words but pretty much. They'll hate because you're not in the gifted class. They strengthen and encourage each other too.

RESPONDENT 2: They develop a bond and friendships and, you have sub groups within the gifted group itself. You have those that are like okay I'm star, I'll be at the top. You have the, maybe in the group, I'm in the middle, I'm just. You have the ones that I'm a do just enough to get back. You had those sub groups within the gifted class themselves. You tend to see what I've seen more girls at the top of the spectrum. Where I'm working to get this good grade, I'm working blah, blah, blah. It goes back to that trying to be perfect. You see some that are just like, I'm making my way on through and I totally accept what I get. If I was to turn this into you and you give it back to me and I have an F on here and you're like okay, well that's what I got. I have a few of those, they are like, okay that's what I've got, that's what I did, that's what I got and they accept that, not a whole lot of them, some of them will be like, if I had done this, this and this, they would want to tally everything up, tally this, okay I should did this and they'll be like, can I redo some might, but I think having someone, especially the environment that you build for them, the freedom to ask, because I know they want to come and ask me stuff all the time so I have to give them at least five minutes at the end of class, five or 10 minutes in the end of class because they will want to ask me.

RESPONDENT 3: I'm getting emails over the weekend at night [0:12:35.8inaudible] (Laughter).

RESPONDENT 5: They would ask. I had to, they'll at my desk in a minute, I roll...You try to roll in a corner and still, they'll pull the desk up to, and so... You do have to develop that rapport with them because I think sometimes, the title of gifted can be a lot of added pressure and even with some of the girls on my dance team, they'll come and I'll be like I'm feeling pressure, I've got this, I've got that, I've got this going on, they're like how am I going to manage all of this at the same time.

(0:13:27.7)

MODERATOR: Let me see if I understand what you're saying. You're saying that the relationship with there teacher is one way that you can counteract the factors that could affect their performance?

RESPONDENT 1: Mm-hmm. (Affirmative)

Mm-hmm. (Affirmative)

(0:13:46.6)

MODERATOR: I wanted to ask you a question about them being in classes. I know none of you guys actually teach the connection classes but that's where they get to interact with other students that aren't necessarily gifted. Their with the regular population if you will. Have you guys seen or noticed of difference in their behavior in those classes, their behavior, their demeanor, however they interact with those types of?

RESPONDENT 3: That would be a good question to ask the connection teachers.

RESPONDENT 2: If you're gifted in math they may not be gifted in Social Studies so you're seeing a different work habits when you go put your grade in Social Studies, it depends on what they're gifted in like you said.

RESPONDENT 1: I've even seen some where they're in connection. Where they're just like I'm just undercover, I'm a do my work but I'm not...

RESPONDENT 4: There's no pressure there.

RESPONDENT 1: Yes, there's no pressure, I'm just going to do my work. It's a free period, I don't want to say free but free where it's not so structured.

RESPONDENT 3: They can turn their brain off.

RESPONDENT 1: Yes.

RESPONDENT 5: I've seen that too because when I had and health class in my class and I was like you are here, you in here....

RESPONDENT 2: Can I just chill? That's what they ask me.

RESPONDENT 3: We don't do anything.

RESPONDENT 4: There was one girl, they stuck her in Language Arts class that she shouldn't have been in, she was in there with level two and level one students. She went down at their level. She produced nothing and I had connection with her and asked her what are you doing because this is not what you're used to, you're going to bring

yourself down but she did. It carried over onto her seventh grade year too because she was removed from the accelerated math class and placed back in the general.

(0:15:54.6)

MODERATOR: Is she happier?

RESPONDENT 4: She is happier. She doesn't feel that pressure anymore either.

(0:15:59.9)

MODERATOR: Interesting. One of the other questions is, there are a couple of things that I've been reading about and I just got this article from a friend of mine where they said the teacher's experience or the teacher's anxiety has a direct effect on the students in the class. If your teacher has science anxiety or math anxiety, it rubs off on the students or least this is what the article reported. Now mainly, it was, they interviewed elementary school teachers where they have to teach all of the subjects and stuff like that. I wanted to know because one of the things that I've been noticing is that the math skills and the science skills of the girls or students in general really is dependent on how good their math or science teacher was in elementary school, what they got. You see that in the gifted classes as well?

RESPONDENT 2: I wouldn't say dependent. I would say influenced because habits are formed at the middle school level and I don't have a gifted child who may be gifted in language arts and social studies because they are avid readers, love to read and when they first entered my class and this an eighth grade level, they let you know, one of their assignments that I have them do is on science memories. What are some of the things that they remember about science, what they hate, what they like and how do they feel about science presently. A lot of them at the beginning of the year will say I hate science, science is, and this is a gifted girl, it depends on the experience that they had with science and if that experience can change positively or negatively because at the end of the year, the same set who expressed that they hated science, they said I like science, you made me really, really like science. A lot of the attitudes that they have is dependent on the teacher that they have and if the teacher's able to turn around that attitude positively or negatively often impacts how they view these subjects.

(0:18:20.9)

MODERATOR: That is, would you guys agree?

RESPONDENT 3: Especially in math. Everybody hates math.

RESPONDENT 5: I've seen that being an issue in science because for me, if you stuck me in a life science class right now, my major was chemistry and I would have a mental struggle with it so I can see me not doing the best job that I could in a life science that first year. I can see that turn up [0:18:50.5 *inaudible*]. I can also see those kids who liked life science, probably liked working and talking about cells and things, then now, in eighth grade, we're talking about physics and chemistry and not really care for that portion of science. That probably has a lot to do with that two in terms of the teacher and their level of comfort with that subject, especially in science. Math, you're just building block on top a building block, that's not so different in math like it is in the sciences. There is a whole different thing you've gotten into when you from one science class to another, into geology and earth science, you talking about life sciences, you're talking about biology and then you get to eighth grade and there you're talking about the other types of sciences. I could see that being a factor too.

RESPONDENT 4: Because from hands on to the conceptual or the analytical stuff.

RESPONDENT 1: Especially at this stage, here, when they get to high school or college, biology won't be asked conceptually because they'll have enough money and resources to be able to get the cells and the slides and this and the that, we don't have those resources.

(0:20:32.9)

MODERATOR: What I have found interesting about what we've talked about today is the things that you guys have addressed has been the family pressure. The teacher-student relationship, not necessarily the teacher perception but the student teacher relationship and how those things may affect the gifted girls in your classroom. Out of the things that we have discussed, if you had to rank those three or the things that we discussed, what would be first? We talked about the family pressure, that student-teacher relationship, adolescence, peer pressure, those are some of the things that we discussed, if you had to rank the top three that would predict success, what would it be? Out of those. Then if had to rank them on what would predict failure, what would it be?

RESPONDENT 2: Success for me is dependent upon that relationship that that student establishes with the teacher. I strongly believe that a teacher doesn't make or break a student and they're still at that point at the middle school level where acceptance is a big deal to them. A lot of times, what I see, if they don't feel accepted, they just tend to shut down if there isn't sufficient parental support at home. Because I've had parents who their children are gifted and in my

thoughts and they don't like science and the parents haven't accepted that their gift is not science and they struggle in science and parents are frustrated that they're not doing well and they're recourses, I need them to have another science teacher, they go to another science teacher and they still struggle. Success depends on how much that teacher can engage that child, even though that may not be their gift, to help them maybe not perform on a gifted level but to perform to a level where they feel as though they are competent enough and if the engagement isn't there and that teacher hasn't achieved that level of success then a lot of the times the parents step in and it just, it's hard just to say what's negative, what's positive but the impact of that teacher, a lot of the times, is that determining factor as to how well they will thrive, how well they will succeed.

RESPONDENT 5: The parental involvement and the teacher influence is probably right out there [0:24:08.2 *inaudible*].

RESPONDENT 1: Positive or negative, right?

(0:24:15.7)

MODERATOR: How do we, let's say we have a gifted girl that shows interest in science or in math, how do we take the interest as teachers? What are some things that we could do to hone that interest so that when the girl leaves middle school, goes to high school or even goes off to college, then she pursues a career that involves mathematics and science?

RESPONDENT 2: One avenue we have is STT2 that a program where the kids are able to apply to, they get in.

RESPONDENT 3: Science tools and techniques?

RESPONDENT 4: Which might get the axe this year coming up.

RESPONDENT 2: I know that for a fact. I'm talking about over the years of being a gifted educator where I've seen students have negative attitude about science and after participating in STT program, they now have careers in the fields of science and mathematics. I also know that just from being there, they get to interact with a lot of the professionals in the field of science, so they have opportunities where they can do summer internships at some of the schools like Georgia Tech or Emory and that helps them to pursue science and math.

RESPONDENT 1: That goes back to resources too.

RESPONDENT 2: Yes.

RESPONDENT 5: Because at Fernbank, I found they have those resources so you do have that capability of full engagement. You're not just talking about these things because you're doing these things.

(0:25:53.5)

MODERATOR: Is STT for middle grade students?

RESPONDENT 2: It's a program that they participate in the ninth grade so they apply in their middle grade year.

RESPONDENT 4: They spend half the day at Fernbank and they get credit for their science.

(0:26:09.0)

MODERATOR: I thought it was for middle...

RESPONDENT 2: Yes. Surely for ninth grade.

RESPONDENT 5: Middle school gets the shaft I guess, because they don't really, we lead into pushing them in the right direction so I think there should be something, I don't know, that can help steer them in the direction of math or science or just get some hands on or something for that, at least seventh and eighth grade girls who might be interested but they have to wait, I think that wait sometimes, they miss out on their opportunity when they're ready to engage and there's a gap.

RESPONDENT 1: Then you turn them off. Sometimes it will come back.

RESPONDENT 3: Yes. They could get the, go in ninth grade and get the wrong teacher and then they're like....

RESPONDENT 4: A lot of teachers play a major role.

RESPONDENT 3: I'm through with science and math. I'm just going to get, I'm just going to do what I need to get out of the class. That's basically what they do. I'm saying this is a gap in between when you really could steer them in the right direction between the middle school year and high school.

RESPONDENT 2: At the risk of sounding, racist is not the word. Because we're not having a lot of African Americans and Americans going into the sciences then a lot of times the interactions the African American students are having is with foreign science and math teachers

which makes it increasingly harder to be able to understand because of that language barrier, sometimes because of the cultural differences.

RESPONDENT 1: Right.

RESPONDENT 5: That's true.

(0:28:14.5)

MODERATOR: To that end, it sounds like you guys are saying, we need more programs, we need more resources, we also need to make sure that these girls interact with people who are women or African American young men and women who are in these fields or some kind of way that they get their interest from people who look like them.

RESPONDENT 2: I don't think as gifted women educators, I think some other responsibilities should lie on us to make ourselves more aware because I know for me initially as a gifted educator, I did not do enough for myself to make myself aware of the programs that were out there. That's something that I sought to change within the past few years or so, now I have made and established these relationships with people in the community that can provide these resources so now I know about CEMA which is also a good program, now I know about Georgia Tech that has a lot of programs in the summer, the Ceismc and they have the Nanotech programs. I know now because of my own personal need for seeing more females in the field of science. It certainly would be beneficial as a gifted educator to become a part of a science professional organization because that does expose you as an educator to the resources that are not just limited by your school or limited by your district.

(0:29:48.5)

MODERATOR: To that end how many of you spend time doing professional development in the way of gifted? I know you have the Georgia Association for Gifted Children, do you go to conferences that help you understand the gifted child or how you could help these gifted kids in general in math and science?

RESPONDENT 4: I'm going to say that's resources. I was planning of going a conference and when I learned that the only thing that the district was going to pay was my registration, and I had to come up with the travel and the lodging, I had to back out.

- RESPONDENT 2:** Yes. That's something that you have to prioritize, wherever you are at that specific point whatever the priority is, it's going to dominate. It's not that you don't feel the need to but because of your other obligations whether it be time or whether it be resources. As a community of gifted teachers, if we've provided ways whether it be through the writing of grants or some type of funding, gifted teachers will be more responsive in participating in these organizations if there were more support, financial support or support for time, for us to participate in programs or organizations such as that. It is important because as I said...
- RESPONDENT 5:** Yes, there's times when they have conference here a couple times and I'll be trying to go as gifted liaison for the building. I don't even really meet with them just like my meeting with, I just come in and I'm like so how is so and so and so, I just ask them questions, and you think so and so and so and so and I go back and I try to see how to better the program here because I'm looking like other people have gifted programs in their building and I don't want to just be like I'm just here, I got this title and I do try to ask, what's going on, I did steer some to go ahead and get their gifted certification and then get out, it's good for the,
- RESPONDENT 1:** I'm just saying the school in general looks good but it's hard to do that because that, trying to get unless it's something that pops up on an administrator's radar.
- RESPONDENT 3:** Time constraints are killing us...
- RESPONDENT 4:** That's a [0:32:39.1 *inaudible*] radar I'll go to her and I'll be like I want to go so and so. Everybody's perception is we don't really have to teach them that much, they're going to get it anyway.
- RESPONDENT 3:** They're gifted students...
- RESPONDENT 4:** Science and math.? Science and Language rather. . Science has been pushed at the side. Math yes but math to the point of proficiency, not giftedness. The perception is that has been mandated somewhat hinders the ability to perform to their maximum capacity because one, science is not a big issue because you don't have to pass science to move on, pass notice pass, not exceed which is what we want out gifted girls to do and then math, you just have to pass. Passing isn't even proficient, that's not at level two. The expectations are so low that they don't perform to their abilities.

(0:33:53.0)

MODERATOR: That leads me to another question. Proficiency, whatever it could take to pass the test in terms of math, since they don't have to pass it in science, not yet, though isn't it coming?

RESPONDENT 3: They have been saying nothing in the past four years. We're waiting four more years because realistically with us it's just turning over to a new curriculum. Not necessarily.

(0:34:22.5)

MODERATOR: They're not going to do that?

RESPONDENT 2: Not necessarily.

(0:34:20.0)

MODERATOR: Right. I understand that. Proficiency is not even, or even passing is not even on their level?

RESPONDENT 2: Mathematically speaking? The test 800, it have a total of 60 questions and proficiency is getting 40 of them right, so if we do that mathematically, that's what average.

RESPONDENT 4: Two thirds. 67%.

RESPONDENT 1: Giftedness, that's failing in a classroom.

RESPONDENT 5: That's failing in a regular classroom.

RESPONDENT 2: That's failing in a regular classroom so what are we teaching them if all we're teaching them to do is pass the test and that's what they're hearing. What I tell my gifted students when they test, when they take my test, I have to teach them that you do not relax until you get to that 60th question. I have them actually literally count one, two, three, four and they count and I say if you get to question number 40 and you are not sure that 40 of these questions are correct, you're back into number two again, you're taking AP, you're not taking AP science next year, you're taking regular science. I have to teach them literally that you cannot sit there and think that this little CRCT pass level two is proficient, if you want to perform at a gifted level, you have to acknowledge that these are the questions and out of these questions, you must get this amount of correct to be at your gifted status and that's what drives my gifted students because they are drilled all year long, you got to pass level 2, level 2, level 2. When they do the benchmark assessments that they're doing right now, oh that's the big joke because once again, same thing, they score 70, that's good. 70's a D in regular class so why is that good for CRCT? The whole what's good and was not good is just....

RESPONDENT 4: The perception...

RESPONDENT 2: Is marred.

(0:36:40.3)

MODERATOR: For our gifted girls though, I'm going backwards just a little bit. In terms of, I want to talk about peer pressure and then I think this will probably be our last question, but I really wanted to get in because I heard you guys touch on it but you touched more like the family pressure and the relationship between you and the student. We didn't necessarily talk about peer pressure and how that may or may not affect them in term, even on the CRCT or the benchmark test or how they perform in your classroom, in all of the interviews I've done so far, peer pressure was big in the sense that these girls, some girls succumb to it enough so that they want to drop out of the gifted program, they don't want to be considered gifted anymore. By the time they get to eighth grade or to the ninth grade, definitely, by the time they get through high school, they've decided, I know you guys have told me I'm gifted, but no thanks, that will definitely affect whether they go or choose a career that involves mathematics and science.

RESPONDENT 1: The answer lies in the question, are they in a gifted setting where they make this decision?

RESPONDENT 5: By the time they get to high school, it's, yes. In middle school, you guys are the gifted program from what I've seen is they're cocooned in their own world.

RESPONDENT 1: That's why I asked the question because the peer pressure drives in a positive way so they're protected. They want to exceed. They want outdo each other.. It's positive, so my question then will be as you stated, outside of the gifted environment. I don't see that being effective, but within the middle school environment, they're competitive, they will do all that they need to do to pull that other person from the top so that they could be on top.

(0:38:57.0)

MODERATOR: Interesting, okay.

RESPONDENT 3: Yes. I could see in a high school level where they are not taking classes with seniors and juniors all their different class locations where...

(0:39:08.5)

MODERATOR: Do you think it would be different if the school is what would you say, 90% African American, let's say. I'm just throwing a percentage out there, I don't know but I'm thinking it's pretty much, it's pretty much African American. Do you think it would be different and this is you, this is your opinion, do you think it would be different if the school were mixed in any shape? If there was 60-40, 50-50, 70-30, if they saw more people of other races and they have to learn how to interact with them, do you think it would be a different environment?

RESPONDENT 2: I think the issue lies on the group thing. As I said, that grouping is powerful. The grouping is what will be the determining factor as to how the peer pressure affects them. If the grouping lends itself to an environment where all the others are smart and gifted, then they are at a cat and tail fight to see who reaches the top first. If the gifted leads where it's mixed ability wise then they tend to become average and they want to not stand out. The grouping and that could even be at a high school level because I've seen AP class to where it's same climate of wanting to succeed, out do the other ones but then when they're mixed where it's different abilities, they shy away from that leadership role, I think that grouping determines how peer pressure affects that.

(0:40:47.0)

MODERATOR: Okay. Going back to math. How do we get these girls to go into careers?

RESPONDENT 2: It's interesting dilemma.

RESPONDENT 5: I think we are representatives of mathematics and science and we have to be good stewards and show these girls the benefits that a career in these areas can bring them. We have to show that math and science can be engaging, fun, and creative.

RESPONDENT 4: How big was the parents, because I know like for me, I love math and I love science but my mom hated it.

(0:43:50.5)

MODERATOR: I've heard that a lot and I think there's some correlation, I assume, I'm assuming that there's a correlation but I've seen it over and over again, my mom can't help me, my parents can't help so therefore they feel like they are all alone on that island by themselves and like no I'm staying here with you and we can get through this. I think it really does affect them in ways that we, I hadn't researched and others probably, others haven't researched either.

RESPONDENT 1: That's the point of the biggest factor.

RESPONDENT 2: That's adds to their home too. Because in the household that I grew up in, my parents could only help me but so far with math too but the expectation was somebody in that building is going to be able to help you. You need to find out who it is.

RESPONDENT 3: Yes.

RESPONDENT 5: Let's step back to tat parenting influence and involvement. That wasn't an excuse that my parents only....

RESPONDENT 4: Your parents said is not an excuse, some parents use their inability to explain their child's inability.

RESPONDENT 1: I wasn't good in math so she's not that good...

RESPONDENT 3: Oh I've heard that.

RESPONDENT 5: It's hereditary. I wasn't good in math too so that's why she is not good in math.

RESPONDENT 2: I've heard that in conversations before.

RESPONDENT 1: That's passed down to the genes.
That's absolutely right.

RESPONDENT 4: It depends on that parent again just like with her parents. My mom, I'm not good in math, but I will find somebody to tutor you, you best believe, you may not ask me but I'm going to put you in some tutorials and you're going to get this right.

(0:45:23.8)

MODERATOR: Our dad was a math whiz so we never had that problem, we'd give him a problem, my dad could solve it in five minutes. He would solve it and then give it back to us and say now you do it, and we were like.

RESPONDENT 1: Your confidence should have built from knowing that you had someone that knew. See my mom, no math and language arts, fractions is all I could get help with. It stops right there.

RESPONDENT 2: What about the parents in reverse and as kids are growing up, they have, they're not sure about everything but what about parents like oh I know she knows this, I know he know this but I don't understand what's this paper right here isn't that paper....

RESPONDENT 3: They know that they know that they know themselves.

RESPONDENT 2: They know that their kid doesn't do, is not demonstrating that, so what will you do with that parent?

RESPONDENT 5: What I said, I'm good in math, so they should be good in math too.

RESPONDENT 2: That's not their gift mama.

[0:46:32.8 Inaudible]

(0:46:32.3)

MODERATOR: Well, Thank you all for coming out this evening. I appreciate you so much. I look forward to reviewing the transcripts of this conversation. I will let you know how my study turns out. Thanks again.

RESPONDENT: Thanks, this was interesting.

(0:46:48.4)

MODERATOR: Yeah, I'm kinda partial to this subject as well.

(AUDIO ENDS ABRUPTLY.)